



Scoping towards potential harmonisation of electricity transmission tariff structures - Stakeholder Questionnaire

Introduction

Cambridge Economic Policy Associates (CEPA) has been appointed by the Agency for the Cooperation of Energy Regulators ("the Agency") to conduct a study on 'Scoping towards potential harmonisation of electricity transmission tariff structures'. CEPA is an economic and financial policy advisory business (for further information see www.cepa.co.uk).

The purpose of the study is to inform the Agency's considerations in relation to electricity transmission tariff structure harmonisation by:

- assessing whether increased harmonisation of electricity transmission tariff structures across all the Members States of the European Union ("Member States") would be beneficial, and if so,
- recommending the most appropriate policy option(s) to the Agency.

The objectives of the assignment are to:

- Analyse current electricity transmission tariff structures across Member States¹ to assess the extent to which these practices ensure or impede (both in theory and practice) integration, effective competition and efficient functioning of the internal European electricity market.
- Identify and develop proportionate policy options to address any actual or potential overarching problems or failures that may be identified with current transmission electricity tariff structures and to assess the associated impacts of these options.

Therefore, the focus of the study analysis is the effects different transmission tariff structures, including the status quo arrangements, may have on relevant objectives at European Union (EU) internal electricity market level, as opposed to specific issues and objectives that may affect transmission tariff structure choices at the Member State level.

For the avoidance of doubt, the study is also focused on tariff *structures* as opposed to tariff levels and its determinants.

To gather evidence and inform an assessment of actual or potential overarching issues (if any) with current electricity transmission tariff structures across Member States, CEPA has been asked by the Agency to undertake a survey of stakeholders in each Member State.

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¹ As well as neighbouring countries such as Norway.

This questionnaire requests views on the following:

- Parties' views on the relevant objectives for electricity transmission tariff structures,
 when considered from an internal electricity market perspective.
- Parties' views on actual or potential overarching problems (if any) within identified current practice(s) that are or might be causing regulatory/market failure(s).
- The impacts of current transmission tariff structures on market integration, efficient functioning and effective competition in the internal electricity market and other relevant aspects (e.g. adequate investment levels).
- Parties' views on potential policy options to address actual or potential overarching problems or failures (if any) with current arrangements.

The questionnaire also provides parties with an opportunity to raise additional comments of a more qualitative nature.

This document is structured into three parts:

- Part 1 provides further discussion of the background and regulatory context to this assignment.
- Part 2 provides definitions of the key terms referred to throughout the stakeholder questionnaire.
- Part 3 forms the stakeholder questionnaire itself, requesting feedback on the types of issues referred to above.

All responses will be treated as confidential. Any comments and views provided will not be attributed to a specific organisation if included in our report and copies of the responses to individual questions in the survey will not be published as part of the study process (responses will be shared with the Agency). We may follow up some questionnaire responses through phone calls to clarify or discuss further the issues raised in responses.

We would be grateful for your reply to the questionnaire by **Friday 27th February 2015**. Please send your completed questionnaire to **Andrei Vladareanu** andrei.vladareanu@cepa.co.uk or Cambridge Economic Policy Associates Ltd, Queens House, 55-56 Lincoln's Inn Fields, London, WC2A 3LJ, United Kingdom.

We would be pleased to discuss the questionnaire or parties' views. Feel free to get in touch (Tel: +44 (0) 207 269 0210) with Andrei Vladareanu if you would prefer the survey in an alternative format (hard copy instead of electronic) or wish to discuss any aspect of the questionnaire.

Part 1: Study Background and Context

Legal background and basis

The internal market in electricity, which has been progressively implemented throughout EU Member States since 1999, aims to:

"deliver real choice for all consumers of the European Union, be they citizens or businesses, new business opportunities and more cross-border trade, so as to achieve efficiency gains, competitive prices, and higher standards of service, and to contribute to security of supply and sustainability."²

To advance the completion of the internal market in electricity and of creating a level playing field for all electricity undertakings in Member States, the EU introduced the Third Package of Gas and Electricity Directives which was transposed in national law by European Member States from March 2011.

Regulation (EC) No 714/2009³ on conditions for access to the network for cross-border exchanges in electricity was adopted as part of the Third Package to facilitate competitive and integrated energy market across the EU. According to this Regulation network access charges shall, among other things, promote transparency, take into account network security, reflect actual/efficient costs, be non-discriminatory and non-distance related, and provide, where appropriate, locational signals at European Union level.

Regulation (EC) No 714/2009 also allows for the development of a legally binding network code on rules for harmonised transmission tariff structures⁴ and for the elaboration of a framework guideline setting out principles for such a network code⁵. In addition, the European Network of Transmission System Operators for Electricity (ENTSO-E) and the Agency are required to monitor the implementation of the network codes, including their effect on harmonisation of rules aimed at facilitating market integration, non-discrimination, effective competition and efficient market functioning⁶.

Regulation (EU) No 838/2010 specifies guidelines on a common regulatory approach to transmission charging including guidelines relating to the inter-transmission system operator compensation mechanism.⁷ This Regulation also includes allowed ranges for annual average transmission charges levied on generators in each Member State and a requirement for the Agency to monitor the appropriateness of the ranges of allowable transmission charges, taking particular account of their impact on the financing of transmission capacity needed for Member States to achieve their targets under Directive 2009/28/EC.

² http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0072&from=EN

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0015:0035:EN:PDF

⁴ Article 8(6) of Regulation (EC) No 714/2009.

⁵ Article 8(2) of Regulation (EC) No 714/2009.

⁶ Articles 8(8) and 9(1) of Regulation (EC) No 714/2009.

⁷ http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:250:0005:0011:EN:PDF

The guidelines state that: "Variations in charges faced by producers of electricity for access to the transmission system should not undermine the internal market. For this reason average charges for access to the network in Member States should be kept within a range which helps to ensure that the benefits of harmonisation are realised."

Current charging practices

Although common European regulations on conditions for access to the transmission network in electricity were adopted in 2009, there are differences in the electricity transmission tariff structures that apply across European countries. As ENTSO-E's recent synthesis of electricity transmission tariffs⁸ in Europe highlights, although there is no single "correct solution" for recovering costs related to electricity transmission, there is a concern that the differences in methodologies may result in distortions to competition and investment decisions as the integrated EU internal electricity market develops.

Increasing electricity market interconnection between Member States could mean that transmission tariff structures become increasingly important to the efficient functioning of the internal electricity market. ACER's recent opinion on Generator-Charges (G-Charges) for example highlights "an increasing risk that different G-charges distort competition and investment decisions in the internal market". ⁹ To limit this risk, it considers that transmission charges will increasingly need to be "cost reflective, applied appropriately and efficiently and, to the extent possible, in a harmonised way across Europe." ¹⁰

The choices that are made on transmission tariff structures will impact on end consumers by influencing the incidence of electricity transmission cost recovery between different types of end consumer, given the characteristics of their use of the transmission network. Particular forms of transmission tariff structure can also be used to provide incentives for end consumers to use transmission networks more efficiently.

Tariff structure harmonisation

If following an assessment of current charging practices in Europe, further harmonisation of electricity transmission tariff structures was considered beneficial, the Agency has asked CEPA to scope out and develop policy options for further harmonisation.

Again, for the avoidance of doubt, the scope of this study does not include harmonisation of electricity transmission tariff levels or the regulatory framework that is used to determine transmission tariff levels.

This questionnaire has been developed to gauge stakeholders' views on the actual and potential problems within identified current electricity transmission tariff structures. We are

⁸ ENTSO-E (2014): 'Overview of transmission tariff structures in Europe: Synthesis 2014'

⁹ Opinion of the Agency for the Cooperation of Energy Regulators No 09/2014 of 15 April 2014 on the appropriate range of transmission charges paid by electricity producers.

¹⁰ ACER (2014): 'Opinion on the Appropriate Range of Transmission Charges Paid by Electricity Producers'

also interested to understand stakeholders views on the extent to which harmonisation options could be used to promote more efficient operational and investment decisions and the overall functioning of the internal electricity market.

Part 2 – Definition of terms in the questionnaire

Term	Definition	
Bidding zones	A bidding zone is the largest geographical area within which market participants are able to exchange energy without capacity allocation. The European Electricity Target Model (see below) envisages bidding zones defined by network congestion rather than, for example, national borders.	
Capacity charge	Also referred to as power based transmission tariffs. These are electricity transmission tariffs that are paid based on the capacity connected to the electricity transmission network.	
Connection charges	Connection charges recover the cost of installing and maintaining assets that allow parties to connect to the transmission system. The network costs which are recovered by connection charges depend on whether connection charges are "deep" or "shallow". 11	
Consumer body	Means an organisation that represents the interests of final consumers of electricity.	
Cost components of transmission tariffs	Cost items related to energy transmission as well as other regulatory costs that are recovered through the transmission tariff. Examples include infrastructure (capex and opex) related costs, system services (e.g. congestion management) and losses.	
Cross-border electricity trading	Trading of electricity between European Member States and neighbouring countries facilitated by cross-border electricity transmission capacity.	
Electricity transmission system	The system of high voltage electric lines providing for the bulk transfer of electricity across a geographical region.	
T-connected end consumer	Means a final consumer of electricity who is directly connected to the electricity transmission network.	
Energy based transmission tariffs	Transmission tariff that is paid on each unit of energy injected or withdrawn from the transmission network.	
ENTSO-E	The European Network of Transmission System Operators (ENTSO-E) is the body that represents 41 electricity TSOs from 34 European countries. 12	
EU Target Model	European Electricity Target Model envisages coupled European electricity markets and a zonal market design which addresses network congestions	

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[&]quot;Shallow" connection charges are usually based on the simply recovering the costs related to the physical connection assets between the connected party and (usually) the nearest network connection point. "Deep" connection charges are based on a combination of shallow charges plus the costs related to any additional "downstream" network reinforcement required to support the load of the connected party.

¹² https://www.entsoe.eu/Pages/default.aspx

Term	Definition
	between "properly defined bidding zones" by using preventive and curative congestion management methods. Key elements of the EU Target Model are set out in the Network Code on Capacity Allocation and Congestion Management (CACM). ¹³
G-Charge	Generator-Charge. The electricity transmission tariff paid by electricity generators (producers) for transporting electricity over the transmission network. G-Charges exclude charges for physical assets required for connection to the system, charges related to ancillary services and system loss related charges. ¹⁴
Load	Demand users of the electricity transmission network. In the context of transmission tariffs, different countries take different approaches in allocating the total costs of electricity transmission network services to be recovered from generators (G-Charge) and Load customers.
Locational price signals	Means elements of transmission tariff that are differentiated by where the network user is located. The purpose of locational price signals can be to incentivise transmission network users to use specific locations on the transmission system to support efficient use and development of the electricity transmission network.
Time of use price signals	Means elements of transmission tariffs that are differentiated according to the time (e.g. daily or seasonal peak) when the user of the network accesses the transmission system.
Trade association	Means an organisation that represents the interests of specific groups of market participants in the electricity market, such as electricity generators, traders, network asset owners, etc.
Transmission tariff	Means the price paid by network users to the transmission system operator for the provision of transmission services.
TAO	The Transmission Asset Owner (TAO) is a licensed entity that owns, develops and maintains the physical transmission network assets within a designated area.
TSO	The Transmission System Operator (TSO) is a licensed entity entrusted with operating the transmission system within a designated area.
Supplier	An entity responsible for selling and billing electricity to final consumers. A supplier may be involved solely in selling energy to final consumers or may also be involved in other aspects of the electricity system.

 $^{^{13} \ \}underline{\text{https://www.entsoe.eu/major-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-and-congestion-projects/network-code-development/capacity-allocation-projects/network-capacity-allocation-proje$

management/Pages/default.aspx

14 This is line with the producer transmission charge definition contained in EU Regulation 838/2010 (Part B, point 2): http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:250:0005:0011:EN:PDF

Part 3 – Questionnaire

Organisation background

Please provide background information on your organisation.

Ques	tion	Answer
(1)	Which European Member State electricity market / sector does you organisation primarily participate in?	
(2)	What is your organisation's role / activities in a Member State electr internal electricity market more generally?	icity sector and the
	Supplier	Yes / No
	Generator	Yes / No
	TSO	Yes / No
	TAO	Yes / No
	T-connected end consumer	Yes / No
	NRA	Yes / No
	Consumer body	Yes / No
	Trade association	Yes / No
	Other	Yes / No
	If other please specify:	
(3)	Does your organisation participate in multiple Member State electricity markets / sectors?	Yes / No
	What other Member State electricity markets / sectors does your organisation participate in?	
(4)	Does your organisation engage in cross-border electricity trading activities?	Yes / No
(5)	If the answer to the previous question is yes, where possible, please state which regions/countries your organisation participates in cross-border trade of electricity.	
(6)	Is there any other information regarding your organisation we should be	e aware of in

C	estion	Answer	
	reviewing your responses to the other parts of the questionnaire?		
	Please provide response:		

Objectives and principles for transmission tariff structures

We are interested to hear your views on how the objectives and legal basis for electricity transmission tariffs in the EU, as outlined in Part 1 above, should be considered as part of this study on electricity transmission tariff structures.

Question		Answer
(7)	How and why is the structure of electricity transmission tariffs important to your organisation?	Please provide response:
(8)	What should be the objectives for electricity transmission tariff structures when considered from the perspective of facilitation and efficient functioning of the internal European electricity market?	Please provide response:

Study assessment criteria

As part of our study we are required to develop a set of assessment criteria against which current electricity transmission tariff structures will be classified and evaluated. These criteria will also be used to identify, develop and evaluate proportionate policy options for potential harmonisation of electricity transmission tariff structures across Member States.

We are interested to hear your views on the assessment criteria that we should apply for evaluating the status quo arrangements and policy options developed by the study.

Please provide your response below:		

Current charging practices in European countries

This section requests feedback on current electricity transmission tariff structures that apply in European countries and the impacts associated with those tariff structures.

We would like to understand your organisation's views on the extent to which current electricity transmission charging structure(s) in Europe differ between European Member

States and neighbouring countries, such as Norway, and the actual or potential problems (if any) this may give rise to.

In particular, we are interested in your views as to whether differences in current transmission tariff structures, when considered from the perspective of the internal European electricity market, currently and/or in the future, could hamper electricity market competition and integration and other regulatory objectives for the internal market in electricity.

We are aware that ENTSO-E produces a synthesis of transmission tariffs and structures that apply in Europe. ¹⁵ The intention of this section of the questionnaire is to gauge stakeholders views on those existing tariff structure arrangements.

<u>Internal European electricity market impacts</u>

The following questions request views on the degree of differentiation of current electricity transmission tariff structures and the associated impacts on the internal electricity market.

To distinguish between *current* impacts and potential *future* impacts, some questions are divided into two parts: part a) requests views on the current situation; part b) requests views on expected impacts in the future.

PART A - Current impacts

Ques	tion	Answer	Comments
(9)	Do differences in the transmission tariff structures that apply in European countries <i>currently</i> impact on the efficient functioning of the internal electricity market?	Strongly disagree / disagree / neutral / agree / strongly agree	
(10)	If you agreed or strongly agreed with Question (9), what impacts does heterogeneity in electricity transmission tariff structures across European countries currently give rise to for the internal electricity market?		
	Altered operational decisions of generation	Yes / No / Not Applicable	

¹⁵ ENTSO-E (2014): 'Overview of transmission tariff structures in Europe: Synthesis 2013'

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Question	Answer	Comments
Altered investment decisions ¹⁶ of generation ¹⁷	Yes / No / Not Applicable	
Financing of generation	Yes / No / Not Applicable	
Altered investment decisions by end consumers ¹⁸	Yes / No / Not Applicable	
Altered consumption decisions by end consumers	Yes / No / Not Applicable	
Other	Please specif	y:

Ques	Question		Comments
(11)	Is heterogeneity of electricity transmission tariff structures amongst European countries a problem – i.e. a source, or a <i>potential</i> source, of regulatory and market failure for the internal electricity market?	Yes / No / Don't Know	
(12)	If you answered yes to Question (12) what are the problems or <i>potential</i> problems that differences in European country transmission tariff structures could give rise to?	Please provide response:	
	Where possible, please provide examples of the problems you identify and how they currently arise.		

 $^{^{16}}$ e.g. locational siting of generation. 17 We will assume that an answer of yes to this question also implies altered investment decisions by the TSO as a secondary impact of altered investment decisions by electricity generation. However, if you disagree with this assumption, please explain why in the other category below.

¹⁸ We will assume an answer of yes to this question also implies altered investment decisions by the TSO as a secondary impact of altered investment decisions by end consumers. However, if you disagree with this assumption, please explain why in the other category below.

Ques	Question		Comments
(13)	Has your organisation been affected by the problems which you identify in Question (12), if applicable?	Yes / No / Not applicable	
(14)	If the answer to Question (13) was yes, what were the impacts on your organisation? Can you provide an indicative monetary or any other quantitative impact (e.g. reduced trade)?	Please provide response:	
(15)	In your opinion are there <i>benefits</i> from heterogeneity in the electricity transmission tariff structures that apply across European countries?	Yes / No / Don't know	
(16)	If the answer to Question (15) was yes, what are those benefits? Please identify monetary or any other quantitative impacts (e.g. increased trade).	Please provide response:	

PART B – <u>Expected</u> future impacts

Ques	tion	Answer	Comments
(17)	Do you expect differences in the electricity transmission tariff structures that apply across European countries to impact on the efficient functioning of the internal electricity market in the future?	Strongly disagree / disagree / neutral / agree / strongly agree	
(18)	18) If you agreed or strongly agreed with Question (17), what impacts do you expect heterogeneity in electricity transmission tariff structures across European countries to give rise to for the internal electricity market in the future?		
	Altered operational decisions of generation	Yes / No / Not Applicable	
	Altered investment decisions ¹⁹ of generation ²⁰	Yes / No / Not Applicable	

e.g. locational siting of generation.
 We will assume that an answer of yes to this question also implies altered investment decisions by the TSO as a secondary impact of altered investment decisions by electricity generation. However, if you disagree with this assumption, please explain why in the other category below.

Ques	tion	Answer	Comments
	Financing of generation	Yes / No / Not Applicable	
	Altered investment decisions by end consumers ²¹	Yes / No / Not Applicable	
	Altered consumption decisions by end consumers	Yes / No / Not Applicable	
	Other	Please specif	y:

Ques	tion	Answer	Comments
(19)	Do you expect heterogeneity of electricity transmission tariff structures amongst European countries to be a problem – i.e. a source, or a <i>potential</i> source, of regulatory and market failure for the internal electricity market in the future?	Yes / No / Don't Know	
(20)	If you answered yes to Question (19) what are the problems or <i>potential</i> problems that differences in European country transmission tariff structures could give rise to in the future? Where possible, please provide examples of the problems you identify and how they may in future arise.	Please provide response:	

Cross border trade and market integration

We are particularly interested to understand / gather evidence of examples where existing charging practices or a lack of electricity transmission tariff structure harmonisation between European countries has in your view impacted on electricity cross-border trade and/or electricity market integration.

²¹ We will assume an answer of yes to this question also implies altered investment decisions by the TSO as a secondary impact of altered investment decisions by end consumers. However, if you disagree with this assumption, please explain why in the other category below.

nctures between European countries, in your nion, hamper electricity cross-border trade and/or ctricity market integration?	Strongly disagree / disagree / neutral / agree / strongly agree	
(22) If you agreed or strongly agreed with the previous question, we are interested to under which specific elements of electricity transmission tariff structures differences bet European countries in your opinion hamper electricity cross-border trade and/or electricity integration.		differences between
	•	cross-border trade due
cost components of transmission tariffs	Yes / No	
nerator tariffs (G-Charge)	Yes / No	
ational price signals ²²	Yes / No	
e of use price signals ²²	Yes / No	
nection charges	Yes / No	
rgy based transmission tariffs	Yes / No	
er	Please specif	y:
b) Please specify which of the following you expect to hamper electricity cross-border trade in the future due to differences in electricity transmission tariff structures:		
cost components of transmission tariffs	Yes / No	
nerator tariffs (G-Charge)	Yes / No	
ational price signals ²³	Yes / No	
e of use price signals ²³	Yes / No	
nection charges	Yes / No	
	ch specific elements of electricity transmission tallopean countries in your opinion hamper electricity of the integration. Please specify which of the following currently hamped to differences in electricity transmission tariff structure cost components of transmission tariffs herator tariffs (G-Charge) ational price signals ²² are of use price signals ²² are regy based transmission tariffs ter Please specify which of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the following you expect to leave the specific property of the s	disagree / disagree / disagree / disagree / ctricity market integration? ase justify your view. Dou agreed or strongly agreed with the previous question, we are intended to specific elements of electricity transmission tariff structures opean countries in your opinion hamper electricity cross-border traket integration. Please specify which of the following currently hamper electricity to differences in electricity transmission tariff structures: Cost components of transmission tariffs Per of use price signals 22 Yes / No An enerator charges Please specify which of the following you expect to hamper electricity in the future due to differences in electricity transmission tariffs Please specify which of the following you expect to hamper electricity in the future due to differences in electricity transmission tariffs Cost components of transmission tariffs Please specify which of the following you expect to hamper electricity in the future due to differences in electricity transmission tariff structures are cost components of transmission tariffs Province of use price signals 23 Province of use price in electricity transmission 24 Province of use price of use province of use price

²² For load and/or generation. ²³ For load and/or generation.

Ques	tion	Answer	Comments
	Energy based transmission tariffs	Yes / No	
	Other	Please specify	y:
(23)	We are interested to understand specific examples or case studies in countries or regions in Europe where, heterogeneity in electricity transmission tariff structures between European countries has hampered: a) electricity cross-border trade; and/or b) electricity market integration?		

Time of use and locational price signals

We are interested to understand your views on the importance of time of use and locational price signals in electricity transmission tariff structures to regulatory objectives for the internal electricity market. Please provide responses to the questions below.

Ques	tion	Answer	Comments
(24)	a) How important do you consider electricity transmission time of use price signals to national energy policy objectives? Please explain why.	Very important / important / neutral / not important	
	b) How important do you consider electricity transmission time of use price signals to transnational EU energy policy objectives? Please explain why.	Very important / important / neutral / not important	
(25)	a) How important do you consider locational price signals for use of the transmission system to national energy policy objectives? Please explain why.	Very important / important / neutral / not important	
	b) How important do you consider locational price signals for use of the transmission system to transnational EU energy policy objectives? Please explain why.	Very important / important / neutral / not important	

Question	Answer	Comments

If there is any other information you believe would be relevant for us to understand, please provide this information as a separate response at the end of the questionnaire.

Within country issues

The following set of questions request views on the impacts of transmission tariff structures within the European country electricity sector your organisation primarily participates in.

Question		Answer / Comments	
(26)	Are there any particular circumstances within your Member State that we should take into account when considering your responses to this questionnaire? Please provide response:		
(27)	Are there any non-transmission related costs recovered through electricity transmission tariffs in your Member State? If yes, please specify what costs are recovered.	Yes / No	
(28)	8) If you answered yes to the previous question, what impacts does the recovery of non-transmission related costs in the electricity transmission tariff give rise to from an internal electricity market perspective:		
	Altered operational decisions of generation Yes / No / Not Applicable		
	Altered investment decisions ²⁴ of generation ²⁵	Yes / No / Not Applicable	
	Financing of generation	Yes / No / Not Applicable	
	Altered investment decisions by end consumers ²⁶	Yes / No / Not Applicable	
	Altered consumption decisions by end consumers	Yes / No / Not Applicable	
	Other	Yes / No / Not Applicable	

e.g. locational siting of generation.

We will assume that an answer of yes to this question also implies altered investment decisions by the TSO as a secondary impact of altered investment decisions by electricity generation. However, if you disagree with this assumption, please explain why in the other category below.

²⁶ We will assume an answer of yes to this question also implies altered investment decisions by the TSO as a secondary impact of altered investment decisions by end consumers. However, if you disagree with this assumption, please explain why in the other category below.

Ques	tion	Answer / Comments
	Where possible, please provide further information to justify your opinion above:	

Views on policy options

We are also interested to understand your views on *potential* policy options for further electricity transmission tariff structure harmonisation which should be considered as part of this study (if any), the potential impacts of individual policy options and the practical issues and drawbacks that would be associated with their implementation.

Please insert your answers into the table below. If there is any other information which you believe would be relevant for us to understand, please provide this information as a separate response at the end of the questionnaire.

Ques	tion	Answer	Comment	
(29)	In your opinion, would further harmonisation of transmission tariff structures be beneficial for the internal electricity market?	Strongly disagree / disagree / neutral / agree / strongly agree		
(30)	(30) If you agreed or strongly agreed with Question (29), which elements of current transm tariff structures should, in your opinion, be considered for further harmonisation acros European countries?			
	The cost components of transmission tariffs	Yes/ No		
	Approach to G-Charge	Yes/ No		
	Locational price signals	Yes/ No		
	Time of use price signals	Time of use price signals Yes/ No		
	Connection charges Yes / No			
	Energy based transmission tariffs	Yes / No		
	Split between Generation (G) and Load (L) ²⁷	Yes / No		
	Other	Please specify:		

²⁷ This is the revenue recovery split between G and L through the transmission tariff structure.

Ques	tion	Answer	Comment	
	Where possible, please provide further information	n to justify your op	inion above:	
(31)	In your opinion, is harmonisation of the principles or characteristics of transmission tariff structures between European countries more important for Generation rather than Load users of the transmission system?	Generation / Load / Equally important	Please justify your view:	
(32)	Please rate the importance of harmonised principles for locational transmission price signals ²⁸ for generation, including minimum G-Charge, amongst European Member States.	1 = harmonised particles transmission price important 5 = harmonised particles transmission price important Please provide re	harmonised principles for locational nsmission price signals are very	
(33)	Please rate the importance of harmonised transmission tariff time of use signals (e.g. daily or seasonal peak) for end electricity consumers amongst European Member States.	Rating system of 1 to 5 1 = harmonised principles for locational transmission price signals are not important 5 = harmonised principles for locational transmission price signals are very important Please provide response below and where possible justify your view:		

²⁸ Capacity based.

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Ques	tion	Answer	Comment
(34)	What implementation issues and drawbacks should in your view be taken into consideration in the case for further transmission tariff structure harmonisation?	Please provide	response:

Further Information

Please provide your response below:

Contact details

Should you wish to discuss any aspect of this questionnaire please contact:

Andrei Vladareanu Andrei. Vladareanu@cepa.co.uk