

ROBERT SCHUMAN CENTRE

The regulatory framework for electricity in the EU: Implementation to traction current for railways

Alberto Pototschnig

22nd Florence Rail Forum "Electricity and Infrastructure Managers: Is there a need for Regulation?"

Florence, 9 Dec 2022



www.eui.eu



EULER Electricity sector liberalisation Reference and electricity consumption by Railway Undertakings

- Electricity supply is liberalised in the EU since 2007
- All consumers shall be free to:
 - buy electricity from the supplier of their choice
 - have more than one electricity supply contract at the same time, provided that the required connection and metering points are established

Article 4 of the Electricity Directive ((EU) 2019/944)

- There is no reason why Railway Undertakings (RUs) should not be able to enjoy the same freedom to choose the suppliers
- Any restriction to the possibility of RUs freely to choose their suppliers might be in breach of EU law





Are there barriers to Railway Undertaking freely choosing their suppliers? (1)

Legal/regulatory

- At present, the railway Infrastructure Managers (IMs) are allowed to provide traction current (in a non-discriminatory manner, as an additional service billed separately)
- If the railway IM is the only available provider of traction current, the price of traction current should be regulated in a cost-plus manner
- What is the status of the railway IMs' electricity network within the electricity regulatory framework?
- Could the railway IMs' electricity network be qualified as a 'closed distribution' system'?
 - Doubtful, given the requirement of art. 38(1)(b) of the Electricity Directive that the system distributes electricity primarily to the owner or operator of the system or their related undertakings
 - In any case, this would not prevent it from being subject to TPA obligations.



Are there barriers to Railway Undertaking freely choosing their suppliers? (2)

ROBERT SCHUMAN CENTRE

Technical

- Lack of metering at the individual train level
 - But multiple trains already operate on the same network and therefore there must be ways of defining their individual consumption. This could be used in a transitory period until smart meters are installed on all trains





The role of the Railway Infrastructure Managers

with respect to the traction current consumed by Railway Undertakings

- Wheel on their electricity network the electric current that RUs buy from the suppliers of their choice
- Possibly compete with other suppliers in selling electric current to RUs
 - In this case, they would need to qualify as suppliers
 - To be considered if their role as operator of the electricity network used to deliver electricity to the trains could put them in a position to distort competition in the supply of electric current to RUs. If so, unbundling should be considered.





The liberalisation of the energy sector and the rationale for unbundling

- The liberalisation of the energy sector and the introduction of competition wherever possible, requires:
 - Unbundling between competitive and monopoly activities
 - to remove the conflict of interest between competitive and monopoly (network) activities:
 - Possible cross-subsidies in tariff setting
 - Possible discrimination in <u>access conditions</u>
 - Possible distortions in <u>network development</u>
 - Third–party access conditions to the networks



OBERT SCHUMAN CENTR



Different Forms of Unbundling for the Railway Infrastructure Managers based on the regulatory framework for the energy sector

- **Accountin**g: would require the railway IMs to keep separate internal accounts for each of its activities, in particular separate accounts for its electricity network-related activities and for its other activities
- *Functional (management and decision-making)*: would requires the railway IMs to separate the management, including decision-making, of its different activities, in particular separate management and decision-making of its electricity network-related activities and of its other activities
- Legal: would require the railway IMs to operate its regulated and competitive activities, in particular its electricity network-related activities and its other activities, through separate legal entities
- **Ownership**: would requires the electricity network-related activities and the other activities of the railway IMs to be operated by undertakings with separate ownership



Unbundling of system operation activities in the EU energy sector

ROBERT SCHUMAN CENTRE

		2nd De eksers		
		2nd Package "Speeding up	3rd Package	
	1 st Package	liberalisation and	"EU-wide Institutional & Regulatory	Clean Energy for All Europeane
	"First common rules for the internal market	market integration" Full market opening;	Framework"	Clean Energy for All Europeans Package (CEP)
				"More robust EU Framework"
and liberalisation"		obligation for MSs to	Reinforcing unbundling; harmonised cross-	Enhanced energy market
	inderangation	establish NRAs independent from	border rules;	design; reinforcing ACER &
	Partial liberalisation	industry; legal &	strengthened NRAs independence and	ENTSOs' roles; strengthening regulatory oversight; creation
inder and	inderansation	tion functional unbundling	powers; establishment	of RCCs and of EU DSO Entity;
	1 1		of ACER & ENTSOs	emphasis on consumers
	ii	i i	I	I .
		· ·	I	
	1996 1998	2003 2005	2009	2019
	Accounting	Legal	Ownership	Ownership
	separation	unbundling	unbundling*	unbundling*
www.eui.eu				Co-funded by the Erasmus+ Programme
www.eui.eu		* With derogation for existing vertically-integrated undertakings (see next slide)		
	undertaking			



ROBERT SCHUMAN CENTRE

Thank you for your attention!



www.eui.eu