

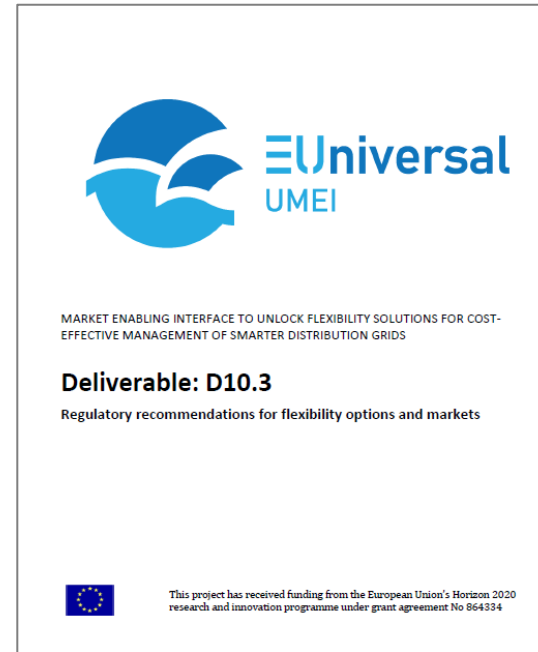
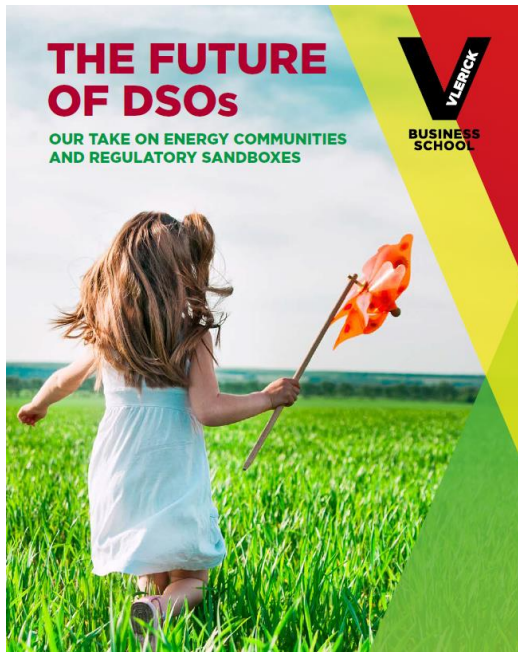
# Energy transition and regulatory sandboxes

Leonardo Meeus, 10<sup>th</sup> of March 2022

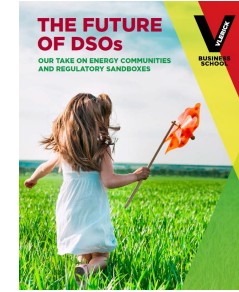
Foundation for Energy and Environmental  
Sustainability, Barcelona





# Story of 3 publications



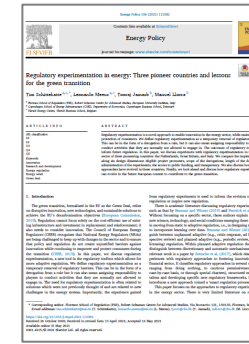
# Regulatory sandbox pioneers



# First implementation regulation sandboxes

	GB (2016) 	NL (2015) 
Scope derogations	Not pre-defined	Pre-defined
Length derogations	2 years	Default 10 years
Who can apply	Communities and companies	Communities and home owner associations
Administration	Regulator	Ministry with advice and monitoring from regulator





# Evolution of the regulatory sandboxes

	GB (2020) 	NL (2020) 
Scope derogations	Not pre-defined	Menu expanded
Length derogations	2 years	Default 10 years
Who can apply	Communities and companies	Scope widened to include suppliers, DSOs...
Administration	Regulator, in coordination with Industry Code administrators	Ministry with advice and monitoring by regulator



# Ofgem first insights

## Insight 1

*It is not always clear to innovators what they can and can't do.  
Innovators commonly need advice, not a sandbox.*



The screenshot shows the Ofgem logo at the top right, with the tagline 'Making a positive difference for energy consumers'. Below the logo is a horizontal orange line, followed by a grey box containing the title 'Insights from running the regulatory sandbox'. The main content is under the heading '1. Introduction' and contains two paragraphs of text.

**ofgem**  
Making a positive difference  
for energy consumers

---

**Insights from running the regulatory sandbox**

**1. Introduction**

We launched the regulatory sandbox service in February 2017. The sandbox enables innovators to trial new products, services and business models without some of the usual rules applying. You can read more about what a sandbox is [here](#). We have now run two application rounds (called 'windows') – this document sets out what we have learnt so far from running the sandbox process.

We intend to continue offering this service, and these lessons are informing how it evolves. We will set-out out the next steps for the sandbox in the near future. We also hope these insights will be of use to other regulators and government departments who are considering a similar approach.

# Regulatory experimentation in Italy

# Regulatory experimentation



	Italy (2010-2015)	Italy (2017)
Scope derogations	Predefined for EV charging infrastructure	Participation of DER in balancing markets
Length derogations	3-4 years	3-4 years
Who can apply	DSOs or third-party operators	Aggregators
Administration	Regulator, with experts for selection of projects	Regulator in close cooperation with TSO
Other aspects	Final report public + funding provided	Final report public + funding provided

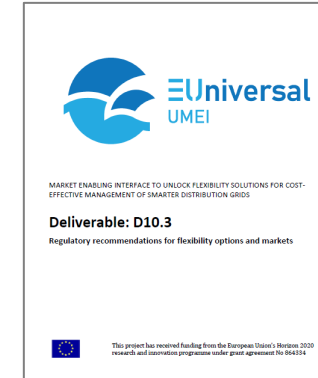




# Second wave of regulatory sandboxes


# Many new regulatory sandboxes

	Austria	Belgium			France	Germany	Lithuania	Norway	Poland	Spain
		Brussels	Flanders	Wallonia						
Sandbox status	Legal provisions entered into force in 2021. No projects granted until December 2021.	2 projects granted and 6 projects under evaluation until December 2021.	1 project granted until December 2021.	3 projects granted until December 2021.	12 projects granted under the first call in 2020. Second call closes in January 2022.	Sandboxes can be granted under the SINTEG and Reallabore der Energiewende funding programmes.	Regulation in place since 2020, no project granted until August 2021.	9 projects granted until October 2021.	Regulation under development, no projects granted until December 2021.	Regulation under development, no projects granted until December 2021.
Eligible project promoters	Companies of any legal form, research institutions, and non-commercial institutions.	All parties.	All parties.	All parties.	Any legal entity.	All parties.	All parties.	All parties.	Any legal person or organisation which is granted legal capacity by a separate act.	All parties.
Derogations	Targeted to exemptions from grid fees for research and demonstration projects	Open to all regulation under regional responsibility.	Targeted to specific list of regulation, but open for any proposal within this list.	Open to all regulation under regional responsibility.	Targeted to specific list of regulation, but open for any proposal within this list.	Open	Open	Open	Targeted to specific area of regulations.	Open
Length of derogation	Max 3 years.	Max 2 years, extension of another 2 years possible.	Max 10 years, extension of max 5 years possible.	Max 5 years.	Max 4 years, extension of another 4 years possible.	-	Max 1 or 3 years depending on the topic. Extension of respectively 1 and 2 years possible.	1-3 years in most cases, with a max of 5 years.	Max 3 years, extension of max 3 years possible.	Max 3 years for sandboxes under Circular 3/2019. Limited but no specified duration under Real Decreto-ley 23/2020.
Administration	Tasks divided among Ministry (BMK), Regulator (E-Control) and funding agency (FFG).	Regional regulator (BRUGEL)	Ministry through agency VEKA.	Regional regulator (CWaPE)	National regulator (CRE), but tasks could be divided differently in specific cases.	Tasks divided between Ministry (BMWi) and national regulator (Bundesnetzagentur).	Project promoter under supervision of national regulator (VERT)	National regulator (NVE-RME)	National regulator (URE)	Regulator (CNMC) under Circular 3/2019. Ministry (MITECO) for under Decreto-ley 23/2020.
Funding	Yes, 4.6 million euros of funding is available by BMK, managed by FFG in the second call.	-	No, but projects may facilitate funding through other channels.	-	No, but projects may facilitate funding through other channels.	Yes, sandboxes are granted when applicable in funding project.	Yes, partially co-funding via regulated tariffs possible.	Yes, possible via regulated tariffs possible under NVE R&D scheme.	No, but projects may facilitate funding through other channels.	No, but projects may facilitate funding through other channels.
Transparency and reporting	-	Six-monthly report to BRUGEL. Final report will be published online.	Annually progress report to Ministry. Final report will be published online.	Interim reports and final report will be available on CWaPE website.	Annual progress report to CRE.	Final report will be available on BMWi website.	Interim reports and final report submitted to VERT.	Periodical report to NVE-RME. Final report will be published online.	Periodical reports and final report will be published online.	-



# Main findings

MARKET ENABLING INTERFACE TO UNLOCK FLEXIBILITY SOLUTIONS FOR COST-EFFECTIVE MANAGEMENT OF SMARTER DISTRIBUTION GRIDS  
**Deliverable: D10.3**  
Regulatory recommendations for flexibility options and markets

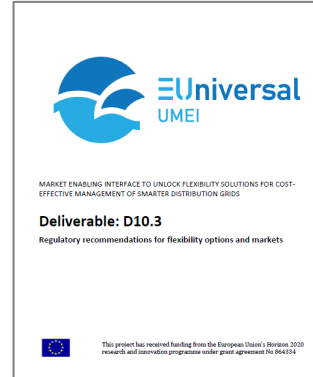
 This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101019714

	Yes	No
Dedicated call	Austria, France, Germany, Poland	Brussels, Flanders, Wallonia, Norway
Everyone can apply	Brussels, Flanders, Wallonia, Germany, Lithuania, Norway, Spain	Austria, France, Poland
Possible derogations specified	Austria, Flanders, France, Poland	Brussels, Wallonia, Germany, Lithuania, Norway, Spain
Regulator administers (together with Ministry)	Brussels, Wallonia, France, Lithuania, Norway, Poland (Austria, France, Germany, Spain)	Flanders
Funding included	Austria, Germany, Lithuania, Norway	Flanders, France, Poland, Spain
Public report at the end of project	Brussels, Flanders, Wallonia, Germany, Lithuania, Norway, Poland	Austria? Spain? France?

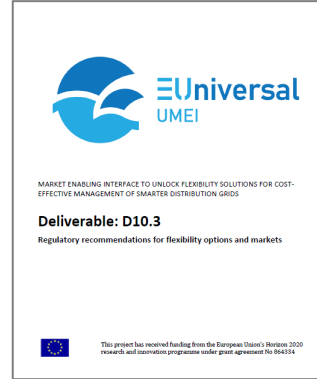


# Design choices and their impact

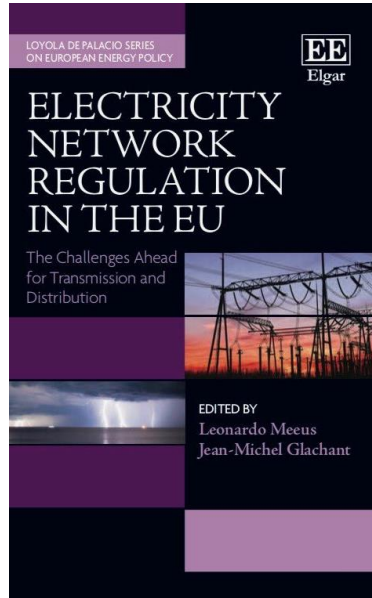
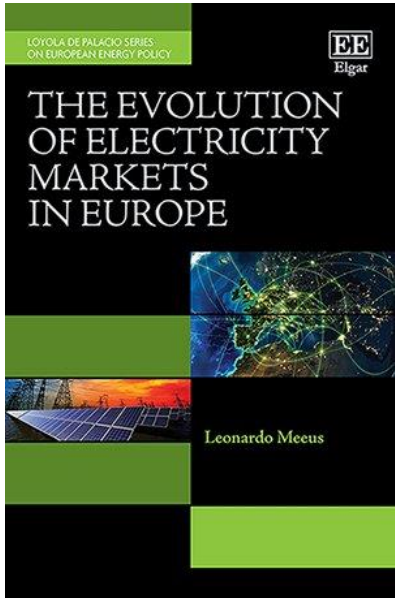
Dimension	Design choices	Impact of decision
Application process	<ul style="list-style-type: none"> <li>• Dedicated calls</li> <li>• Continuous application</li> </ul>	<ul style="list-style-type: none"> <li>• Timing of workload of the application process</li> <li>• Possibility to highlight topics during application</li> <li>• Possibility to provide funding during application</li> </ul>
Eligible project promoters	<ul style="list-style-type: none"> <li>• Open, without definition</li> <li>• Open, with specified definition</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunity to have innovative use cases by unusual project promoters</li> </ul>
Derogations	<ul style="list-style-type: none"> <li>• Targeted list</li> <li>• Open</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunity to have innovative use cases by unusual project promoters</li> <li>• Opportunity to inspire new regulation</li> <li>• Risk that innovators might be looking for regulatory advice</li> </ul>
Administration	<ul style="list-style-type: none"> <li>• Regulatory only</li> <li>• Ministry only</li> <li>• Regulator and ministry</li> <li>• Other involved agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Regulation and legislation under scope of sandbox to which derogations can be given</li> <li>• Opportunity to inspire new regulation</li> <li>• Possibility to provide funding</li> </ul>
Length of derogations	<ul style="list-style-type: none"> <li>• Maximum length of initial project</li> <li>• Extension allowed or not</li> </ul>	<ul style="list-style-type: none"> <li>• Time for experimentation and development of results</li> <li>• Opportunity to inspire new regulation</li> <li>• Possibility to intervene in the sandbox project</li> </ul>
Funding	<ul style="list-style-type: none"> <li>• Funding as part of sandbox project or not</li> <li>• Other funding sources are allowed or not</li> </ul>	<ul style="list-style-type: none"> <li>• Innovators might rather be looking for subsidies than a sandbox</li> <li>• Business case of the project when the regulatory sandbox ends</li> </ul>
Transparency and reporting	<ul style="list-style-type: none"> <li>• Internal or public periodic reporting</li> <li>• Internal or public final report</li> </ul>	<ul style="list-style-type: none"> <li>• Dissemination of lessons learned</li> <li>• Opportunity to inspire new regulation</li> </ul>



# Final conclusion



	Opportunity	Risk
Do sandboxes speed up innovation?	Sandboxes can bring innovative use cases by unusual project promoters	Innovators might rather be looking for subsidies or regulatory advice
Do sandboxes speed up regulatory change?	Sandboxes can inspire new regulation	Sandboxes might be used as an excuse for delayed implementation of regulation



[www.leonardomeeus.com](http://www.leonardomeeus.com)



[www.eui.eu](http://www.eui.eu)