



European
University
Institute

ROBERT
SCHUMAN
CENTRE FOR
ADVANCED
STUDIES

FLORENCE
SCHOOL OF
REGULATION

4TH CONFERENCE ON THE REGULATION OF INFRASTRUCTURES

REGULATING NETWORK INDUSTRIES IN EMERGING COUNTRIES

Organiser: **Florence School of Regulation/Robert Schuman Centre for Advanced Studies/
European University Institute**

Conference Room, Villa La Fonte
Via delle Fontanelle, 18 – San Domenico di Fiesole

12 June 2015

■ **CONTEXT**

The de- and re-regulation of the different network industries is an ongoing process at the global level. As this process unfolds, ever new phenomena emerge, which generally call for more, rather than less regulatory intervention. Yet, the question about the right mixture between market, economic, technical and social regulation remains wide open in all the network industries.

The question becomes even more challenging when looking at infrastructure development in different regions as, at least in some of the network industries, the gap between regulatory assets in different countries is very wide. Most of the European countries have a long lasting story of national regulation and have then started to put considerable effort in harmonising their regulation at the EU level. Outside the EU, regulation of network industries has followed its own path, according to the necessities of the country or the macro-region. Despite the different stages of network industries regulation, mutual learning processes might be possible and actually welcome, in the light of an ever more connected world.

This 4th Florence Conference on the Regulation of Infrastructures aims at taking stock of the major challenges infrastructure regulation is currently facing, paying attention to the mutual understanding effort that the regulators have to undertake. It does so by:

- looking at the main infrastructure sectors, notably telecommunications, postal services, electricity, gas, railways, air transport, urban public transport, as well as water distribution and sanitation;
- looking at infrastructure regulation from various disciplinary approaches, notably engineering, economics, law and political science;
- linking an academic approach to practical relevance.

Scientific Committee

- **Matthias Finger** (EPFL and EUI, Director of the Transport Area of FSR)
- **Jean-Michel Glachant** (Director of the Energy Area of FSR)
- **Leigh Hancher** (Director of the EU Energy Law & Policy Area)
- **Xavier Labandeira** (Director of the Climate Policy Research Unit of FSR)
- **Pier Luigi Parcu** (Director of the Communications and Media Area of FSR)
- **Ignacio Pérez-Arriaga** (MIT, Comillas and EUI, Director of the Energy Training of FSR)
- **Stéphane Saussier** (IAE de Paris and FSR, Director of the Water Area of FSR)

COMMUNICATIONS AND MEDIA

- **Christian Jaag***, Jose Parra Moyano, Urs Trinkner Postal strategies for a digital age
- **Riham Ahmed Ezzat***, Carlo Cambini, Carine Staropoli: Do regulatory reform dynamics matter for telecom sector performance? Evidence from MENA countries
- **Fuat Oğuz, Erman Benli***: Fixed-Mobile Substitution in Telecommunications: A Comparative Analysis of the Recent Turkish Experience
- **Maria Luisa Stasi**, The role of non -State actors in the regulatory reform outside the EU

ENERGY

- **Günter Knieps***: The evolution of smart grids and the increasing need for disaggregated nodal pricing
- **Joseph P. Tomain***: The Democratization of Energy
- **Jesse Jenkins, Ashwini Bhaskar***, Scott Burger, Jose Ignacio Pérez-Arriaga: Redesigning the Regulation of Electricity Distribution Under High Penetration of Distributed Energy Resources
- **Alexis Meletiou***, Carlo Cambini, Ettore Bompard, Marcelo Masera: Regulatory reforms for incentivizing the investments in innovative Smart Grid projects in Europe: Best practices from EU member state cases

TRANSPORT

- **Jason Monios***, Rickard Bergqvist: Developing a Framework for Standardising and Harmonising Intermodal Terminal Concession Contracts
- **Edson Gonçalves***, Patrícia Sampaio, Joisa Dutra, Mariam Daychoum: Regulatory reform in the Brazilian railway sector and its potential effects
- **Valerio Benedetto***, Chris Nash, Andrew Smith: Rail regulation in Europe: an industry-based survey
- **Joanna Piechucka***: Regulatory contracts and cost efficiency – the French urban public transport case

WATER

- **Alexandre Mayol***, Simon Porcher: An empirical study of French water distribution: performance and efficiency measures
- **Ricardo Ferreira Reis***, J. Gonçalo Ribeiro, J. Miranda Sarmento: An assessment of water utilities efficiency using the Portuguese case

*Selected authors and titles of their papers (*presenting author)*

■ PROGRAMME

	Conference Room		
08.30-09.00	Welcoming Introduction Brigid Laffan Matthias Finger Jean-Michel Glachant Xavier Labandeira Pier Luigi Parcu Stéphane Saussier		
09.00-10.40	Parallel Sessions 1 Transport session – Room A Chair and Discussant: Matthias Finger <ul style="list-style-type: none">• Jason Monios• Edson Gonçalves / Patrícia Sampaio	Energy session – Room B Chair and Discussant: Jean-Michel Glachant <ul style="list-style-type: none">• Günter Knieps• Joseph Tomain	
10.40-11.10	COFFEE BREAK		
11.10-12.50	Parallel Sessions 2 Telecommunications and Media session – Room A Chair and Discussant: Pier Luigi Parcu <ul style="list-style-type: none">• Christian Jaag• Maria Luisa Stasi	Water session – Room B Chair and Discussant: Stéphane Saussier <ul style="list-style-type: none">• Alexandre Mayol• Ricardo Ferreira Reis	
12.50-14.00	LUNCH BREAK		
14.00-15.40	Parallel Sessions 3 Energy – Conference Room Chair and discussant: Jean-Michel Glachant <ul style="list-style-type: none">• Alexis Meletiou• Ashwini Bhaskar / Scott Burger	Transport session – Room A Chair and discussant: Matthias Finger <ul style="list-style-type: none">• Valerio Benedetto• Joanna Piechucka	Communications and Media session – Room B Chair and discussant: Pier Luigi Parcu <ul style="list-style-type: none">• Riham Ahmed Ezzat• Erman Benli
15.40-16.00	COFFEE BREAK		
16.00-17.00	Joint Session and concluding remarks – Conference Room Concluding remarks and award of the best paper: Matthias Finger Jean-Michel Glachant Xavier Labandeira Pier Luigi Parcu Stéphane Saussier		

■ PARTICIPANTS

Riham Ahmed Ezzat	University Paris 1, France riham.ahmedezzatt@gmail.com
Valerio Benedetto	Institute for Transport Studies, United Kingdom tsvb@leeds.ac.uk
Erman Benli	Social Sciences, University of Ankara, Turkey erman.benli@yahoo.com
Nadia Bert	European University Institute, Italy nadia.bert@eui.eu
Ashwini Bharatkumar	Massachusetts Institute of Technology, United States
Alberto Biancardi	The Italian Regulatory Authority for Electricity, Gas and Water, Italy abiancardi@autorita.energia.it
Scott Burger	Massachusetts Institute of Technology, United States burger@mit.edu
Marta Cantero Gamito	European University Institute, Italy marta.cantero@eui.eu
Donna Champion	Loughborough University, United Kingdom d.champion@lboro.ac.uk
Ilaria Conti	European University Institute, Italy ilaria.conti@eui.eu
Benjamin Curnow	Vienna University of Economics and Business, Austria bcurnow@equalit.com.au
Elena D'Alessandri	European University Institute, Italy elena.dalessandri@eui.eu
Filippo Donati	University of Florence, Italy fdonati@unifi.it
Matthias Finger	European University Institute, Italy and EPFL, Switzerland fsr.transport@eui.eu
Jean-Michel Glachant	European University Institute, Italy jean-michel.glachant@eui.eu
Christian Jaag	Swiss Economics, Switzerland christian.jaag@swiss-economics.ch
Guenter Knieps	University of Freiburg, Germany guenter.knieps@vwl.uni-freiburg.de
Marek Kolodziejski	European Parliament, Belgium marek.kolodziejski@ep.europa.eu
David Kupfer	European University Institute, Italy david.kupfer@eui.eu
Fumio Kurosaki	Institute of Transportation Economics, Japan fumiokurosaki@itej.or.jp
Xavier Labandeira	European University Institute, Italy xavier.labandeira@eui.eu
Edson Daniel Lopes Gonçalves	Getulio Vargas Foundation, Brazil edson.goncalves@fgv.br

Claudio Marcantonini	European University Institute, Italy claudio.marcantonini@eui.eu
Alexandre Mayol	Paris School of Economics, France alexandre.mayol@psemail.eu
Alexis Meletiou	European Commission JRC Joint Research Centre-Ispra, Italy alexis.meletiou@jrc.ec.europa.eu
Jason Monios	Edinburgh Napier University, United Kingdom j.monios@napier.ac.uk
Pier Luigi Parcu	European University Institute, Italy pierluigi.parcu@eui.eu
Joanna Piechucka	Paris School of Economics/Microeconomix, France joanna.piechucka@psemail.eu
Ricardo Reis	Catolica Lisbon School of Business and Economics, Portugal rreis@ucp.pt
Daniele Russolillo	Turin School of Local Regulation, Italy daniele.russolillo@turinschool.eu
Patricia Sampaio	Getulio Vargas Foundation, Brazil patriciarsampaio@gmail.com
Joaquim Sarmiento	ISEG, Portugal jsarmiento@iseg.utl.pt
Stéphane Saussier	Sorbonne Business School, France saussier@univ-paris1.fr
Maria Luisa Stasi	European University Institute, Italy maria.stasi@eui.eu
Joseph Tomain	University of Cincinnati, College of Law, United States joseph.tomain@uc.edu

■ BIOGRAPHIES OF THE SPEAKERS



Riham Ahmed Ezzat

Riham Ahmed Ezzat is a PhD candidate at Centre d'Économie de la Sorbonne, University of Paris 1 Panthéon-Sorbonne since 2012. In her thesis, she is conducting different empirical essays on the telecommunication sector in MENA countries. She is also a Teaching Assistant at the Economics department, Faculty of Economics and Political Science, Cairo University. She holds her Master degree in Applied Economics from the University of Paris 1 Panthéon-Sorbonne in 2012 and obtained her Bachelor degree in Economics from Cairo University in 2011.



Valerio Benedetto

Valerio Benedetto is a PhD Research Student in Transport Economics and Regulation at the Institute for Transport Studies (ITS), University of Leeds, under the supervision of Dr Andrew Smith and Professor Chris Nash. His research focuses on the impacts of regulation on the efficiency of European railway systems, and on the analysis of regulatory practices in this industry. Before joining ITS, he completed Master's degrees in Economics at the universities of York (2012) and Ferrara (2010).



Erman Benli

Erman Benli graduated from Bilkent University Faculty of Law in 2008 and then he received his LL.M. degree in the field of Law and Economics from the Bilkent University Faculty of Law in 2009. Erman is a Ph.D. candidate and expected to receive his degree before the end of 2015. His Ph.D. field is private law (capital markets law) and his dissertation title is financial collateral arrangements.

Prior to his current position, he worked as a research assistant in Baskent University Faculty of Law and Yıldırım Beyazıt University Faculty of Law. He also worked as a competition lawyer at Türk Telekom. He now works as a research assistant at the Social Sciences University of Ankara Faculty of Law. Erman gives consulting services on competition and regulation law and economics. His research interest includes specifically on margin squeeze, fixed-mobile substitution, fiduciary transactions, financial collateral law, and economic analysis of private law. Erman published three international and two national peer-reviewed articles.



Ash Bharatkumar

Ash Bharatkumar is a PhD student in the Engineering Systems Division at MIT and a research assistant with the MIT Energy Initiative's Utility of the Future project, an interdisciplinary study of the technology, business model, and regulatory changes reshaping the power sector and electric utility industry. Her research focuses on the design of regulation and markets best suited for the integration of decentralized and centralized resources in a decarbonized power sector. Her core research interests include the development of theory and the use and development of computational tools to capture the physical impacts of distributed energy resources on power system planning and operations in order to inform the design of electricity markets, network regulation, and the pricing of electricity services. Ash completed her master's degrees in Electrical Engineering and the Engineering Systems Division's Technology and Policy Program at MIT, and her bachelor's degree at the University of Wisconsin-Madison.



Scott Burger

Scott Burger is an engineer, researcher, and consultant with expertise in distributed energy technologies, energy entrepreneurship, electric power systems, and energy project finance. Scott is pursuing a Masters in Technology and Policy and a PhD in Engineering Systems from the Massachusetts Institute of Technology, where he is a MIT-Shell Energy Fellow. Scott's academic research with the MIT Energy Initiative focuses on the optimal deployment, system impacts, and climate implications of distributed energy systems within the broader electric power system. Outside of research, Scott is the Managing Director of the MIT Clean Energy Prize, the nation's largest student energy entrepreneurship competition. Scott successfully led the CEP in fundraising over \$450,000 for the 2014-2015 competition. In addition, Scott is a Fellow with the PRIME Coalition, where he is developing a pipeline of potential resource innovation investments for PRIME's philanthropic and family office investment partners.

Before coming to MIT, Scott was a Solar Analyst with GTM Research. Scott led GTM's global downstream demand practice, and led GTM's entry into the Middle Eastern and Japanese markets. Before GTM Research, Scott was the Director of Engineering for Circular Energy, a solar PV engineering, procurement and construction firm based out of Austin, TX. During his tenure at Circular, Scott oversaw the engineering department as the organization's revenue grew nearly 100%. Scott holds a B.S., cum laude, in Chemical Engineering from Washington University in St. Louis.



Edson Gonçalves

Edson Gonçalves. PhD and MA in Econometrics at EPGE/FGV, Bsc in Mechanical Engineering at UNICAMP.

Currently, senior researcher at CERI/FGV and professor of Economics (EPGE), Management Science (EBAPE) and Applied Math (EMAP) at FGV-RJ. Former consultant at Accenture and RiskControl/Banco BBM, working mainly in the following areas: Corporate Finance for utilities, Risk Management for infrastructure projects and regulated firms and Decision Analysis.



Christian Jaag

Christian Jaag is a Managing Partner with Swiss Economics. He has worked extensively on economic consulting assignments in relation to regulation and competition economics for corporate and public-sector clients across network industries such as post, telecommunication, transport and energy. Christian Jaag is also a lecturer at the Universities of St.Gallen and Zürich as well as at the Swiss Federal Institute of Technology in Lausanne. He is the author of numerous academic articles on public economics, regulatory economics and industrial organization.



Günter Knieps

Günter Knieps is professor of economics at the University of Freiburg (Germany) and Director of the Institute for Transport Economics and Regional Policy. Before that he held a position as professor of microeconomics at the University of Groningen. He has diplomas in economics and mathematics and a PhD in mathematical economics from the University of Bonn. He obtained his habilitation in Berne. He is Member of the Boards of Academic Advisors to the Federal Ministry for Economic Affairs and Energy as well as of the Federal Ministry of Transport and Digital Infrastructure.

Professor Knieps' main research interests include the study of network economics, de-regulation, competition policy, industrial economics, and sector studies on energy, telecommunications and transportation. He has published widely in academic and professional journals.



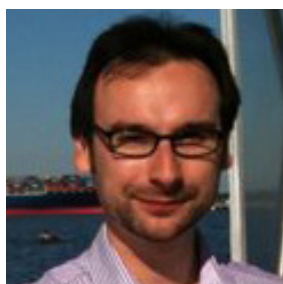
Alexandre Mayol

Alexandre Mayol's research interest mainly deals with measuring efficiency of local public services in two sectors, water and electric industry, referring to technological changes (smart grids, big data etc.). The rising of smart's concept renews the business and economic models in a lot of public sectors. Alexandre is graduated from Ecole Normale Supérieure in Economics, Law and Management in 2014. Since September 2014, he is PhD candidate in Economics in Paris School of Economics under the supervision of Carine Staropoli (PSE – Paris 1) and Stéphane Saussier (Sorbonne Business School – Paris 1). Personal website: www.parisschoolofeconomics.eu/fr/mayol-alexandre



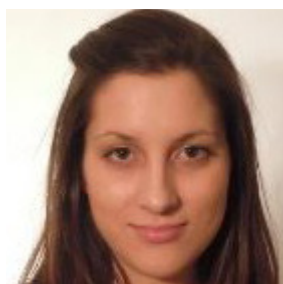
Alexis Meletiou

Alexis Meletiou joined the Smart Electricity Systems group of JRC-IET on February 2012. He is a Ph.D student in affiliation with the university of Politecnico di Torino and his main research interests include the regulatory aspects of distribution electricity networks and in particular the regulatory incentives for the deployment of Smart Grids in Europe. He is an economist with specialization in the management of energy resources. He holds a bachelor diploma in Economics from the University of Piraeus in Greece as well as a master diploma in Environmental and Resource Management (with specialization in energy analysis) from the Vrije University of Amsterdam in the Netherlands. During his master studies he conducted research around the economic feasibility of distributed energy resources.



Jason Monios

Dr Jason Monios is a Senior Research Fellow at the Transport Research Institute, Edinburgh Napier University, UK. His primary research areas are intermodal transport planning and the geography of port systems, with a specific interest in how these two subjects intersect in the port hinterland. He has over 40 peer-reviewed academic publications in addition to numerous research and consultancy reports, covering Europe, North and South America, Asia and Africa. He has co-authored technical reports with UNCTAD and UN-ECLAC and been expert adviser to the Scottish parliament. His book Institutional Challenges to Intermodal Transport and Logistics was published in 2014.



Joanna Piechucka

Joanna is a Ph.D. student at Paris School of Economics-Université Paris 1. Her research focuses on competition policy, public procurement, and regulation. Her current work addresses French urban public transport. She is also as an economist at Microeconomix in the field of competition policy and econometrics.

Joanna holds a master degree from Paris School of Economics-Université Paris 1 in Empirical and Theoretical Economics and from Warsaw School of Economics in Quantitative Methods in Economics and Information Systems.



Ricardo Ferreira Reis

Ricardo Ferreira Reis, Invited Assistant Professor of Accounting and Associate Dean for International Affairs. Holds a PhD in Business Science and Applied Economics, Wharton School, U. Pennsylvania, USA and a Licenciatura in Economics, University of Porto. Prof. Reis teaches Financial Accounting at the MBA, Undergraduate and Executive Education levels. His areas of interest in research are based on informational economics, with an emphasis on Accounting, ranging from agency theory to corporate governance. He previously taught both Cost and Financial Accounting at The Wharton School. Before that, he was attending the Doctorate and Masters Degree in Economics at Universidade Nova in Lisbon, where he also taught a wide range of courses in Economics and Business. Prof. Reis was a consultant for the then Lisbon Stock Exchange and the Porto Derivatives Exchange and he worked as a credit risk analysts for investment banking earlier in his career.



Patricia Sampaio

Patricia Sampaio is professor of law at FGV Law School in Rio de Janeiro. She has a doctorate and a master degree from the University of São Paulo School of Law. She is a researcher at the Research Center for Law and Economics and collaborates with the Research Center for Regulation and Infrastructure.



Maria Luisa Stasi

Maria Luisa Stasi is research associate at the FSR Communications & Media at the European University Institute. Her research interests cover a wide range of European law issues, with particular expertise in competition law and electronic communications law. From 2008, she worked as an associate lawyer in the competition law department of Bonelli Erede Pappalardo law firm, Milan. In 2012, she joined the Academy of European Law (ERA) as a course director, where she organised training, seminars and conferences in competition, State aid, public procurement and electronic communications law. She is the author of several publications in various fields of law. Maria Luisa holds a LLM in European Legal Studies (College of Europe, Bruges) and a Master's degree in International Relations and Diplomatic Studies (Lumsa University, Rome). She graduated in law (J.D) with honours from the University of Perugia in 2004. She is member of the Italian Bar Association since 2008.



Joseph P. Tomain

Joseph P. Tomain is Dean Emeritus and the Wilbert and Helen Ziegler Professor of Law. His teaching and research interests focus in the areas of energy law, regulatory policy, contracts, and law and the humanities. Before returning to the faculty in 2004, he had previously served the College of Law as Dean for 15 years.

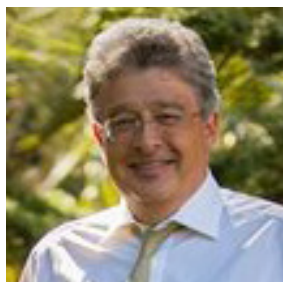
Dean Tomain has written extensively in the energy law field. His energy-related publications include *Clean Energy Politics: The Necessity of Invention* (forthcoming), *Ending Dirty Energy Policy: Prelude to Climate Change* (2011), *Energy Law in a Nutshell*, *Regulatory Law and Policy*, *Energy Law and Policy for the 21st Century*, and *Nuclear Power Transformation*, among others. Dean Tomain also has published books entitled *Achieving Democracy: The Future of Progressive Regulation* (2014) and *Creon's Ghost: Law, Justice and the Humanities* (2009).

In addition to his teaching and scholarship, Dean Tomain serves on a number of professional and civic organizations. He is Chair Emeritus of the Board of the KnowledgeWorks Foundation and Chair of Knowledge Works Inc. He also serves on the Boards of the Ohio Justice and Policy Center, and the Center for Chemical Addictions Treatment. He has been actively involved with the ABA Section on Legal Education and Admissions to the Bar, as well as other state and local bar associations. Dean Tomain is a Life Member of the American Law Institute and a Fellow of the American Bar Foundation.

In his years in academia, Dean Tomain also has held positions as Visiting Environmental Scholar, Lewis & Clark Law School; Distinguished Visiting Energy Professor, Vermont Law School; Visiting Scholar in the Program of Liberal Studies, University of Notre Dame; Visiting Fellow, Harris Manchester College, Oxford University; Fulbright Senior Specialist in law in Cambodia; and National Endowment for the Humanities Summer Fellow, Stanford University.

Before beginning his academic career, Dean Tomain practiced general litigation in New Jersey. He received his J.D. from George Washington University and his B.A. from the University of Notre Dame.

■ BIOGRAPHIES OF THE MEMBERS OF THE SCIENTIFIC COMMITTEE



Matthias Finger

Matthias Finger is Part-Time Professor at the Florence School of Regulation and full Professor at the Ecole Polytechnique Fédérale de Lausanne (EPFL), where he directs the Chair Management of Network Industries. After having been Assistant Professor at Syracuse University, New York (1989-1991) and Associate Professor at Columbia University, New York (1992-1994), Matthias Finger was appointed Full Professor at the Swiss Graduate School of Public Administration in Lausanne in 1995. There he developed his research on the transformation of network industries in the postal, telecommunications, railways, electricity, air transport, and water sectors. In his research, he reconciled the liberalization of these sectors with public service objectives by means of new regulatory arrangements, while at the same time promoting a more entrepreneurial behaviour of the operators. Matthias was appointed to his present position of Full Professor at the EPFL in October 2002. Matthias edits the Journal Competition and Regulation in Network Industries and is in charge of Special Issues of Utilities Policy for Elsevier.

Matthias received his Ph.D. in Political Science in 1988 and his Ph.D. in Education in 1986, both from the University of Geneva.



Jean-Michel Glachant

Jean-Michel Glachant is Director of the Florence School of Regulation and Holder of the Loyola de Palacio Chair at the European University Institute, Florence. He is Professor in Economics and holds a PhD from La Sorbonne University. He is or has been Advisor to DG TREN, DG COMP, DG Research and DG ENER of the European Commission and Coordinator/Scientific Advisor of several European research projects like THINK, SESSA, CESSA, Reliance, EU-DEEP, RefGov, TradeWind, Secure and Optimate. He is Research Partner of CEEPR, (MIT, USA) and EPRG (Cambridge University, UK). Chief-Editor of EEEP: Economics of Energy & Environmental Policy and member of the Council of the International Association for Energy Economics. He is also in the editorial board of Competition and Regulation in Network Industries, European Energy Journal, Latin-American Economic Review, Annals of Public and Cooperative Economics, Revue d'Economie Industrielle. Jean-Michel Glachant is Member of the EU-Russia Gas Advisory Council of Commissioner Oettinger (EC), Member of the Steering Committee of the International Conference on the European Energy Market (EEM).

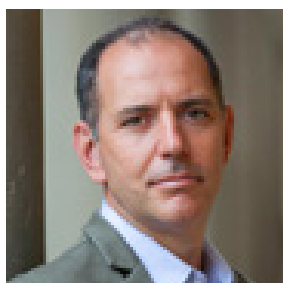


Leigh Hancher

Leigh Hancher is a professor of European law at the University of Tilburg and is also attached to the Amsterdam office of Allen & Overy as Counsel. Her research interests are energy market regulation, EU state aids and energy market governance.

Leigh has been a Professor since 1991, initially at the Erasmus University, Rotterdam. In 1996 she was Visiting Professor in "Natural Resources Law" at the University of Calgary, Canada. She has broad experience in energy regulation issues at the European and national levels. Her expertise as well as her academic research is focused on the changing role of the government in stimulating the liberalisation of traditionally heavily regulated sectors.

Leigh studied law at the Universities of Glasgow and Sheffield, and at the EUI. In 1989 she obtained, with distinctions, her doctorate in law at the University of Leiden.



Xavier Labandeira

Xavier Labandeira is Director of the FSR-Climate, part-time professor at the EUI and professor of Economics at the University of Vigo. His research lies at the boundaries between Public, Energy and Environmental Economics and his work has been published in leading academic journals of the field. He has led many research projects in Spain and abroad and has been a lead author of the UN Intergovernmental Panel on Climate Change for the elaboration of its Fifth Assessment Report. Labandeira is also director of Economics for Energy, a private research centre specialising in the economic analysis of energy issues and aimed to create and disseminate rigorous, neutral and useful knowledge in the field. He is also coordinator of Ergon, a research platform aimed to explore in depth the economic aspects of energy efficiency. Labandeira's full profile and publication record can be found [here](#).



Pier Luigi Parcu

Pier Luigi Parcu is currently Area Director of the FSR Communications & Media, Director of the Centre for Media Pluralism and of the European Networking and Training for National Competition Enforcers at the European University Institute. He is also Chairman of a consultancy company specialized in antitrust and regulatory issues of network industries.

From 2000 to 2003, he has been CEO of the Independent System Operator running the Italian Electricity Grid (GRTN). From 1991 to 2000 he was the Director of Investigation at the Italian Competition Authority (AGCM) in charge of several regulated sectors. Previously, he served as Chief Economist at the Italian Security and Exchange Commission (CONSOB) and as Economist at the International Monetary Fund (IMF). Prof. Parcu holds a Ph.D. in Economics from the University of California at Los Angeles (UCLA). His research in the area of industrial organization and law and economics focuses on the interaction between regulation and antitrust in shaping firms' behaviour in network industries.



Ignacio J. Pérez-Arriaga

MS and PhD in Electrical Engineering from MIT, and Electrical Engineer from Comillas University in Madrid, Spain. Professor and Director of the BP Chair on Sustainable Development at Comillas University, and founder and director for 11 years of its Institute for Research in Technology (IIT). Permanent visiting professor at the Center for Energy and Environmental Policy Research (MIT, Boston, USA). Commissioner at the Spanish Electricity Regulatory Commission (1995-2000). Independent Member of the Single Electricity Market Committee of Ireland (2007-2012). Member of the Board of Appeal of the Agency for the Coordination of Energy Regulators (ACER) in the EU. Director of Training at the Florence School of Regulation, European University Institute in Florence, Italy. Review editor of the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). Member of the Advisory Group of the Energy Roadmap 2050 for the Energy Directorate of the European Commission. Life Member of the Spanish Royal Academy of Engineering. Consultant for companies and institutions in more than thirty countries. He has supervised more than 25 doctoral theses, one hundred master theses, edited three books, published one book and more than two hundred articles in international conferences and journals.



Stéphane Saussier

Stéphane Saussier is Director of the Water area at the Florence School of Regulation. He is also a Professor of Economics and Management at the Sorbonne Business School. He is a specialist of contract and organization theories. Since 2009, he has been running a research group working on the Economics of Public Private Partnerships at the Sorbonne. He published more than 40 articles, many in international journals such as the Journal of Economic Behavior and Organization, Industrial and Corporate Change, Review of Industrial Organization, International Journal of the Economics and Business, European Journal of Law and Economics, Journal of Marketing Channels, Journal of Transport and Economic Policy, Utilities Policy...

He is also regularly involved in reports for international institutions such as OECD and European Parliament. For the last 10 years, he has expanded his work towards public private contracts and the organization of public services. He has developed research studies in the water sector with the French authority in charge of water services performance indicators and sunshine regulation. He joined the Florence School of Regulation in 2013.