IRINA BRASS

Department of Science, Technology, Engineering and Public Policy (STEaPP) University College London

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Current Position

2020- present **Associate Professor - Regulation, Innovation and Public Policy**

Department of Science, Technology, Engineering and Public Policy

University College London

Previous Academic Roles

2017-2020	Lecturer - Regulation, Innovation and Public Policy Department of Science, Technology, Engineering and Public Policy University College London
2016-2017	Postdoctoral Research Associate, PETRAS IoT Research Hub Department of Science, Technology, Engineering and Public Policy University College London
2015-2016	Adjunct Assistant Professor in International Relations School of Social Sciences Richmond the American International University in London
2015-2016	Postdoctoral Teaching Fellow, PGCert in Regulation and Public Policy Department of Science, Technology, Engineering and Public Policy University College London

Degrees

2015	PhD in Government London School of Economics and Political Science Thesis: Who Run the Radio Commons? The Role of Strategic Associations in Governing Transnational Common Pool Resources Supervisors: Professor Martin Lodge, Professor Damian Chalmers
2011	Postgraduate Certificate in Higher Education London School of Economics and Political Science
2008	MSc in Politics and Government in the European Union (Distinction) London School of Economics and Political Science Thesis: The European Digital Switchover: Technological Progress or Conflict of Interests?

Leadership Roles

2021-present Programme Lead, MPA in Digital Technologies and Public Policy

Department of Science, Technology, Engineering and Public Policy

University College London

2020-present Member, Standards Policy and Strategy Committee (SPSC)

British Standards Institution (BSI)

Appointed member to SPSC, which is the committee responsible for advising and reporting to the BSI Board on the preparation of British Standards and the strategic

direction/ policy of the BSI as national standards body.

2017-present Chair, Internet of Things IoT/01 Technical Committee

British Standards Institution (BSI)

Elected chair of the overarching technical committee responsible for the development of IoT standards within the national standards body of the UK (BSI).

Nominated committee member of the "Privacy by Design' standards-development panel in IoT-1 Technical Committee.

Appointed delegate of the BSI to the International Organisation for Standardisation (ISO).

2017-present Programme Co-Lead, MPA in Digital Technologies and Public Policy

Department of Science, Technology, Engineering and Public Policy

University College London

Co-developed this highly interdisciplinary programme, aimed at training future leaders and decision-makers working in policy to meet the challenges and opportunities of emerging digital technologies.

Established partnerships with key governmental and industry players to co-design and deliver the programme.

2017-2018 **Deputy Director, Digital Policy Lab (DPL)**

Department of Science, Technology, Engineering and Public Policy

University College London

Co-led the establishment of the laboratory, which brings together all the research projects (in excess of £1.6M) and educational programmes on digital technologies and public policy in the department. Co-developed the DPL Strategy and Aims, organised the DPL Research Group and currently establishing the teaching strategy of the lab and programme for the MPA in Digital Technologies and Public Policy.

2017-present **e-Learning Champion**

Department of Science, Technology, Engineering and Public Policy

University College London

2016-present **Teaching Committee Member**

Department of Science, Technology, Engineering and Public Policy

University College London

2016-2017 Research and Ethics Committee Member

Department of Science, Technology, Engineering and Public Policy University College London

Prizes, Awards and Honours

June 2020 Winner – UCL Provost's Education Award

UCL Provost

Received the award in recognition of "contribution to excellent practice and facilitated innovation in teaching and learning". Shortisted and nominated by the Faculty of Engineering for delivering research-based education (especially through the educational partnership established between UCL and BSI).

June 2020 **Nomination for "Inspiring Teaching Delivery"**

Student Choice Award, UCL

Nomination received for teaching in the Master's of Public Administration (MPA) programme at UCL STEAPP, academic year 2019-2020

Nov 2019 Winner - Standards Makers Award for Education about Standardisation

British Standards Institution (BSI)

Received the award in recognition of "exceptional contribution to integrating standards and standardisation into the higher education curriculum and for promoting student education projects and research around standards".

Apr 2019 **Nomination for the Exceptional Feedback Award**

Student Choice Award, UCL

Nomination received for teaching in the Master's of Public Administration (MPA) programme at UCL STEAPP, academic year 2018-2019

Apr 2019 Nomination for the Excellent Personal Tutoring Award

Student Choice Award, UCL

Nomination received for teaching in the Master's of Public Administration (MPA) programme at UCL STEAPP, academic year 2018-2019

May 2016 **Nomination for Best Teacher Award**

Students Award, LSE

Nomination received for teaching on the LSE 100 interdisciplinary course at London School of Economics and Political Science.

Oct 2010 - **Postgraduate Research Scholarship**

Dec 2015 London School of Economics and Political Science

Merit-based doctoral funding aimed at supporting primary research in national and international standards-development organisations in telecommunications and ICTs (£12,000 cumulative during the PhD).

Sept 2010 - **Deutsche Bank and ESRC Research Scholarship**

Sept 2011 Centre for Analysis of Risk and Regulation, LSE

Merit-based doctoral funding for research investigating the role of the International Telecommunications Union in radio spectrum management and the development of mobile cellular communications (£2,500).

Aug 2004 Research Scholarship

The Gilbert Murray Trust, Oxford

A project investigating the role of the UNECE in promoting SMEs-driven innovation in Central and South-East Europe (£1,500).

Sept 2003 - Presidential Scholarship and Dean's List Award

Dec 2006 Richmond the American International University in London

Merit-based scholarship for educational and professional development (£47,000

cumulative during the undergraduate studies).

Research

My research focuses on the regulation and governance of disruptive technologies, especially digital technologies that are increasingly coupled with other innovations, leading to systemic challenges that are difficult to map out or predict. I specifically focus on the regulatory models, frameworks and instruments that governmental and non-governmental actors use to manage the disruptive effects of these technologies.

The rationale for this focus is a recognition that the innovations associated with the Fourth Industrial Revolution, such as the Internet of Things (IoT) or personalised medicine, challenge the fundamental principles and practices that policy-makers and other decision-makers have used to respond to the risks and benefits of technological change.

I have a background in public policy and public administration, with research that spans across common-pool resource management, intellectual property and competition rules, data protection and privacy, cybersecurity and safety regulations.

Grants

Oct 2021 – PETRAS National Centre of Excellence in IoT Systems Cybersecurity

Mar 2023 Principal Investigator: Regulation and Standardization of Connected Intelligent

Medical Devices (Reg-MedTec)

EPSRC, (approx. £200,000)

[add text]

Aug 2018 – Future Targeted Healthcare Manufacturing Hub

Sept 2023 Principal Investigator: Regulatory Strategies for Targeted Healthcare Project

EPSRC, (approx. £750,000)

I lead the *Regulatory Strategies* Project within the Hub, which employs one post-doctoral researcher, and investigates the regulatory challenges pertaining to these therapies. The Hub is a multi-disciplinary and multi-institutional EPSRC-funded research project addressing the manufacturing, business, regulatory and

reimbursement challenges of biological medicines, especially cell, gene and protein-based therapies.

Apr 2018 – Aug 2019

PETRAS Internet of Things Research Hub

Co-Investigator: Standards, Governance and Policy Stream

EPSRC, (approx. £500,000)

I co-led the Standards, Governance and Policy stream, which employed two post-doctoral researchers, and investigated the standardisation and regulatory challenges pertaining to the Internet of Things (IoT). The Hub is a multi-disciplinary and multi-institutional EPSRC-funded research project addressing the privacy, cybersecurity, trust and resilience challenges of the IoT and has now become a Centre of Excellence.

Sept 2017 -

PETRAS Internet of Things Research Hub

Jan 2018 Co-Investigator: Internet of Things in Control Project

GCHQ and EPSRC (£20,000)

This project investigated the standards landscape for Industrial Internet of Things and identified five priory areas for further standardisation, delivered to GCHQ.

2017

PETRAS Internet of Things Research Hub and UCL STEaPP

Co-Investigator: Emerging Risks in the Internet of Things

Lloyds of London, (£40,000)

This project investigated emerging risk in the deployment of IoT on critical infrastructure and the impact this has on the insurance and re-insurance sector. The project is part of the reputable Lloyds of London Emerging Risks Series.

2016-2018

Department of Science, Technology, Engineering and Public Policy

Co-Investigator: Visions of Infrastructure Project

University College London (£6,000)

This interdisciplinary project investigated the value of infrastructure from a public policy, critical studies, economic, futures and foresight and environmental perspective.

Publications

Iournal Articles

[add Data & Policy journal article]

Bicudo, E., Brass, I., Carmichael, P., & Farid, S. (2021). **The UK's emerging regulatory framework for point-of-care manufacture: insights from a workshop on advanced therapies**. *Cell and Gene Therapy Insights*, *7* (9), 1005-1015, doi:10.18609/cgti.2021.133.

Galaz V., Centeno M., Callahan P., Causevic A., Patterson T., Brass I., Baum S., Farber D., Fischer J., Garcia D., McPhearson T., Jimenez D., King B., Larcey P., Levy K. 2021. **Artificial intelligence, Systemic Risks and Sustainability**. *Technology in Society, 67*, doi:10.1016/j.techsoc.2021.101741.

Brass, I. and J. Sowell. 2020. **Adaptive Governance of the Internet of Things: Coping with Emerging Risks**. Regulation & Governance. Special Issue on The Governance of Emerging Disruptive Technologies, doi:10.1111/rego.12343.

Tanczer, L., Brass I., Carr M. and J. Blackstock. 2018. **CSIRTs and Global Cybersecurity: How Technical Experts Support Science Diplomacy**. Global Policy, *9*(*S3*), *60-66*. Publication available here.

De Grandis, G., Brass, I. and A. Petersen. 2018. **The Promise and Perils of Biotech in Personalised Healthcare: Can New Regulatory Pathways Protect the Vulnerable?** CARR Risk and Regulation Magazine 36, 21-23.

Brass, I., Tanczer, L., Carr M., Elsden, M. and J. Blackstock. 2018. **Standardising a Moving Target: The Development and Evolution of IoT Security Standards**. In Living in the Internet of Things: Cybersecurity of the IoT Conference London, UK: IET. Publication available here or click for the open access version here.

Brass, I. 2018. **Standardising IoT Security: Implications for Digital Forensics**. Digital Forensics Magazine 35, pp. 22-25.

Brass I., Tanczer L., Carr M. and J. Blackstock. 2017. **Regulating IoT: Enabling or Disabling the Capacity of the Internet of Things?**. CARR Risk and Regulation Magazine 33(2), pp. 12-15. Publication available here.

Bosanquet, N., Dean, L., Iordachescu (Brass), I. and C. Sheehy. 2013. **The Effectiveness Gap in COPD: A Mixed Methods International Comparative Study**. Primary Care Respiratory Journal 22(2), pp. 209-213.

Book Chapters

Veale, M. and I. Brass. 2019. **Administration by Algorithm? Taking Public Sector Machine Learning Seriously in Public Administration**. In K. Yeung and M. Lodge (eds.) *Algorithmic Regulation*. Oxford University Press.

Brass, I. and D. Hornsby. 2019. **Digital Technological Innovation and the International Political Economy** (Chapter 38). In T. Shaw, L. Mahrenbach, R. Modi, X. Yi-Chong (eds.) *The Handbook of Contemporary International Political Economy*. Palgrave Macmillan, 615-631.

Tanczer, L., Brass I., Carr M., Blackstock J. and M. Elsden. 2019. **The United Kingdom's Emerging Internet of Things (IoT) Policy and Legislative Landscape**. In R. Ellis & V. Mohan (eds.) *Rewired: Cybersecurity Governance*. Wiley.

Reports and Other Publications

Bicudo, E., Carmichael, P. and Brass, I. (2021) **Point-of-Care Manufacture: Regulatory Opportunities and Challenges for Advanced Biotherapeutics**, Future Targeted Healthcare Manufacturing Hub, UCL. Publication available here.

McEntaggart, K., Etienne, J., Beaujet, H., Campbell, L., Blind, K., Ahmad, A., and I. Brass. 2020. **Taxonomy of Regulatory Types and their Impacts on Innovation**. BEIS Research Paper Series Number 2020/0004, UK Department for Business, Energy and Industrial Strategy. Publication available here.

Brass, I., Pothong, K. and M. Haisham. 2019. **Navigating and Informing the IoT Standards Landscape: A Guide for SMEs and Startups**. The BSI Group. Publication available here.

Brass, I., Pothong, K., Tanczer, L. and M. Carr. 2019. **IoT Standards, Governance and Policy**. In K. Pothong, I.Brass and M. Carr (eds) Cybersecurity of the IoT: PETRAS IoT Stream Report. Publication available here.

Tanczer, L., Steenmans, I., Brass, I., & Carr, M. 2018. **Networked World: Risks and Opportunities in the Internet of Things**. London: Lloyds's of London. Publication available here.

Brass, I., Tanczer, L., Maple, C., Blackstock, J., & Carr. M. 2018. **Unbundling the Emerging Cyber-Physical Risks in Connected and Autonomous Vehicles: Part II**. In S. Appt & Livesey N. (Eds.), See the road ahead Connected and autonomous vehicles: The emerging legal challenges. (pp. 7-9). London: Pinsent Masons. Publication available here.

Taylor, P., Allpress, S., Carr, M., Lupu, E., Norton, J., Smith, L., Blackstock, J., Boyes, H., Hudson-Smith, A., Brass, I., Chizari, H., Cooper, R., Coulton, P., Craggs, B., Davies, N., De Roure, D., Elsden, M., Huth, M., Lindley, J., Maple, C., Mittelstadt, B., Nicolescu, R., Nurse, J., Procter, R., Radanliev, P., Rashid, A., Sgandurra, D., Skatova, A., Taddeo, M., Tanczer, L., Vieira-Steiner, R., Watson, J.D.M., Wachter, S., Wakenshaw, S., Carvalho, G., Thompson, R.J., & Westbury, P.S. 2018. Internet of Things: Realising the Potential of a Trusted Smart World. Royal Academy of Engineering: London. Publication available here.

Tanczer, L., Carr, M., Brass, I., & Blackstock, J. 2017. **IoT and Its Implications for Informed Consent**. PETRAS IoT Hub, STEaPP: London. Publication available here.

Brass, I., Carr, M., Tanczer, L., Maple, C. and J. Blackstock. 2017. **Unbundling the Emerging Cyber-Physical Risks in Connected and Autonomous Vehicles: Part I.** In S. Appt & Livesey N. (Eds.), See the road ahead Connected and autonomous vehicles: The emerging legal challenges. (pp. 7-9). London: Pinsent Masons. Publication available here.

Evidence for Policy

Brass, I., Carr, M., Tanczer, L., Pothong, K. and J. Watson. 2019, June 5. **Consultation on the Government's regulatory proposal regarding consumer IoT security: Response by the Standards, Governance and Policy (SGP) Stream of the PETRAS IoT Research Hub**. HMG Department for Digital, Culture, Media and Sport. London.

Brass, I., Boyes, H., Maple, C. and J. Watson. 2018. **Security Standards Landscape for Industrial IoT**. Delivered to GCHQ: Project Standards Landscape for Industrial IoT Solutions.

Tanczer, L., Blythe, J., Yahya, F., Brass, I., Elsden, M., Blackstock, J. and M. Carr. 2018, March 07. **Summary Literature Review of Industry Recommendations and International Developments on IoT Security**. Annex to Secure by Design Policy Paper, HMG Department for Digital, Culture, Media and Sport. London.

Brass, I., M. Carr, L. Tanczer, M. Elsden and J. Blackstock. 2017, October 30. **IoT Policy Stress Test: Report on IoT Workshop Proceedings**. Expert Consultation. Secure by Default Unit, HMG Department for Digital, Culture, Media and Sport. London.

Brass, I., Tanczer, L., Carr, M. and J. Blackstock. 2017, April 24. **Secure by Default IoT: Standards and Guidelines Landscape Mapping**. Expert Advisory Group, Secure by Default Unit, HMG Department for Digital, Culture, Media and Sport. London.

Brass, I., Tanczer, L., Carr, M. and J. Blackstock. 2017, March 15. **IoT Cybersecurity: Response to National Infrastructure Commission Technology Study Call for Evidence**. National Infrastructure Commission, HMG. London.

Select Talks and Presentations

Regulatory Responses to Technology Disruptions and Scientific Innovations. 2021, Aug. Theories of Regulation & Governance Seminar Series (<u>Online</u>).

Regulatory and Reimbursement Strategies for Targeted Healthcare. 2019, Nov. Presentation: Grand Challenges Strategic Working Group. Bi-annual User Steering Committee Conference, Future Targeted Healthcare Manufacturing Hub, London, UK.

Governing AI. 2019, Oct. Al and the Environment Conference. Princeton University and Stockholm Resilience Centre. Princeton University, USA.

Navigating and Informing the IoT Standards Landscape: A Guide for IoT SMEs and Startups. 2019, April. Rapid Response Policy Panel: Living in the IoT PETRAS-IET Conference. London.

Governing AI: How Coordination between Tech & Policy Experts can Effectively Redraw System Boundaries. 2019, January. Human-Machine-Ecology: A Workshop on the Emerging Risks, Opportunities and Governance of Artificial Intelligence. Princeton University.

IoT Security – The Challenges of Governing Cyber-Physical Systems. 2018, April. Royal Swedish Academy of Science. Governing Complexity: Legacy and Next Frontiers. Stockholm, Sweden.

IoT Security Standardisation at a Crossroad: Mandating or Self-Regulating It? 2018, March. Digital Forensics Exhibition. IoT Forensics Conference. London, UK.

Implications of the Fragmented Standards Landscape for IoT Security. 2018, Feb. Messaging, Malware and Mobile Anti-Abuse Working Group (M3AAWG) Conference. Panel: IoT Security Governance, San Francisco, USA.

IoT Standards for a Secure and Resilient Economy. 2018, Jan. PETRAS IoT Research Hub Bi-Annual Conference. Panel: Secure and Resilient Economy. London, UK.

IoT Security: A Review of the Regulatory and Standards Landscape. 2018, Feb. British Computer Society Workshop: Citizen Issues in Policies for IoT. London, UK.

IoT Security Standards: Opportunities and Challenges. 2017, Oct. Royal Society. The Internet of Things: Opportunities and Threats Conference. London, UK.

Cybersecurity and Liability in Autonomous and Intelligent Transport. 2017, June. BSI and CEN-CENELEC. Standards Matter Conference. Panel: Autonomous and Intelligent Transport, Edinburgh, UK.

The Role of Transnational Expert Associations in Governing the Cybersecurity Risks of the Internet of Things. 2017, June. International Conference on Public Policy (IPPA). Singapore.

IoT Security Governance and the Role of Standards. 2017, June. Messaging, Malware and Mobile Anti-Abuse Working Group (M3AAWG) Conference. Panel: IoT Security Governance, Lisbon, Portugal.

IoT Standards, Governance and Policy: Research Agenda and Impact. 2017, May. PETRAS IoT Research Hub Bi-Annual Conference. London, UK. Awarded best presentation from a PETRAS IoT Stream.

The IoT Effect: The Future of Data Protection and Information Security in the UK. 2017, April. Political Studies Association Annual International Conference. Panel: The Future of EU Regulation in the UK. Glasgow, UK.

Forms of Academic Co-Production. 2016, Oct. UCL STEaPP Doctoral Training Workshop on Interdisciplinary Practice. London, UK.

Who Makes Radio Spectrum Policy in the EU? The Role of Complementary Governance in the Management of Electronic Communications. 2016, Mar. Political Studies Association Annual International Conference. Brighton, UK.

The Role of Associative Action in Managing the Radio Commons in Europe. 2015, Feb. International Conference on Technology, Knowledge and Society, Panel: Technologies for Human Use, Berkeley, US.

Self-Governing the Commons through Strategic Alliances: The Case of Radio Spectrum Policy in **Europe**. 2014, June. General Conference of the European Political Science Association, Panel: Interest Formation in the EU. Edinburg, UK.

Teaching

Teaching Philosophy

I have ten years of teaching experience that spans across a range of subjects in policy analysis, regulation, public administration and international relations.

My teaching practice reflects a continued commitment to the development of highly interdisciplinary curricula, that challenge how we make sense of technological innovation cycles both historically and systemically, and the transformations required in public administration, public policy and international relations. I have a pedagogical interest in applying experiential methods of learning, such as negotiations and multilevel scenarios, in order to develop students' analytic, evidence-gathering and communication skills.

External Examiner

Oct 2019 -**CeFiMS Public Policy and Public Management Programmes**

present

Member of Board of Examiners for MSc, MA, PG Dip, PG Cert in Public Policy

and Public Management

Doctoral Supervision

Oct 2020 – Present	Primary Supervisor to Emmanoiul Koulas (Full-time, fully funded by EPSRC CDT in Cybersecurity) Department of Computer Science, UCL <u>Thesis</u> : The Role of Non-State Actors in Internet Security Governance
Oct 2019 - present	Primary Supervisor to Nishant Anand (Part-time, fully funded by Oracle) Department of Science, Technology, Engineering and Public Policy, UCL <u>Thesis</u> : Responsible governance of e-identity in the Fourth Industrial Revolution
Oct 2018 - present	Primary Supervisor to Stefan Wolf Startzel (Full-time, part funded by AON) Department of Science, Technology, Engineering and Public Policy, UCL <u>Thesis</u> : Risk, Regulation and Innovation in Climate Related Governance

Mar 2017 -**Primary Supervisor to Andreas Kopp** (Full-time, full funded by ESRC)

Master's of Public Administration (MPA) Supervision

Oct 2019 -**Supervisor for MPA Final Group Project (5 students)**

Aug 2020 Department of Science, Technology, Engineering and Public Policy, UCL

Thesis: Regulatory and Standardisation Challenges for Connected and Intelligent

Medical Devices Partner: BSI

Oct 2018 -**Supervisor for MPA Final Group Project (4 students)**

Department of Science, Technology, Engineering and Public Policy, UCL Aug 2019

Thesis: Standards for SME Innovation in the IoT Ecosystem

Partner: BSI

Oct 2017 -**Supervisor for MPA Final Group Project (5 students)**

Department of Science, Technology, Engineering and Public Policy, UCL Aug 2018

Thesis: Data in the Humanitarian Sector

Partner: European Commission

Sept 2019 -**External Examiner**

Dec 2022 SOAS University of London

> Appointed external examiner for the **MSc in Public Policy and Management** at SOAS, examining the following courses: 1. MSc Dissertation; 2. Decentralisation and Local Governance; 3. Environmental and Social Impact Assessment; 4. Project, Programme and Policy Evaluation; 5. Regulation of infrastructure and

Utilities.

Teaching Responsibilities

Doctoral Programme Courses, UCL STEaPP

Oct 2016 -**Knowledge Systems, Public Policy and Management** (Convenor) Aug 2020

This module is an entry requirement for all doctoral candidates pursuing a PhD at UCL STEaPP. It introduces doctoral candidates to the practice of policy-making, public administration, knowledge systems and innovation policy, and provides the

basis for their interdisciplinary doctoral degree.

Book Seminar Oct 2016 -

present

In this seminar series, I lead three sessions based on personally recommended readings which are aimed to expose STEaPP doctoral candidates to interdisciplinary research and practice:

Arthur, Brian (2009) The Nature of Technology: What it is and How it Evolves. Penguin Books.

Ostrom, Elinor (2009) Governing the Commons: The Evolution of institutions for Collective Action. Cambridge University Press.

Barber, Michael (2015) How to Run a Government: So that Citizens Benefit and Taxpayers Don't Go Crazy. Penguin Books.

Master's of Public Administration Courses, UCL STEaPP

Oct 2018 - present

Emerging Dilemmas in Digital Technologies Policy (Course Lead)

This is the core introductory module of the Digital Technologies and Policy specialisation of the MPA at UCL STEaPP. It follows the Connected Curriculum at UCL by implementing research-led teaching practice across several digital technologies and policy issues: cybersecurity, digital rights, bias in artificial intelligence, the digital economy and the regulation of technology giants.

Oct 2018 - present

Risk Assessment and Governance (Course Lead)

This is an elective module which offers students practical skills to conduct risk assessment under uncertainty and to design/evaluate risk regulatory frameworks across three main topical areas: critical infrastructures, personalised healthcare and natural disaster management. The course attracts students from across the university.

Oct 2017 - present

MPA Group Project (Project Lead)

The Group Project is the equivalent of the final dissertation in the MPA programme. It is a clear example of **innovation in pedagogy** and **the adoption of Connected Curriculum practices**, as students are working on a practical project with a member of academic staff and an external partner proposed by the staff member.

Over the past two years, I successfully led two MPA Group Projects in collaboration with **BSI** (UK national standards body) in 2019, and the **European Commission DG Humanitarian Aid** in 2018.

The UCL-BSI Group Project has been highly praised as a successful collaboration with external peers and partners. BSI has commissioned a Case Study of the Group Project to feature on its website as an example of innovative collaboration with an educational partner.

The success of this project has led to the renewal of the educational collaboration with BSI for the 2019-2020 academic year and to my nomination and winning of the 2019 BSI 'Standards-Makers Award for Education about Standardisation'.

Oct 2016 - present

Public Administration (Course Lead)

This is a core module of the MPA at STEaPP, introducing students to the tools and techniques governments and key stakeholders use to implement complex policies for 21st century challenges such as climate change, the rise of disruptive digital technologies, increased urbanisation or natural resource crises. The course has received consistently high reviews from students, especially for its applied nature. For instance, I designed an **innovative assessment for the course**, where students are trained to take the role of senior policy advisor and write a memorandum to a minister on a contentious policy issue.

Undergraduate Courses, Faculty of Engineering, UCL

Jun 2017 and Jun 2018 How to Change the World (Cohort Lead - Transport)

I led the Smart Transport Challenge of the innovative 'How to Change the World' Integrated Engineering Programme, having teaching and training responsibility for over 80 undergraduate students/ year across the Faculty of Engineering.

Feb 2017 and Mar 2018

Science Communication for Policy (Challenge Lead)

I designed and led the 'IoT in the Home' challenge of this course, which is part of the undergraduate minor in Science, Technology, Engineering and Policy at UCL.

Undergraduate Courses, School of International Relations, Richmond University in London

Aug 2015 – Aug 2016

International Political Economy (Course Convenor)
Evolution of International Systems (Course Convenor)
Introduction to International Relations (Course Convenor)

Undergraduate Courses, Department of Government, London School of Economics

Oct 2011 – May 2016

LSE 100 – The LSE Course (Postgraduate Teaching Assistant) **Public Policy Analysis** (Postgraduate Teaching Assistant)

Extra-Curricular Teaching Roles

2018-present

Coach (UCL Team), Cyber 9/12 Strategy Challenge UK

I have successfully coached three UCL teams for the intercollegiate national competition 'Cyber 9/12 UK Strategy Challenge' which asks students to act as senior policy analysts and respond to a realistic, evolving cyberattack. The competition takes place over two days at the BT Tower, and students have to work under the clock to respond to an escalating cybersecurity incident. In 2019, the UCL team was selected into the semi-finals.

Executive Education, UCL

Nov 2017

STEaPP Bootcamp, Royal Society, UK

I co-developed and delivered three modules of this short-term executive education course to early career policy analysts at the Royal Society.

Oct 2015 -Apr 2016 Postgraduate Certificate in Regulation and Policy, Vodafone Group and UCL

I developed, co-designed and co-delivered a short-term professional course on the regulation of emerging technologies in partnership with Vodafone UK, which later led to the development of a PGCert in Regulation and Policy.

Consultancy Roles

2019 **Senior Adviser**

ICF International; UK HMG Department for Business, Energy and Industrial

Strategy (BEIS), London

Appointed Senior Adviser on a BEIS-funded project investigating the relationship between regulation and innovation, and co-authored the report entitled *Taxonomy of Regulatory Types and their Impacts on Innovation* for the BEIS Research Paper

Series (forthcoming).

2011-2013 **Economic Consultant**

Volterra Partners LLP, London

Developed and delivered socio-economic impact assessments, industry forecasts and expert statements on the implementation of the national planning policy and

competition policy in the UK for key infrastructure sectors, such as urban

development, transport, construction and mining.

2009 Research Assistant, 2020 Public Services Trust

Royal Society of the Arts, London

Prepared the policy proposal Online or In-Line: The Future of Information and

Technology in Public Services for the Cabinet Office, HMG.

2007 Traineeship

European Parliament, Brussels

Prepared policy briefs for the EU Black Sea Synergy Initiative on bilateral and multilateral relations in the Black Sea Economic Cooperation Organisation.

Language and Software Skills

Language <u>English</u>: fluent comprehension, reading, speaking and writing

<u>French</u>: very good comprehension, reading, speaking and writing <u>Spanish</u>: intermediate comprehension, reading, speaking and writing

Italian: basic comprehension, reading, speaking and writing

Romanian: native

Software Network Analysis: NodeXL; intermediate R.

Statistics: SPSS; intermediate STATA and R.