INTERNATIONAL CONFERENCE

'Making the smart city safe for citizens: The case of smart energy and mobility'

Interdisciplinary perspectives on data ownership, data security and liability





Making the Smart City Safe for Citizens

The smart city has become the leitmotiv of urban development in the sustainability transition. The smart city promises to reorganize the flows of resources, goods, services and people much more efficiently, drawing on sensor technologies and artificial intelligence, and thereby potentially saving resources on a massive scale. Many cities have engaged in partnerships with technology corporations to pilot data-based ways of running the city. According to critical voices, there is a clear risk that smart cities end up selling their citizens' data to private investors for private profit, rather than using the data for the common good. Additionally, instead of serving sustainability and enhancing quality of life, many smart city innovations could be used for the surveillance and manipulation of citizens. The way data has been handled by some cities has been exposed as failing to meet the requirements of privacy and data security. Before this background, we ask:

What needs to be done to make the smart city safe for its citizens?

'Safe', here, is meant in a political, legal, technological and emancipatory sense.

This conference showcases the current work of the programme *Safety in Urban Environments*, the 2018 research focus of the Open University of the Netherlands.

Welcome and conference opening

Wednesday 28th November, 13.30-14.00

Prof. dr. Anja Oskamp, Rector, Open University of the Netherlands

Prof. dr. Rein de Wilde, Open University of the Netherlands, Director of the research programme *Safety in Urban Environments*

PD dr. Angela Oels, Open University of the Netherlands, conference chair

Panel on smart energy

Wednesday 28th November, 14.00-15.30

The smart grid can contribute to demand management of electricity. At peak electricity demands, the smart-grid postpones non-urgent activities and reschedules them to times of low demand. However, such efforts run into problems of data privacy and data security. Can the system be secured from unauthorized access? Who owns the data generated by users? How can the fascinating idea of load management contributions be rendered operational and safe?

Chair Prof. dr. Jac Rinkes, Open University of the Netherlands





PROF. RALF MARTIN, IMPERIAL COLLEGE LONDON

'How to make smart meters smart'

Ralf Martin is an Associate Professor of Economics at Imperial College Business School and the programme director of the Growth Programme at LSE's Centre for Economic Performance. In ongoing research, he is looking at how new IoT technologies improved customer feedback and how customer incentives can change energy customer behaviour to both reduce consumption and improve energy system efficiency. Ralf is often advising government bodies such as the UK Department for Business Energy & Industrial Strategy (BEIS), the UK Climate Change Committee (CCC) or the OECD on issues related to his research. He holds a PhD in Economics from the London School of Economics.



PROF. MARTHA ROGGENKAMP, UNIVERSITY OF GRONINGEN

'Energy networks, smart cities and the law'

Martha Roggenkamp is professor of Energy Law (the first one in The Netherlands) and director of the Groningen Centre of Energy Law at the Faculty of Law. She is an expert in the field of Dutch, European and international energy law. She is on the editorial board of the Journal of Energy and Natural Resources Law, International Energy law and Taxation Review and Renewable Energy Law and Policy Review. Prof. Roggenkamp studied Scandinavian languages and literature. She holds a PhD in Law from the University of Leiden.

Panel on smart mobility

Wednesday 28th November, 15.45-17.45

Autonomous driving is the key technological innovation in the field of mobility, with the potential to reduce the number of cars on the road by 70%. There are challenges to secure the data so that self-driving cars cannot be 'taken over' by non-authorised persons. Also, they need to be able to respond to abnormal behavior by promptly self-correcting. At what point should humans be able to intervene and take over? What legal questions are still to be resolved? Who is liable in case of accident? How can autonomous driving be rendered safe and ecologically sustainable?

Chair dr. Stefano Bromuri, Open University of the Netherlands and BISS Institute.

Keynote speakers

thain o

JOSCHKA BISCHOFF, TECHNICAL UNIVERSITY BERLIN

Mobility as a Service (MaaS) in urban and rural areas: The impact of Shared Autonomous Vehicles' Joschka Bischoff is a research associate and PhD candidate working at the department for transport systems planning and transport telematics at TU Berlin. His main field of expertise is the simulation of dynamic transport modes and Mobility as a Service solutions, including autonomous vehicles and taxis. Previously, he studied transportation planning and operations.



PROF. ALBERTO VANOLO, UNIVERSITY OF TURIN

'Auto-automobilities and being a passenger in tomorrow's smart city'

Alberto Vanolo, PhD in Spatial planning and local development, is professor of political and economic geography at the University of Turin, Italy. His main research interests include urban politics, smart cities, urban representations and cultural geographies. His latest book, entitled 'City branding, urban imaginaries and ghosts: the politics of representation in globalising cities' (Routledge, 2017), focuses on the cultural and political dimensions of urban representations.



NICOLAS WOLTMANN, UNIVERSITY OF WÜRZBURG

'Do we need ethical and legal boundaries for the development of automated cars?'

Nicolas Woltmann passed the First State Examination in Law at the University of Würzburg and completed his accompanying studies in European Law. Since 2017 he has been a research assistant and doctoral candidate at the RobotLaw Research Centre. Under the direction of Prof. Dr. Dr. Eric Hilgendorf, member of the German Ethics Committee on Automated Driving and of the EU's High Level Expert Group on Artificial Intelligence, he is dedicated to the legal challenges posed by technological progress. In his dissertation he examines liability issues in the context of the use of self-learning computer systems.





Panel on smart cities

Thursday 29th November, 11.00 – 13.00

The smart city promises to reorganize the flows of resources, goods, services and people much more efficiently, drawing on sensor technologies and artificial intelligence, potentially saving resources on a massive scale. However, critical voices claim that there is a clear risk that smart cities end up selling their citizens' data to private investors for private profit, contribute to surveillance and manipulation of citizens, and is criticized for furthering the privatization of public services. How can cities influence the technological developments of the smart city to ensure that it contributes to the common good?

Chair PD dr. Angela Oels, Open University of the Netherlands

Keynote speakers

DR. EVGENY MOROZOV, JOURNALIST AND AUTHOR

'A critique of digital capitalism: The smart city in the trap of data extractivism'

Evgeny Morozov is the author of The Net Delusion (2011) and To Save Everything (2013). Morozov's monthly column on technology and politics appears in The Observer (UK) and is syndicated in various newspapers across Europe. His writings have appeared in The New Yorker, The New York Times, The Wall Street Journal, Financial Times, and other publications. Previously a senior editor at The New Republic, he has been a fellow at Georgetown University, Stanford University, New America Foundation, and the American Academy in Berlin. He has a PhD in history of science from Harvard University. His next book, Freedom As a Service, will come out in 2019.

DR. MARTIN DODGE, UNIVERSITY OF MANCHESTER

'The (In)Security of Smart Cities: Vulnerabilities, Risks, Mitigation, and Prevention'

Martin Dodge is a Senior Lecturer in Human Geography at the University of Manchester. He has coauthored three books analyzing the spatiality of computer technologies: Mapping Cyberspace (Routledge, 2000), Atlas of Cyberspace (Addison-Wesley, 2001) and Code/Space (MIT Press, 2011). He has completed his PhD at University College London and has previously worked at Cardiff University and the University of Nottingham.

DR. FRANCESCA BRIA, CHIEF TECHNOLOGY AND DIGITAL INNOVATION OFFICER, BARCELONA

'Reclaiming the smart city for the citizens: Data sovereignty and encryption as human right'

Francesca Bria is currently the Commissioner of Digital Technology and Innovation for the city of Barcelona in Spain and she is leading the DECODE project (www.decodeproject.eu) on data sovereignty in Europe. As Senior Programme Lead at Nesta, the UK Innovation Agency, she has led the EU D-CENT project, the biggest European Project on digital democracy and digital money. She also led the DSI project, advising the EU on digital social innovation policies. She holds a PhD in Innovation Economics from Imperial College, London and a MSc on Digital Economy from the University of London, Birkbeck.

Date Wednesday 28th and Thursday 29th November, 2018

Place Forum of the Brightlands Smart Services Campus, Smedestraat 2, 6411 CR Heerlen, Netherlands

To register for the conference, please sign up at www.ou.nl/smartcitysafe

Organizers

At the Open University of the Netherlands in Heerlen

- PD dr. Angela Oels (Political Science/Environmental Sciences)
- Prof. dr. J.G.J. (Jac) Rinkes (Law)
- Prof. dr. Anka L.H. Ernes (Law)
- Matthew Hanley (Political Science/Environmental Sciences)

At the Business Intelligence & Smart Services (BISS) Institute in Heerlen

• dr. Stefano Bromuri (Data Analytics and Artificial Intelligence)

Contact address smartcity@ou.nl