

LTMS

Annual report 2020

Home of TILT & TILEC

LTMS

Law, Technology,
Markets, and Society

TILT

Tilburg Institute for Law,
Technology, and Society

TILEC

Tilburg Law and
Economics Center



Hardship, Resilience

LTMS
**Department of Law, Technology,
Markets, and Society**

Home of
Tilburg Institute for Law, Technology, and Society (TILT)
and Tilburg Law and Economics Center (TILEC)

By joining forces, the two centers foster a richer understanding on the effects of socio-technical change on the regulation and governance of economic activity in an age where information technology is a key driver for innovation.

Tilburg Institute for Law, Technology, and Society (TILT)

TILT is one of the leading research groups in Europe at the intersection of law, technology, and society. It is premised on the multidisciplinary study of socio-technical change, aiming at understanding the interaction of technology and social and normative practices, to clarify how regulatory challenges of socio-technical change can be addressed.

Tilburg Law & Economics Center (TILEC)

TILEC is an internationally renowned center of the Tilburg Law School and the Tilburg School of Economics and Management. It carries out interdisciplinary research on the governance of economic activity in the digital age.

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Foreword

The year 2020 was supposed to be a marvellous year. We had just completed a successful anniversary year (our 25th) and were full of plans for 2020. Then Covid-19 struck.

The emergence of this pandemic was already mentioned in the TILT 2019 annual report, which was only produced in September 2020 instead of the usual spring time. We were occupied with getting to grips with what then seemed to be a nuisance for most of 2020, so working on an annual report was not much of a priority. This is what I wrote in the 2019 foreword:

“At the time of writing this foreword, we are in the midst of the Covid-19 pandemic. It feels like a terrible time for everyone, but certainly also for academics. From one day in March to the next, the university went from bustling to deserted. Everyone suddenly had to work from home, classes had to be moved

online, conferences that we were hosting (Bileta 2020, PLSC-E 2020) were cancelled, and on top of that staff with small children had to take on additional roles as home-schoolers. We are managing and have gotten our new act together, I believe. The Law & Technology LLM programme has been transformed to an on-line-only programme within a short time, and student numbers remain constant or are even rising a little. We now have students living in Brazil, California and India, just to mention some of the more challenging time zones for organizing online sessions, as well as many other countries.”

On the one hand, this reflected hope—we are in the midst of the pandemic. On the other hand, it talked about hardship (and resilience)—we are transitioning to a new normal and coping.

Now, end of March 2021, there is still no sight of an exit. What can be said is that we have become accustomed to living and working under curfew and in lockdown (did I really just write this?) and that we are doing remarkably well, given the circumstances. Also true is that everyone is fed up with the situation, the vaccination programmes are in progress and maybe we will

come out of this later this year. But given the scale of the vaccination operation, the setbacks in vaccine production and other difficulties, it may easily take until the end of the year before we are anywhere near back to normal. Also, given that our students (and some staff) come from around the globe, differences in vaccine rollout speed as well as travel restrictions between countries may mean that we are up for an even longer wait to return to ‘normalcy’. I think (hope) we will get there, eventually, but have also learned to take things a day or a week at a time.

In the meantime, so much has happened and it is clear to me that LTMS won’t return to the old days. From talks I am having with everyone in the department at the time of writing this, a couple of things become clear. We have all changed. Working remotely (which includes ‘home’, but also parents’ homes and the odd holiday cottage), seems to do the trick just fine for many things that we do. Everyone misses the random coffee bar encounters and serendipitous discussions, as well as friends’ and colleagues’ stimulation and annoyance, but we also get a lot in exchange. We don’t need to be in the office all the time to still be a community and act like one. We don’t have to all work at the same time—some have discovered the charm of working in the wee hours, or getting up really early and then take a long walk during lunch. We need to take these learnings forward to a new style of working.

We are at the beginning of a transition.

By the time you read this, one thing will have changed already. LTMS is no more. With the transition of leadership and administration of TILEC to TISEM, maintaining that LTMS is the home of TILT and TILEC no longer holds true. And since declaring that ‘LTMS is the home of TILT’ does not make sense, we had to make a choice: either continue as LTMS or as TILT. The newcomer had to give way. TILT is an established name and hence re-adopting TILT as name of the department and as brand of its research is most sensible.

So, welcome to TILT.

Everyone within the department of LTMS will become a TILTie. Some (the former TILEC members of the department, but also some newcomers) will also become members of TILEC, but member in the sense that anyone can be member of various associations. All ‘TILEC lawyers’ will stay within TILT, and the scope and mission of TILT will merge the scope and research interests of the two former strands within LTMS.

Enough about the immediate future. Back to the horrible, if I may say so, 2020. This year will go down in history as a remarkable year, and hopefully as a once-in-a-lifetime one. As such, we need to document it. This annual

report aims to do so. It not only presents how we have spent tax payers' money on research and how we have taught and helped young people start their careers, but it also bears testimony of how we did so behind the scenes and screens. For the outside world, it provides a glimpse of academia in crisis. For LTMS staff, I hope this will be an annual report (or maybe THE report) to cherish and hand over to children and grandchildren.

To meet this challenge, we have set up this report differently than usual. Of course it provides the usual data and overviews, but part of the report provides (very) personal accounts of how real people have coped with the pandemic. These are stories of hardship, despair, resilience, ingenuity, and stamina.

The pandemic is not the only crisis we are experiencing. We also have the climate crisis and, at least that is my conviction, will need to change the way we use resources, work, live and travel. This year's report tries to present a picture of how big our CO₂ footprint was in 2019, to compare it with a much closer to zero one in 2020. Of course the 2020 figures won't be lasting, but I think many of us have come to the conclusion that we indeed can travel less for work-related affairs.

Given that this report is meant to have more lasting value, we also incorporate more data on the composition of our current team. This allows us to monitor our progress on topics such as inclusivity and diversity.



Ronald Leenes, LTMS director

Ronald Leenes

I may count myself lucky. My girlfriend and I and our two furry babies, Mopo and Jonesy, live in the countryside and we have plenty of space. We have always worked extensively from home and while I can't really concentrate with others working in the same office, we have done wonderfully well in our home office for the last 20 odd years. Working from home permanently hence did not come as a complete shock and we continued our routines as we always have. I am also not too social and have no need to visit people or having people visit me. Splendid isolation should not come too hard on me. And it doesn't.

I do care about my team though, and I have often found it frustrating not being able to tour the office and say hi, have a (serious) conversation with colleagues and just seeing people.

A couple of weeks before we went in lockdown in March 2020, I had expressed my wish that everybody would be on the 7th floor more fre-

quently to foster collaboration, community and so on. I must admit that the experience over the last year has been that we can maintain a meaningful community remotely. I have invested serious time in trying to maintain our community. I think I did a reasonable job. We need to get back to the office and meet, but I no longer see the need for everyone to be around four or five days a week. One or two days should suffice. Let's stop the silly commutes and spend more time focussing on our priorities wherever we are.

I have also feared us going digital in teaching. I adore being in a large a classroom/auditorium and lecture and exchange ideas with our students. But I also see the inefficacy of that and I see a potential for online teaching. Now that I have two semesters of experience in teaching online, I clearly see the benefits. Moving content to video clips and emphasizing the importance of the reading material and thinking about the material prior to 'class' has allowed for a more meaningful and substantial exchange with students through Zoom. Yes, the setting is awful and shallow, but the interactions have improved.

I am making plans for how to continue as a department after the crisis, but I am convinced that we should not return to the old routines. We have learned a lot and we can do better by working in a more hybrid fashion.

Shaz Jameson

Covid-19 was a pandemic that sheared off the veneer. What worked continued to work, and what was cracked could no longer hide behind ad hoc informality. All the unnecessary stripped away. As a crisis transitioned to this new normal, adaptation can be confronting. It can also be an opportunity; I certainly have found new ways to create new boundaries and new ways of working which I personally found to be much healthier and in balance. In that strange way, this time has been a gift. Collectively, we moved into burnout; I hope we can collectively be brave enough to create the ways to move through and beyond it.

Stephanie Bijlmakers

Covid-19 pandemic changed work flexibility in ways that enabled me to continue my research from the comfort of our home and spend more time with my family. We had just moved to Belgium when the pandemic appeared. A new workspace was created quickly. Border crossings, delays in public services and finding a babysit for our newborn caused some challenges at first. We remained healthy throughout, however, and I am grateful for that. A warm thank you goes out to the frontline workers, a supportive department and partner.

RESEARCH

Main content

Research output
and key results
Personal Grants
PhD Dissertations
Events and dissemination
of research

1. Research

1.1 Research output and key results

In 2020 LTMS' research took the interplay between technology, markets and society as the starting point to explore and (co-)shape the role of law in a world increasingly shaped by technology; socio-technical change.

The basis of this research is the recognition that technology, regulation, and normative notions interact, i.e. they continuously adapt to new technological, regulatory, and/or normative environments, and in this process, they mutually shape one another. The 'LTMS triangle' of technology, regulation, and normative notions is studied against the background of society, to incorporate insights into human and organizational behavior, markets, social mechanisms and norms, and the context-specificity of certain sectors in society, such as health, commerce, public administration, or law enforcement. Through our research, we hope to better understand the mutual shaping—or co-construction—of socio-technical change.

It goes almost without saying that LTMS' research is multidisciplinary. Regulation consists of different modalities – law, social norms, market,

and architecture – which are grounded in different disciplines: law, social sciences, economics, and science & technology studies. LTMS' researchers incorporate these disciplines and collaborate with scholars in other disciplines, including the technical sciences.

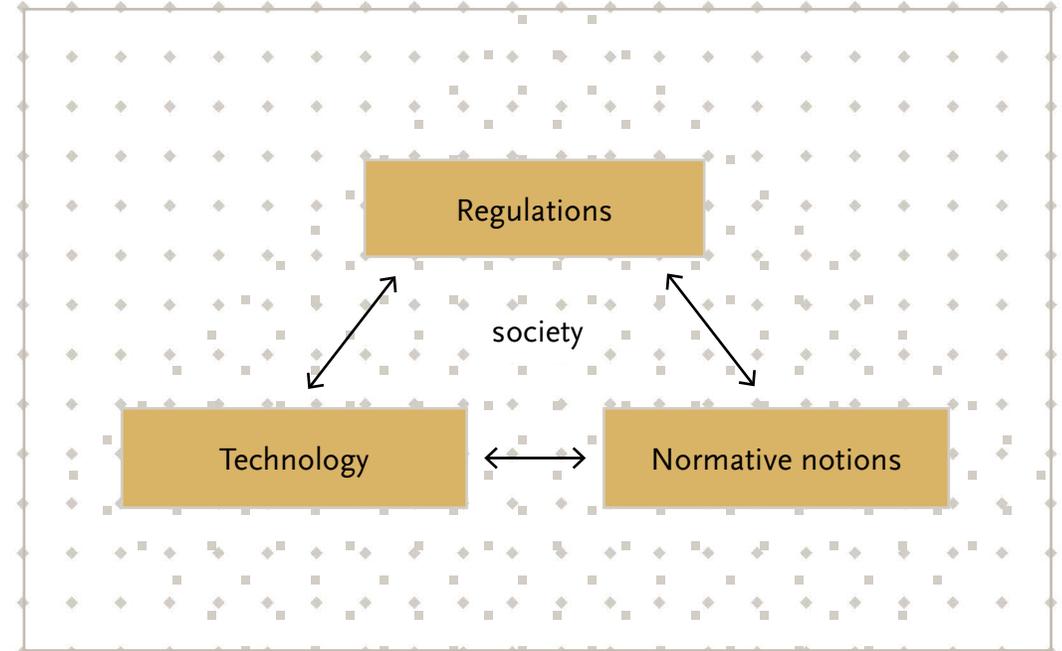


Figure 1. The interplay between regulation, technology, and normative notions in the context of society

Table 1 offers a quantitative overview of LTMS' research output in 2020. A full overview of all LTMS publications is provided in Appendix 2.

Academic publications	
Journal articles	29
Book chapters	27
Monographs and edited books	8
PhD dissertations	5
Other academic publications	20
Professional publications	21

Table 1: Overview of research output by LTMS members

To showcase the achievements of LTMS research in 2020, we provide a qualitative overview of highlights of LTMS research, grouped in five thematic clusters. Further details on the publications are provided Appendix 2.

1.1.1 Regulation and Governance of Technologies

The importance of regulation in balancing the benefits brought about by novel technologies with other societal concerns, such as the protection of human health, privacy, and energy security, continues to be a key aspect in

many of LTMS' publications in 2020. In a world that started to look drastically different as of March 2020, LTMS researchers have continued to analyze topics involving a link between technological developments that enable mankind to address challenges in these fields, but which – when left uncontrolled – may also bring about risks in and of themselves.

The Covid-19 pandemic has kept the department busy also from a research perspective. **Linnet Taylor, Gargi Sharma, Aaron Martin and Shazade Jameson** have edited [Data justice and COVID-19: Global perspectives](#) providing an account of what happened immediately after the outbreak in early 2020, capturing the emergent conflicts and responses around the world. The essays provide an international perspective on the implications of these developments for justice at large. **Magdalena Brewczyńska** not only contributed with an analysis on how Poland policed quarantine via app; but also published an critical look at the 'selfie app' and direct access to location data. **Corien Prins** and **Linnet Taylor** provide an ethical perspective to the topic. Corien looks at the "renewed normal" and examined relating values and principles as cornerstones. Linnet examined the price of certainty: How the politics of pandemic data demand an ethics of care? **Esther Keymolen** explored what the long-term political consequences could be of introducing technological solutions during the Covid-19 pandemic.

The topic of health was also dealt with outside the context of the Covid-19 pandemic. **Tineke Broer** discussed the duty to report and processes of subjectification relating to digitalized suicide prevention. **Anna Berti Suman**, not only published her PhD thesis *Sensing the risk: A case for integrating citizen sensing into risk governance*, but also, together with A. Fathisalout Bollon, edited a volume on *Legal, social and ethical perspectives on health and technology*. She further published an analysis of citizen sensing as a form of multi-stakeholder cooperation for safe and healthy urban environments. The environment also featured in **Leonie Reins'** work on energy regulation, discussing amongst others the legal and economic case for an auction reserve price in the EU emissions trading system; the integration of renewable energy sources in the EU electricity grid and the governance of new technologies, such as hydrogen in the energy transition. For Dutch policy-makers, professionals, and academics, **Corien Prins** continued her important agenda-setting work in her Editorials for the *Nederlands Juristenblad*, discussing the legal and policy implications e.g. accountability of AI systems, discrimination via WhatsApp and Artificial Intelligence and humans first.

In the field of fundamental rights and personal freedoms, LTMS researchers have addressed the relationship between new technologies, such as cloud computing and crowdsourcing, and the concepts of (individual) autonomy and (legal) accountability.

Bart van der Sloot, Mara Paun and **Ronald Leenes** investigated the European Legal Framework of *Athletes' human rights and the fight against doping*. The concept of autonomy featured in **Merel Noorman's** work (together with Tsjalling Swierstra) on balancing theoretical autonomy and practical engagement. Accountability featured in the edited volume by **Siddharth de Souza** (together with Nida Rehman and Saba Sharma) on *Crowdsourcing, Constructing and Collaborating*. It brings together individuals and groups engaged in building and sustaining platforms for online collaboration and participation, to explore and reflect on the methods, challenges and potentials of the technology of crowdsourcing, and mapping of social impact. How to enhance accountability in the cloud was discussed by **Ronald Leenes** and colleagues.

1.1.2 Institutions

Global services liberalisation is currently held hostage of transatlantic divergences, American isolationism and an introspective approach that the largest developing countries take towards international trade matters. In *Coherence and divergence in agreements on trade in services: A drama in three acts* **Panagiotis Delimatsis** reviews instances of coherence and divergence in trade in services agreements through a series of events that led to the creation of the GATS and its evolution via developments at the preferential level.

In *Trust in global governance: Ensuring trustworthiness of transnational private regulators* **Enrico Partiti** adopts a multidisciplinary perspective based on the notion of institutional trust to frame the interaction between public and private authority, and between private authority and those affected by it. In *The energy transition: Democracy, justice and good regulation of the heat market* **Saskia Lavrijssen** and Blanka Vitéz, analyse how energy democracy, energy justice and the principles of good market regulation support the development a more consistent approach towards energy regulation.

1.1.3 Competition

The European Commission is looking for new tools to enforce competition law faster and more effectively. In *Sharpening the European Commission's tools: Interim measures* **Alexandre Ruiz Feases** explores the potential of interim measures.

Recent years have seen significant evolution in the European Commission's approach to State aid policy. The timely volume *EU state aid law: Emerging trends at the national and EU level*, edited by **Giorgio Monti** with Pier Luigi Parcu (European University Institute) and Marco Botta (European University Institute and Max Planck Institute for Innovation and Competition) analyse the enforcement of State Aid law in the aftermath of the State Aid Modernisation initiative that decentralised enforcement.

1.1.4 Innovation

A flourishing European data economy requires effective portability of- and access to- data for individuals and firms. Beyond the right to data portability introduced in the General Data Protection Regulation (GDPR), various data access regimes have been developed in the energy, automotive, payment and digital content/ services sectors. In *Spill-overs in data governance: Uncovering the uneasy relationship between the GDPR's right to data portability and EU sector-specific data access regime* **Inge Graef, Jasper van den Boom** and Martin Husovec compare key aspects of these instruments and analyse the relationship between sector-specific regimes with the GDPR right to data portability.

China's innovation policy, the connections between China's standardisation regime and its IPR regime – especially in the area of information and communications technology - have been studied from different disciplines. This phenomenon has however not been analysed from a legal perspective. In *Hic sunt dracones? Mapping the legal framework of China's innovation policy: Standardisation and IPRs* **Piergiuseppe Pusceddu** tracks the evolution of the legal framework of China's innovation policy since the 1950s, including recent developments.

Lisa van Dongen focuses on intellectual property rights in data from an EU perspective.

1.1.5 Artificial Intelligence and Robotics and Cybersecurity

Perhaps the most prominent development in our field today is the continuously increasing importance of AI, robotics, and cybersecurity. LTMS researched this development from many perspectives and in various application spaces. For instance, **Sascha van Schendel** examined the application of SyRI and whether it is in conflict with fundamental rights, **Tanya Krupiy** carried out a vulnerability analysis and theorized the impact of artificial intelligence decision-making processes on individuals, society and human diversity from a social justice perspective. **Floris Bex** with some colleagues described how his own work, and Artificial Intelligence and Law more broadly, was influenced by Douglas N. Walton. **Ronald Leenes** (together with Pauline Kuss) analysed the *Ghost in the machine*” the emotionally intelligent conversational agents and the failure to regulate ‘deception by design’.

In the area of robotics, **Robin Pierce** (and colleagues) promote inclusiveness in exoskeleton robotics by identifying and addressing challenges and barriers to pediatric access to this potentially life-changing technology.

Irene Kamara, Ronald Leenes, Kees Stuurman, and Jasper van den Boom, analysed the *cybersecurity certification landscape in the Netherlands after the Union Cybersecurity Act*.

1.1.6 Privacy and Data Protection

Privacy and data protection have always been key pillars of LTMS’ research and continue to be widely studied, including in ERC projects in different fields of applications. The commercialization of data featured in **Lokke Moerel**’s work on providing rules of the road and ethical dilemmas for the monetization of data, as well as in her work on the impact of IR4 on corporate governance of listed companies. **Linnet Taylor** (with Lina Dencik) further compared strategies and rhetoric to understand how commercial data ethics is constructed, as well as its political and strategic dimensions, and its relationship to data ethics more broadly. Emerging models of data governance in the current platform society have also featured in the work of **Anna Berti Suman** and colleagues. **Bert-Jaap Koops and Jaap-Henk Hoepman** focused on the notion of “home”, asking whether it is possible to establish home-equivalent legal protection of those private digital storage spaces (smartphones, private cloud storage accounts) that most closely resemble the home as a storage environment for private things. **Bo Zhao** argues that the inviolability of the home and home protection should cover not only the home’s physical space, but also its virtual and hybrid space, helping residents regain their control of home.

Fundamental rights in relation to privacy and data protection was another focus of study. **Lorenzo Dalla Corte** examined the substance and essence of the fundamental right to personal data protection and **Bart van der Sloot** argues that, propelled by cases revolving around mass surveillance activities,

the European Court of Human Rights has gradually turned into a European Constitutional Court, in particular for privacy cases. **Ronald Leenes** and **Paul de Hert** (together with Dara Hallinan and Serge Gutwirth) edited an volume on [Data protection and privacy: Data protection and democracy](#), bringing together chapters that offer conceptual analyses, highlight issues, propose solutions, and discuss practices regarding privacy and data protection, to which also several members of the Department contributed.

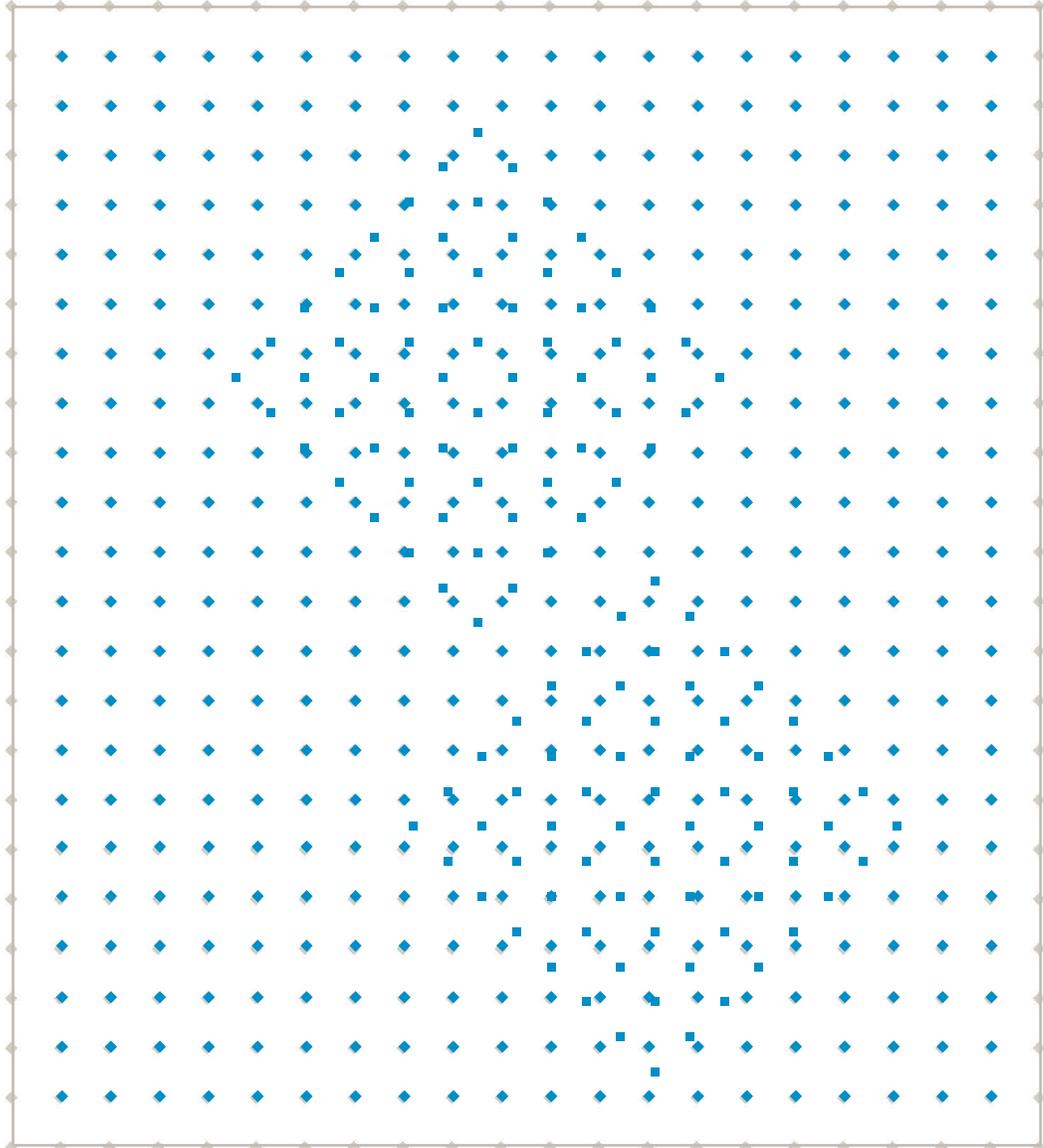
Irene Kamara published commentaries on provisions of the General Data Protection Regulation (GDPR) and so did **Ronald Leenes** and **Eleni Kosta**. The relationship between the GDPR and blockchain has been examined by **Maurice Schellekens** who answers the question who is or are the controllers in a blockchain context?

Further, **Bart van der Sloot** continued his important agenda-setting work in his Editorials for the [European Data Protection Law Review](#), discussing the legal and policy implications of amongst others AI, Big Data and mass surveillance.

An important pillar of the department is the policy work carried out for the Dutch Research and Documentation Centre (WODC).

Masa Galič, Merel Noorman, Bart van der Sloot, Bert-Jaap Koops, Colette Cuijpers, Rapahel Gellert and **Esther Keymolen** (together with T. van Delden) examined the issue of spying with hobby drones and other technologies by citizens. They explored the privacy risks and regulatory options. [Spioneren met hobbydrones en andere technologieën door burgers: Een verkenning van de privacyrisico's en reguleringsmogelijkheden](#).

Esther Keymolen, Merel Noorman, Bart van der Sloot, Bert-Jaap Koops, Colette Cuijpers and **Bo Zhao** explored facial recognition and privacy risks in horizontal relationships in [Op het eerste gezicht: Een verkenning van gezichtsherkenning en privacyrisico's in horizontale relaties](#).



1.2 Personal Grants

1.2.1 REVEAL project (ERC Panos Delimatsis)

REVEAL is carried out by the Principal Investigator, Panos Delimatsis, Assistant Professors Enrico Partiti, Stéphanie Bijlmakers and Konrad Borowicz and two PhD-students, Shanya Ruhela and Zuno Verghese.

The global financial crisis put basic tenets of neoliberalism into question. Previous crises on product safety also exemplified the limits of delegating regulatory power. However, in the medium run, private regulatory bodies re-assume their previous powerful status and continue to exert large, and seemingly unconstrained, influence on the functioning of economic activity.

This research project investigates the origins and causes of the dominance of private rule-making bodies, focusing on their mutability and resilience. It does so by addressing the following research question: what enabling conditions, innate traits and mechanics allow for the transformation, adaptability and resilience of private rule-making bodies amid exogenous regulatory shocks and how does the law perpetuate this dominance?

This project develops a multidisciplinary conceptual framework to analyse structures, institutional design and adaptive/resilience strategies in 10 non-public regulatory bodies and their public law counterparts. Data are collected via qualitative methods (interviews with key individuals,

direct observations, historical institutionalism, process tracing) to identify trajectories of change and causation spanning three decades.

This research is groundbreaking in three ways:

- ◆ ◆ ◆ by delving into the peculiarities of private collective action, it sets the basis for a new theory of creation, evolution and resilience of such action;
- ◆ ◆ ◆ by integrating multiple disciplines, it innovates methodologically and offers a multidisciplinary and thus more comprehensive theory of private action in the service of future generations of researchers and policymakers;
- ◆ ◆ ◆ by collecting data and theorizing on a largely unexplored (from an empirical viewpoint) area such as transnational standard-setting, it revisits the promises, flaws and limits of technocratic rule, results in a more balanced understanding of transnational regulatory governance, and resolutely offers a regulatory theory for private regulatory bodies.

1.2.2 INFO-LEG (ERC Nadezhda Purtova)

2020 was a challenging year for the project. Several members of the team fell ill and the working time of the PI was limited due to combining work with child care. In 2020, the INFO-LEG team continued research on generating new organising concepts and ideas to fundamentally restructure data protection law. This was done in three streams:

- ◆ ◆ economics track studying the nature of data and information as an economic resource. In 2020 we have particularly focused on the conceptualisation of data as a common-pool resource;
- ◆ ◆ information studies track studying data technologies and practices. In 2020 the track was scheduled to interview stakeholders from the contexts of online advertisement, smart city, and smart grid. However, due to the pandemic and the lockdowns in the Netherlands and other countries recruiting sufficient number of participants turned out to be impossible. The case studies had to be paused.
- ◆ ◆ the legal track studied how information is conceptualised across legal domains. In 2020 this was data protection and freedom of information.

1.2.3 The Global Data Justice project (ERC Linnet Taylor)

Linnet Taylor has continued leading the ERC-funded Data Justice project (2018-2023) with Shazade Jameson, Aaron Martin, Helen Mukiri-Smith, Gargi Sharma and the new addition of Siddharth de Souza, currently working from Delhi due to the pandemic. The team continues to observe and participate in events worldwide on issues relevant to data justice, and is currently analysing and working through their fieldwork data to create conclusions for dissemination. The team published an open-access book, [Data Justice and Covid-19](#), which collects views from researchers and commentators around the world on how the pandemic has changed the way societies are governed through technology. Although the pandemic has made it temporarily impos-

sible to travel, the team has engaged with policy and civil society processes on data governance around the world including in India, the EU and Africa.

1.2.4 PartFin project (Grant Eleni Kosta)

The ParTFin (Public Private Partnerships on Terrorism Financing) project aims at developing and strengthening public-private partnerships (PPPs) in order to enhance information sharing between competent authorities (including regulators) and financial and payment service providers at the national and EU levels and at facilitating the cross-border information exchange between PPPs. To this end, the project will provide best-practice guidance to policy makers at the EU and national levels.

Research activities will include (i) comparative legal analyses of PPP involving eight countries in- and outside the EU in the area of AML/ as well as PPP in other areas of security law; (ii) research spanning security law, data protection law, and public international law; (iii) socio-legal research on PPPs, including interviews with competent authorities and relevant private stakeholders; and (iv) an interdisciplinary investigation into the relationship between law and technology in the context of financial analytics.

In the short term, the project will benefit competent authorities engaged in counter-terrorism investigations in four EU Member States (France, Germany, Italy, and Spain), which form the core of the present pilot project, as well

as European agencies. In the mid-term, it will provide guidance for legislators in the four above-mentioned States and for the EU legislator. In the long term, it will contribute to creating or enhancing PPP in other EU Member States and stimulate political action in support of such mechanisms outside the area of terrorism financing.

1.2.5 CSI-COP (Robin Pierce)

LTMS is a partner in CSI-COP, an EU Horizon 2020 project within the Science with and for Society (SwafS) work programme, which aims to support citizen science research initiatives. The project is carried out by an interdisciplinary team of twelve partners, including Coventry University from the UK, Universidad Autonoma de Barcelona from Spain, Czech Technical University from Czech Republic, and University of Patras from Greece.

The project aims to contribute to lay understanding of and enhanced discernment about digital tracking via cookies by mobilising citizen scientists from across Europe and Israel. Through the investigation of the different types of cookie trackers embedded in mobile applications and websites, layperson will become familiar with the different types of trackers and their legal permissibility. By this, the project aims to empower laypersons to understand the regulatory landscape relevant to cookie tracking and apply basic provisions of the law. CSI-COP is premised on a view that citizen scientists can play a valuable role in helping to foster a culture where digital technologies

are developed with privacy by design and default in mind. Laypersons will receive informal training through a tailor-made Massive Open Online Course (MOOC) and local workshops. The training will introduce citizen scientists to the GDPR and the ePrivacy Directive rules relevant to cookie tracking and will instruct them regarding how to identify cookies in the applications and websites they use on a daily basis. The project envisions development of a taxonomy of cookie trackers, as well as an open-access online repository of same.

The project has disseminated early findings in three reports, [Methods of Citizen Science Engagement](#), [Guidelines for Diverse Citizen Science Recruitment](#), and [Framework for Citizen Science Engagement](#).

1.2.6 Digital Legal Studies sector plan (Ronald Leenes)

The Digital Legal Studies sector plan project entered its second year in 2020.

Ronald Leenes continued to lead this large six-year collaboration between LTMS and three partner institutions at the University of Amsterdam, Maastricht University and Radboud University Nijmegen. With several new additions, the Tilburg team comprised of Inge Graef, Linnet Taylor, Floris Bex, Esther Keymolen, Merel Noorman, Tjaša Petročnik, Eleni Kosta, Nadya Purtova, Charmian Lim, Bart van der Sloot, Robin Pierce, Marijke Roosen, Christina Winters, Costin Puscasu and Alex Ruiz Feases. Laura van Gelder joined the team as a science writer and the collaboration's communications coordinator. An absolute highlight of the year was the Digital Legal Talks

kick-off conference in December. With a diverse speaker lineup, many inspiring discussion sessions and 250 participants tuning in from all over the world, the event was a successful first introduction of the Digital Legal Studies collaboration. Find out more on the DLS website: www.sectorplanDLS.nl

1.2.7 The Digital Clearinghouse (Inge Graef)

The Digital Clearinghouse is a network of competition, data protection and consumer authorities across Europe and beyond, which aims to facilitate exchange of insights about how to achieve a more coherent protection of individuals in an era of big data and artificial intelligence. The project is funded by grants from the Open Society Foundations, the Omidyar Network, and the King Baudouin Foundation and is jointly hosted by Tilburg University, the University of Namur and the European Policy Centre.

In 2020, two roundtables for regulators were organized for which academic background notes on the topics of market power and modes of cooperation between regulators were prepared by Tilburg University and the University of Namur. In addition, two online public events took place in autumn 2020 in the run-up to the publication of the legislative proposals for a Digital Services and a Digital Markets Act. Executive Vice-President of the European Commission Margrethe Vestager delivered a keynote speech on 'Building Trust in Technology' during one of these events.

1.2.8 WODC research projects

1.2.8.1 WODC research project: “At first sight. An exploration of facial recognition and privacy risks in horizontal relationships”

Authors: **Esther Keymolen, Merel Noorman, Bart van der Sloot, Colette Cuijpers, Bert-Jaap Koops, Bo Zhao.**

Facial recognition technology is used to recognize faces or facial features based on digital images (for example a photo or video). For some time, governments have deployed the technology on a limited scale for detection and security purposes, but in recent years, it has also become available to businesses and citizens. Commissioned by the WODC—The Research and Documentation Centre of the Ministry of Justice and Security—this study identifies the use of facial recognition technology, describes how it can infringe on the horizontal privacy of citizens and provides guidance on how to prevent or limit privacy breaches.

In [our study](#), we found that facial recognition is not yet widely used in many fields in the Netherlands. Rather, there are local, demarcated experiments and applications in the field of access control to investigate whether a clear use case and revenue model is possible. At the same time, the applications being developed worldwide and the associated privacy risks are real and far-reaching. For example, the technology usually works on the basis of image data to which the people depicted have not given their permission. Citizens have difficulty estimating what happens to their data and if certain

parties have access to a lot of data and others do not, an inequality of power arises. The use of facial recognition technology can also lead to chilling effects; people adjusting their behavior because they feel monitored. A problem that should also not be underestimated is that there may be a bias in the training data, resulting in facial recognition applications that enable discrimination against certain groups because of incorrect or no recognition.

From the legal analysis follows that the current legal tools for regulating facial recognition technology are mainly found in the General Data Protection Regulation, in private law and in particular in the unlawful act and to a limited extent in criminal law. In general, the General Data Protection Regulation will apply to facial recognition technology. This implies that the use of facial recognition in horizontal relationships will only be permitted by law in limited cases. The report offers an overview of regulatory options—from a complete ban to tolerance policies—and develops a decision-making framework differentiating between contexts and relations to assist the legislator. In reaction to this report, the Dutch Minister of Legal Protection endorsed its findings and announced to Parliament that the bill to amend the UAVG (the Dutch implementation law of the GDPR) will include the additional requirement of a double necessity test; the processing must be necessary for reasons of substantial public interest as well as for authentication or security purposes.

1.2.8.2. Privacy risks stemming from the use of hobby drones and spy products between citizens.

Authors: **Maša Galič, Merel Noorman, Bart van der Sloot, Bert-Jaap Koops, Colette Cuijpers, Raphaël Gellert, Esther Keymolen en Thierry van Delden** (VU)

In 2020, the research report, titled *Spioneren met hobbydrones en andere technologieën door burgers – Een verkenning van de privacyrisico's en reguleringsmogelijkheden*, was published. The report was the final product of a year-long research on the privacy risks in horizontal (citizen-citizen) relations of the use of hobby drones and spy products, such as miniature camera's, hidden audio recording devices, and location trackers. It was commissioned by the Dutch WODC (Dutch Research and Documentation Centre of the Ministry of Justice and Security). The researchers on this project were: Maša Galič, Merel Noorman, Bart van der Sloot, Bert-Jaap Koops, Colette Cuijpers, Raphaël Gellert, Esther Keymolen en Thierry van Delden.

Through an extensive literature review, internet quick scans as well as focus groups with stakeholders, the report identified and assessed the privacy impact of hobby drones and other spy products. Based on this analysis, the report evaluated potential lacunae in the Dutch legal system and specified regulatory options to remedy those lacunae's. The researchers examined existing privacy and data protection legislation, criminal law, private law, the

portrait right, general local ordinances and drone regulations.

The research showed that the current (or upcoming) legislation offers substantial protection against most of the identified privacy risks. In fact, most current uses of hobby drones and spy products for the purpose of spying on others already violate existing laws. Nevertheless, a few gaps in the laws do exist, mainly requiring clarification or a slight broadening of scope. The researchers provided ten recommendations to address these gaps. These range from upstream and downstream suggestions for the regulation of the sale, purchasing and use of these technologies, to technoregulation and clarification recommendations.

1.2.8.3 Het recht op privacy in horizontale verhoudingen.

Authors: **Bart Schermer (Considerati) & Bart van der Sloot (TiU)**

Fundamental rights, such as the right to privacy, are primarily aimed at protecting citizens from the state. But (serious) violations of fundamental rights can also occur between citizens. For that reason, it is important to investigate to what extent fundamental rights, in particular the right to privacy, also offer protection in “horizontal relationships”. In the initiative memorandum on mutual privacy of Member of Parliament Koopmans, the problem of privacy violations in horizontal relationships will be identified. Privacy violations in horizontal relationships refer to privacy violations between citizens and between citizens and legal entities (companies, associations, etc.). Horizontal privacy protection is thus distinguished from vertical privacy protection,

which relates to the relationship between citizens and government. This research focuses on a threefold problem definition: What can The Netherlands learn from the way in which horizontal privacy is protected in other European countries? To what extent can these solutions be used in the Dutch context? Are there any undesirable effects or side effects associated with these possibilities for better horizontal privacy protection in The Netherlands? The countries involved in the legal comparison are: Germany, Poland, Sweden and the United Kingdom.

Laura van Gelder

What it was like to join LTMS during the pandemic.

2020 was the year of COVID-19. But for me, it was also the year of starting a new job at LTMS. When I joined the department as a science writer and coordinator of the Digital Legal Studies sector plan collaboration, it was mid-summer and the pandemic had brought life on campus to a standstill.

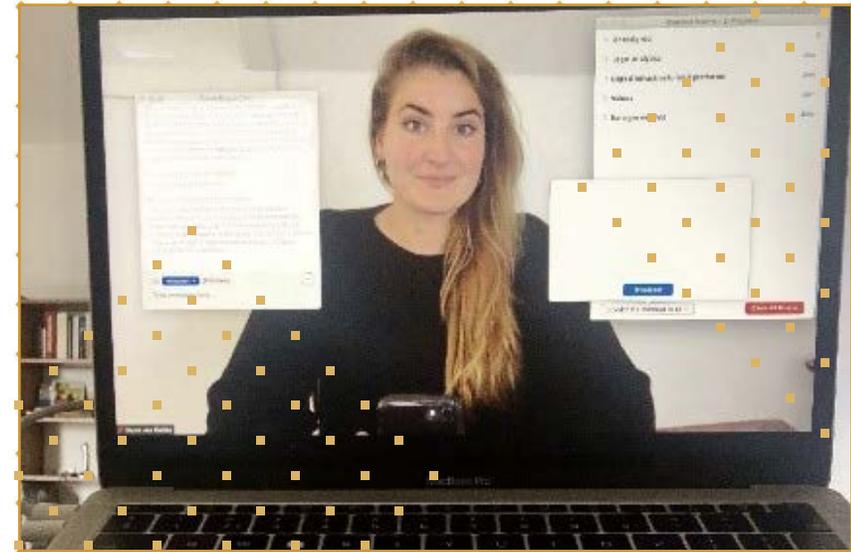
In normal times, navigating the ins and outs of the job would have been exciting enough. I knew my way around the university, but the role and responsibilities I was now taking on at LTMS were completely new to me. And so were the smiling faces of my colleagues welcoming me through a screen as Ghislaine took me on a virtual round of introductions on my very first day. Although it was a small consolation, at least I didn't have to worry about spilling my coffee on the carpet of my new workplace or—heaven forbid—on one of my new teammates.

Fast forward a few months and the pandemic has only deepened. I've gotten to know some of those smiling faces that welcomed me on my first day quite well by now, but I have yet to meet them in real life. Even my interaction with Ronald, whose guidance and constant support have been so motivating and helpful throughout my first half year as an LTMS'er, still remains limited to pixels on a laptop screen (plus lots of can-you-hear-mes, what-about-nows and let's-switch-to-Zoom-insteads).

Looking back, joining LTMS in these difficult times and starting my new job remotely has been a weird but wonderful experience. For me, it meant that 2020 did not turn out to be a year of standstill. On the contrary—despite the remoteness that can feel so immensely isolating at times, I'm most of all grateful to be able to look back at a year of growth, development and connecting with so many new amazing people. I hugely enjoy being a part of LTMS, and I've learned so much from this job and my new teammates already.

Strange as it may sound coming from a person who couldn't tell you what the 7th floor of the Montesquieu building looks like, I've come to feel at home at LTMS. I'm thankful for the welcoming and inspiring community that our department is, even under these stressful circum-

stances, and I can't wait to have those old school occasional run-ins at work once it's safe for us to return to the office. I'll try not to spill my coffee on you.



1.3 PhD Dissertations

1.3.1 Anna Berti Suman, 8 May 2020, Online, LTMS

Title: *Sensing the risk. In search of the factors influencing the policy uptake of citizen sensing*

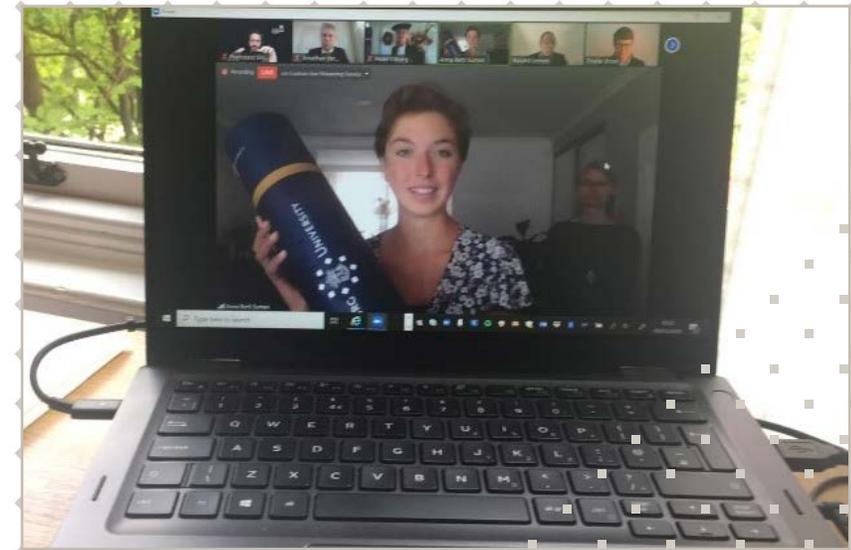
Supervisors: Prof. dr. R.E. Leenes and Prof. dr. J.M. Verschuren.

Co-supervisor: Dr. T. Broer.

'Citizen sensing', framed as grassroots-driven monitoring initiatives based on sensor technology, is increasingly entering the debate on environmental risk governance. When lay people distrust official information or just want to fill data gaps, they may resort to sensors and data infrastructures to visualize, monitor and report risks caused by environmental factors to public health. Although through a possible initial conflict, citizen sensing may ultimately have the potential to contribute to institutional risk governance. The practice, manifesting claims based on individual rights, such as the right to live in a healthy environment and the right to access environmental information, brings the promise to make risk governance more transparent and accountable.

Whereas studies on broader citizen science and on citizen sensing often focus on the learning gains for the participants, this thesis rather explores the potential for the sensing citizens to concretely influence risk governance

through policy uptake. It inquires: "Which factors contribute to the policy uptake of community-led citizen sensing, responding to a risk and eventually generated by distrust, and which interventions are needed for citizen sensing to complement institutional risk governance?" This complementary potential is assessed by empirically researching the policy uptake of citizen sensing and the influence of factors such as the technology element, the grassroots' drive, risk, distrust and social uptake on this outcome.



A number of case studies are investigated adopting a combination of methods, including ethnographical research (on two selected cases), descriptive analysis and fuzzy-set Qualitative Comparative Analysis (on a larger set of cases). The cases are analysed through a theoretical framework built on legal, socio-political and Science and Technology Studies' scholarship on risk governance, environmental justice, co-production and the role of non-expert knowledge in society.

From the analysis, a framework for integrating citizen sensing into institutional risk governance is drawn, envisaging various levels of integration and targeting possible inhibitors and challenges to the process. The main findings include the essential role of risk and sound technology for policy uptake; the unexpectedly positive influence of distrust; the need for a legal instrument regulating citizen sensing and including a legitimate base for it, eventually to be grounded in a 'right to contribute to environmental information'; the identification of a 'dilemma of integration' deriving from the incompatibility of integration with strongly community-led.

Anna Berti Suman

If I look back to 2020, a word comes to my mind, that is, improvisation: in a few weeks, we had to accept the idea that our work lives will become virtual, when we treasured so much physical encounters, sensations, real world experiences. If I think about my little sphere, I would say that I lived 2020 under a motto: "it is what it is, and we have to go online", which for me meant to accept that a number of 'milestones' would just be moved behind a screen. Maybe the most 'memorable' for me was to defend in my living room (actually, of Magda's house 😊), in flip-flops, and with an audience scattered all over the world. A ubiquitous defense in short!



Freetime

It also meant for many of us to focus on the small important things in our daily lives, such as doing yoga (credit to Virgil, Tineke's dog), baking a good cake (thank you Mara!), and rediscovering hidden passions such as drawings. We still very much need a physical touch to stay happy!!



Finally, 2020 meant a sad, empty office, but where there were plenty of plants to take care of, with lovely messages of colleagues communicating 'from far' through plants. I moved to a new work setting, in my home country, which entailed a solitary packing of books, together with a lot of other stuff (and plants) and send it away. More enjoyable was to jump on a bike and go back to Italy all the way along the Rhine, of course with a TILT/LTMS hoodie.



1.3.2 Lorenzo Dalla Corte, 18 May 2020, Online, LTMS

Title: *Safeguarding data protection in an open data world. On the idea of balancing open data and data protection in the development of the smart city environment.*

Supervisor: Prof. dr. E. Kosta,
co-supervisor: Dr. B. van Loenen

The main research question the idea that data protection's material scope would purportedly be overstretching, by virtue of both technological development and of its judicial and doctrinal interpretation, which would, in theory, compress the amount and kinds of information that can be shared and reused as open data – a core element of the development of the 'smart city' environment.

The thesis inquires whether it would be appropriate to somehow balance the interests underlying open data with the right to personal data protection, bringing back the latter to its original privacy underpinning.

It examines the meaning of the term 'smart city', the evolution of public sector information legislation in the EU and its progressive alignment with the concept of open data, the development and (quasi)constitutionalisation of data protection as a standalone fundamental right, the mechanics underlying balancing and proportionality, and the material scope of EU data protection legislation.

It ultimately contends that the idea of balancing open data and personal data protection (be it in the 'smart city' context or not) is not really about balancing, but rather about deregulating the latter; it also recognises that the scope of the notion of personal data might indeed be overly inflating, but that the law and its interpretation already contain the mechanisms necessary to keep it in check.

Ultimately, the problem for the development of the smart city is not the tension between open data and data protection, but rather rests on the technologies used to instrument the built environment, on the values underlying their development and deployment, and on the consequences of their adoption.

1.3.3 George Comnenus, 16 June, 2020 Tilburg University, LTMS

Title: *Protectionism in the Era of Globalisation: the misuse of anti-dumping instruments from an EU perspective*

Supervisors: Prof. dr. P. Delimatsis and Prof. dr. J. Chaisse, City University of Hong Kong

The dissertation contrasts the Agreement on the Implementation of Article VI of the GATT with anti-dumping investigations carried out by and against the EU. The study identifies contingent protectionism in sectors of geopolitical importance, tit-for-tat in the imposition of anti-dumping measures and partiality in the various rates of duties. It identifies malpractices in the determination of negligibility, normal value, export prices, injury and margins of dumping. It

shed new light on the functioning of the US International Trade Administration, the DG Trade EU and the PRC Trade Remedy Investigation Bureau. The PhD Committee members included, in addition to the two supervisors, Giorgio Monti (Tilburg University), Freya Baetens (University of Leiden), Christina Tietje (University of Halle) and Edwin Vermulst (World Trade Institute, Berne)

1.3.4 Olia Kanevskaia-Whitaker 22 June, 2020, Tilburg University, LTMS

Title: *The Law and Practice of Global ICT Standardization*

Supervisors: Prof. dr. P. Delimatsis and Prof. dr. P. Larouche,
University of Montreal

On 22 June, **Olia**'s dissertation studies the extent to which current information and communication technologies (ICT) standardisation complies with applicable procedural and substantive requirements, and whether increased scrutiny of standard developing organisations in the ICT sector is desirable to guarantee due process. The project brings together theoretical considerations stemming from applicable legislation, regulatory documents, judicial decisions and academic scholarship closer to practice by evaluating procedural guarantees in a number of SDOs in the light of current industry praxis. The PhD Committee members included, in addition to the two supervisors, Jorge Contreras (University of Utah), Mariolina Eliantonio (Maastricht University), Alison Harcourt (University of Exeter), Harm Schepel (University of Kent) and Kees Stuurman (Tilburg University)

1.3.5 Paulan Korenhof 6 October, 2020, Tilburg University, LTMS

Title: *“Let’s forget about it. The Web of problems for the right to be forgotten ”*

Supervisors: Prof. dr. R.E. Leenes and Prof. dr. E.J. Koops

Olga Hrynkiv

Covid has changed the way we interact not only with each other but also with people outside our department. Conferences and webinars have moved online. Initially, I was very excited to attend the conferences that were previously impossible for me to join in person because of travel costs and logistics. Online events require no travel and permit to attend multiple presentations within the same day without compromising my work and other responsibilities. Therefore, I was able to attend more events last year than ever before.

My experience is, however, that online conferences are primarily focused on information exchange between the presenters and the audience and they do not simulate the networking among colleagues outside the scheduled presentations. PhD students and early-career researchers might find it more intimidating to reach out to new people, to ask questions, or to start a discussion during someone's presentation. 'Traditional' conferences used to be the platforms where we could have a face-to-face talk with our peers and senior researchers working

in our field of interest, to discuss with them our research in informal atmosphere, to brainstorm new ideas during coffee breaks and dinners, and even to make some plans for future collaboration. Online conferences do not give us such an opportunity.

I tried to reach out to some of the colleagues after the online events we had attended. Some of them replied to me and we even had short zoom calls afterwards. However, it takes much more time and efforts to organize such talks and many people are too busy to answer all the emails. Thus, I really miss a more natural networking experience and the opportunity to meet new people and to interact with them during 'traditional' conferences. Even if it means that I would attend less events, I feel they would be more productive and useful for me.

1.4 Events and dissemination of research

Location, location, location are the three most important factors determining the price of real estate. Although we thrive on intellectual labour, we have all discovered that location matters a lot to our work too. Conferences, seminars, PhD defenses, classes, meetings, social interactions (like BBQs)—they all depend on spaces to be held. Throughout the year, it became clear that all these types of events consist of two components of which one turned out not to depend on physical space: (informational) communication and social engagement. Part of our business can meaningfully be conducted online through Zoom, Jitsi, Skype (for Business), Teams and all the other platforms we have learned to love/hate. We have all spent countless hours in online sessions, and Zoom fatigue has become part of our vocabulary. What has also become very clear is that part of our daily work cannot be done online. Communication has become very planned (organized) and instrumental. Gone are the random encounters at the coffee bar, and more importantly, gone are the possibilities for (young) academics to talk to esteemed colleagues at conferences and for the necessary networking to move on in academic life and craft collaborations. Oh, and of course many of us miss the social chitchat with longtime remote friends over beers, wine and/or dinner during the (semi) annual conferences where we used to meet.

It is with great regret that we had to cancel some big events in 2020, some at

relatively late stages of preparation. We've had countless discussions about whether to cancel Bileta 2020 and PLSC-Europe 2020, which were supposed to take place in April 2020 in the LocHal. They were formally cancelled just hours before the government announced that meetings with more than 100 people would no longer be permitted. Various seminars, workshops and project kick-off meetings in spring also had to be called off.

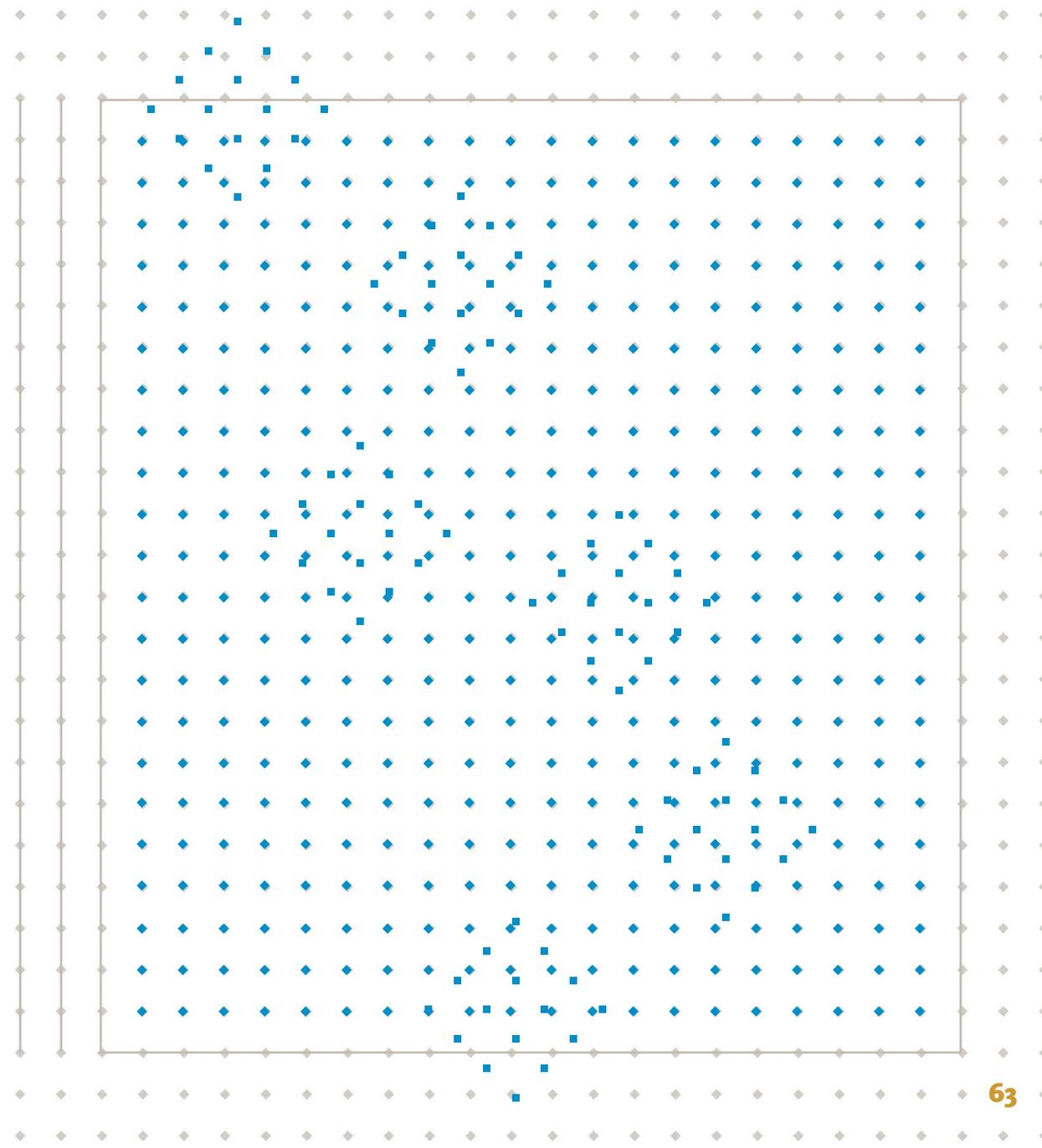
Several spring PhD defenses (Anna Berti-Suman, Lorenzo Dalla Corte, George Comenus, Olia Kanevskaya, Paulan Korenhof) were moved to later dates in the hope to be able to do them on campus. Ultimately, most were done in a very disappointing form—online with no or hardly any audience to witness and celebrate the event.

But it's not all misery on the scientific meetings front. After the disappointing spring, we have clearly rebounded and found ways to hold appealing online events. Notable are online webinars and conferences where TILEC and TILT played significant roles, such as the online (Zoom) TILEC (et al.) webinar/colloquium on International Investment Law & State Capitalism on 15 and 16 October 2020, the online workshop on Economic Governance: Law, Markets, and Organizations on 20 November 2020 organized by Panos Delimatsis' ERC project REVEAL, the Digital Legal Talks conference organized by TILT as part of the Sectorplan DLS effort on 2 December 2020, TILEC's online international conference on the evolution of transnational private rule-makers:

Understanding drivers and dynamics on 3 and 4 December 2020. The Sectorplan DLS event was a clear example of the positive side of moving online. Preparation of the entire event, which was attended by 250 people worldwide, was done in less than five weeks and we could draw on two distinguished speakers, Julie Cohen and Frank Pasquale, and a host of interesting panels, workshops and presentations. No travel, no complicated (re)scheduling, no hassle, just 4-5 hours online, very low organizational costs and hence no entry fees work miracles.

In addition to these larger events, we have organized many online seminars with distinguished speakers such as the 2020 Ronald Coase chair Gani Aldashev, Sandra Wachter, Leslie Francis, Bert Jaap Koops, Gijs van Maanen, Horst Eidenmueller, Stefan Bechtold, Natalia Fabra and Jean Christophe Graz.

A full overview of the events organized in 2020 can be found in [Appendix 3](#).



Colette Cuijpers

Even though it is only a year ago that COVID-19 prevented us from coming to our beautiful campus in Tilburg, it feels like a lifetime. The vibrant space the seventh floor of building M used to be, now is a ghost town. A place where I have not seen more than 3 people together and where the dying plants on the table sadly illustrate the misery. I am a peoples' person. I work at the University because I love the interaction with my students, because I love to participate in large research projects with experts from different scientific disciplines, and because I love to be surrounded by a group of wonderful colleagues. A University is a "together place". A place where, because of the synergies, knowledge is created and shared. Regardless of the technologies helping us to bridge physical distances, bringing us together in virtual settings, I really miss the actual physical interaction. Most of all I miss spontaneity.

Currently, all days are the same; I sit at the same table (dinner table) and stare at the same computer screen all day long. And the informa-

tion influx is overwhelming and all coming from the same direction: the screen, either via email or via incoming Skype, Teams or Zoom calls. I also miss the boundaries, both in time and in environment, the difference between work and family life increasingly gets lost. I do acknowledge that Covid-19 also has shown us ways for improvement. We can travel way less, working from home every once in a while can make us more efficient, we can find the time during the day to go for a walk (as it is a necessity now in view of neck and back aches) and the coffee at home at least is better than on campus. But still, I want to go back to the seventh floor as soon as possible. With living plants and vibrant people, to coffee machine chit-chats and a lecture room filled with enthusiastic students and scientific events where you can actually meet new people. This realization also has a positive element—I appreciate LTMS as a great working environment even more.

Leonie Reins

I had sleepless nights over how we could continue to ensure the same quality of education and give students a valuable learning experience,” Leonie Reins *confesses*. She is Assistant Professor with the Law and Technology LLM program. We contacted her to find out how she experienced the past months and how she has prepared for the new term.

What was the transition to online education like for you?

Summer, 2020

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We are now facing the challenge of maintaining or, ideally, improving the accessibility of our community to students.

In the Law and Technology LLM program, we have over 100 students in different time zones, with different bandwidth qualities and different living conditions. How can we ensure that they have the same experience and how can we create a positive community feeling for all of them? We are now facing the challenge of maintaining or, ideally, improving the accessibility of our community to students."

How many additional hours a week do you need to invest in providing online education?

It is very difficult to quantify this. We started using existing material, but completely revamped the entire structure, cut material into smaller pieces, rearranged storylines, developed exercises, etcetera. The recording of 18 clips for 12 lectures took my colleague and myself around 56 hours. And that's not counting the time spent on editing the clips, restructuring the lectures, writing the scripts and designing the slides, preparing the 90-minute online sessions, and searching for usable material. I also had sleepless nights over how we could continue to ensure the same quality of education and give students a valuable learning experience. To be honest, I had planned to do a lot of research during the summer, but I spent most of my time preparing for the upcoming semester.

How do you experience teaching online?

As my preparations progress, the more advantages I see. My first thought was that online classes would be a nightmare, as they are so

lonely for students and for us. And yes, I do miss the personal interaction with the students and nothing can replace it. But with knowledge transfer now taking place outside the assigned lectures, there's a lot more time for discussion with students. We can experiment with many more tools and tricks.



How have you experienced students' commitment to online education?

My colleagues and I do our utmost, last term too, to be available for students and to initiate an interactive and stimulating dialogue.

But what happened a lot during the Zoom sessions was that I found myself staring at a dark screen, because students did not want to turn on their camera and participate actively. This saddens me. For this on-line adventure to be a success, both sides need to commit: students as much as lecturers. That being said, there are students who understand that we give our best and I am very grateful for their appreciation.

How do you create interaction and which new technology, methods, and tools will you be using this term?

In the new academic year, we try to ensure interaction on two levels: that of the LLM program and of lectures. At the LLM program level, we are setting up an entire program for community building. It will help us stay in touch with our students, not only or solely in academic terms, but also in terms of trying to give them the actual “Class of 2020-2021” experience and by giving them room to actively engage with academic staff and with each other, albeit at a distance.

For this online adventure to be a success, both sides need to commit: students as much as lecturers.

The lectures we offer have different components: video clips (5 to 25 minutes) prepared by us and by others, reading materials, individual and group assignments and exercises, plenary online discussions, and streamed plenary lecturer talks. So there is a mix of methods and tools to keep things interesting and diverse. Activities take place at different times (before, during and after class). And in the online meetings we use breakout sessions where students can discuss statements, papers, etc. with each other and then report back to the plenary session.

Taking the long view, would you integrate online teaching into education?

One of the major advantages of online education is that students can study whenever it suits them and not only in a pre-defined 90-minute lecture. So yes, in the long term, online teaching can usefully complement our educational offer, but only if it is combined with live interaction.

Time spent at university is not merely of an academic nature. Rather, it creates bonds, friendships and, yes, even romantic relationships that can last a lifetime.

If I have to take sides, I still prefer seeing my students in real life. Similarly, for students – and recalling my own experience – the time spent at university is not merely of an academic nature. Rather, it creates bonds, friendships and, yes, even romantic relationships that can last a lifetime. The experience of meeting and interacting with people from all across the globe is invaluable and while online education is technologically possible, I remain convinced that it ought not to entirely replace the personal, face-to-face learning environment that is and until very recently was our natural habitat.



EDUCATION

Main content

- Education in LTMS
- MASTER L&T
- JADS
- TIAS and PAO
- Student community during
times of COVID-19
- TILT clinics

2. Education

2.1 Education in LTMS

Even though LTMS is historically a research institute, education is considered to be a very important pillar of LTMS. The central point of this pillar is the Law and Technology master program. This LL.M. started in September 2005 and has been successfully running and expanding for the last 15 years; even during a global pandemic, when education had to be shifted to an online environment. Since 2015, LTMS has also extensively engaged with education in the new data science programs of JADS. Alongside these major involvements, many of LTMS staff members are active in one or more other programs, including the Global Law Bachelor, the Liberal Arts Bachelor, the Rechtsgeleerdheid Master, TIAS and other Post Academic Programs.

In addition to the aforementioned, members of LTMS are also involved in the International Business Law Master and the Master in International and EU law, as well as additional courses, examples of which include the Master courses ‘Regulating Competition’; ‘International Competition Law’; ‘Competition Law and Market Risks’; ‘Trade and WTO Law’; ‘Global Trade and

Development Law’; ‘Free Movement Challenges’; ‘Business Taxation and Decision-Making Processes for IBTL’.

2.2 MASTER L&T

While the master program started out as a small-scale niche program with only few students a year, the trend is now that the program is attracting over 100 students per year from all over the world. The intake is spread over two periods, in September (ca 80-100 students) and in January (ca 40 students). We are pleased to note that these numbers have stayed consistent even when the program moved to online teaching.

The program consists of three main components. Namely:

- ◆ ◆ one mandatory course as a foundation to the entire program;
- ◆ ◆ six electives to choose from a total of 12 electives;
- ◆ ◆ a master’s thesis on a topic that explores the intersection; of law & technology.

The mandatory course

The mandatory course which is named REAL: Regulation, Ethics, Acceptance and Legitimacy, provides students with necessary tools, concepts and perspectives to analyse the socio-technological landscape. Thus it provides students with the basic foundation from which they explore the various technology-related subjects offered by the program.

The electives

The electives within the program are clustered in two ways. First, into three main pillars of the program, all consisting of an introduction and an advanced course, where the advanced course is only available to students who participated in the introduction. These pillars are: privacy and data protection, intellectual property, and competition law.

Second, besides these three main pillars, the program has two clusters of electives: an IT law cluster and a Societal cluster. The IT law cluster consists of the following courses: 'Contracts and ICT'; 'Global E-Commerce and Internet Liability'; 'Cybercrime'. The 'Contracts and ICT' and 'Global E-Commerce' courses were taught for the last time this year, and from next year will be merged into one course. The societal cluster consists of the courses: 'Climate Change Law'; 'Law, Technology and the Environment'; 'Health, Care, Regulation and Technology'. We also added the course Regulation and Governance of Artificial Intelligence to the list of electives this year.

Even though these pillars and clusters provide students with the opportunity to, in combination with their master's thesis, specialize in certain domains within the broad field of Law & Technology, students are entirely free to choose the electives as they wish. On top of the program.

In addition, student can choose electives from other master programs.

Within the program, students are trained in assessing the mutual relationships between law, technology and normative outlooks within society. The program is interdisciplinary in nature, starting from the perspective of regulation, students are challenged to consider the interplay of different disciplines in solving complex societal issues in relation to the ever-evolving technological landscape.

Even though internships are not a mandatory component of the Law & Technology Program, students are encouraged to engage in internships and other extracurricular activities. Practice is involved in the Law & Technology Program by way of guest lectures and extracurricular activities such as seminars and so-called TILT Clinics – assignments commissioned by practice executed by small groups of students – which are highly valued by both students and practice. See more on the 2020 TILT Clinics below.

2020 proved a difficult year for both students and teachers, having to adapt to online learning, while still providing as much support as possible. In order

to address this, workshops were organized in an attempt to facilitate student community and to provide students with a space to interact with each other and with staff members. We recognize that students sometimes struggle with the lack of contact that normally occurs during a student's studies and these community building events were directed at addressing this lack of contact.

2.3 Involvement in other TLS Programs: Master Rechtsgeleerdheid, Bachelor's Programs in Global Law and Liberal Arts

LTMS offers various courses in other TLS programs. In the Master Program Rechtsgeleerdheid an elective course on 'privacy and data protection' is offered. Students learn about the differences and similarities in privacy and data protection, they get acquainted with the notions of a harm-based and risk-based approach and explore the GDPR in theory and in practice, on the basis of real-life cases. In the Bachelor Global Law LTMS staff teach courses on 'Law, Technology and Society', 'European Union Law', 'Human Rights Law', 'International Trade and Investment Law', and 'Law and Economics'. Several of our staff also supervise and grade the final project/essay of the Global Law Bachelors.

In the program Liberal Arts LTMS hosts a distance course on 'Liability and the Internet', focusing on the implications of online environments for the applicability and enforceability of traditional legal frameworks. Liability in re-

lation to Internet Service Providers and jurisdictional issues regarding online defamation are used as illustrations of how internationalization, dematerialization and technological turbulence pose regulatory challenges.

2.4 JADS

Tilburg University is one of the founding partners of the Jheronimus Academy of Data Science (JADS). LTMS lecturers are involved in both the Bachelor's Program and Master's Programs that fall under JADS. The courses taught by LTMS staff aim to provide data science students with a strong legal and ethical foundation that will stay with them throughout the rest of their careers.

The majority of JADS students do not have a legal background. However, over the course of their careers, they will inevitably face circumstances in which they will benefit from an understanding of the legal and ethical frameworks that come into play when one deals with (big) data.

The following courses were taught by LTMS lecturers as part of JADS:

Joint Bachelor in Data Science: (Tilburg + Eindhoven)

- ◆ Law and Data Science
- ◆ Data Science Ethics
- ◆ Data challenge
- ◆ Innovation & Regulation

Joint Masters: Data Science and Entrepreneurship (Den Bosch)

- ◆ ◆ IP and Privacy
- ◆ ◆ Law, Ethics and Entrepreneurship

Masters in Data Science: Business and Governance (Tilburg)

- ◆ ◆ Mandatory: Data Science Regulation and Law
- ◆ ◆ Elective: Data Science: Sustainability, Privacy and Security

The primary aim of the courses LTMS provides is to ensure that data scientists of the future are aware of the legal and ethical duties that come with the great potential of (big) data. The legal courses provide insight into both legal and ethical considerations relevant to data science. Besides a general introduction into law and ethics, students get basic knowledge of different fields of law such as privacy and data protection, private law and intellectual property law, aiming to make students aware of challenges, risks and opportunities that may derive from these legal frameworks. Students are challenged to reflect upon moral and ethical factors, which may influence a decision not to analyze or publish certain information, even in cases where it is already publicly available. LTMS staff is also involved in various JADS exclusive education programs.

2.5 TIAS AND PAO

One of LTMS's success programs is a **Post Executive Specialization Course in the field of Privacy and Data Protection**. During 4 days (all Fridays) the participants gain a foundational understanding of the General Data Protection Regulation (GDPR) and learn how to work with this complex legal framework in practice, by handling data protection issues via case studies. Special attention is given to issues prominent in an international setting of data use, including the scope of application of the Regulation and compliance with the EU data transfer rules. Another PAO program in which LTMS participates concerns **Big Data**. In this program a full spectrum on the emerging field of both the law on big data as well as the use of big data in the law is offered. The participants get a comprehensive view on the latest developments in big data and artificial intelligence (AI) related to the law and legal practice. A wide range of topics is covered, including the GDPR, ethical issues of big data and AI, contractual protection of data and IP-rights.

Besides these stand-alone PAO courses, LTMS is also active in Post Academic Programs offered by TIAS School for Business and Society. LTMS is involved in courses on Privacy and Data Protection, Ethics, ICT-contracts and Intellectual Property in a variety of programs such as the Executive Master of IT-Auditing and the short programs **'Waardecreatie met Big Data Analytics'** and **'Trans-formeer naar een data gedreven organisatie'**. For the Executive

Master of IT-auditing, LTMS on occasion is involved in graduation trajectories providing supervision to small groups of students.

2.6 STUDENT COMMUNITY DURING TIMES OF COVID-19

During 2020, the unexpected pandemic and associated health measures not only challenged the quality and consistency of the courses offered by LTMS, but also the sense of community that is shared among Law and Technology students. Open access to campus, the ability to converse with friends before and after class, and the ability to interact face-to-face with LTMS staff, are fundamentally important for maintaining an active and healthy student community, yet only a short few months into the year these were no longer possible to maintain. Rising to face these challenges, LTMS staff offered open bi-weekly meetings with any students who wished to join. Not only did these meetings help keep students informed about developments at the university and department level, but also allowed for a consistent space where students and staff could engage in more informal discussions about their lives and different circumstances during the turbulent spread of COVID-19 across the world.

2.6.1 Community Building Events

From the start of the Fall 2020 semester, the bi-weekly meetings were replaced with bi-weekly community building events, each with a different topic/activity for our students. We started out the semester with our program director and the Head of the LTMS Department, Dr. Ronald Leenes, giving the students a general introduction to himself, including his interest, passions and publications. This allowed students to get to know our faculty members and reduce the distance created by online learning.

Several of the events organized had informative or educational value. This included presentations from successful alumni, including dr. Arnold Roosendaal (the director of Privacy Company) and Joost Dujim (a patent lawyer), who spoke about their careers and on how the Law & Technology Masters prepared them for their careers. LTMS members also presented their research and discussed their findings with students during these events. Including Dr. Bo Zhao and Dr. Emmanuel Pernot-Leplay on the topic of China's rising data power and the global impacts; as well as Dr. Linnet Taylor and Gargi Sharma, who discussed their book on Data Justice in the context of COVID-19 and contact tracing apps.

A few festive and fun events were also included in this year's calendar, including a movie night, a Carnaval pub quiz and a Sinterklass celebration, which was hosted together with the student association E-law.

2.7 TILT clinics

TILT Clinics are short term projects (4 weeks in a row for 2 days a week typically) in which 4 Law & Technology students work on a commissioned study under supervision of LTMS senior staff and the project commissioner. The days and number of students can vary depending on the wishes of the commissioner of the assignment. In 2020 we oversaw 3 TILT Clinics, with project commissioners from various different fields.

2.7.1 TILT Clinic in cooperation with SafeCity

(March – April 2020)

SafeCity

SafeCity received a pioneer grant from the SIDNfund (SIDN is the Dutch domain name registrar for .nl domains and strong supporter of internet security) for the development of a comparison website on the reliability of apps and IOT devices, in the context of cybersecurity and data protection. The goal here was to develop a website where end-users can check the reliability of the relevant app or IOT device, leading to more awareness in cyber and data security for users, and motivating the developers of apps and IOT devices to get a high score at the reliability comparison.

Assignment

Students were tasked with developing a well thought-out questionnaire that gives an indication of the level at which an app or IOT device meets certain criteria pertaining to:

- ◆ ◆ Privacy / GDPR with data.
- ◆ ◆ Security of data storage.
- ◆ ◆ Handling data and combining with other data.
- ◆ ◆ Integrity of developer / provider

Students were also tasked with developing a ranking system based upon this questionnaire, to compare and categorise the relevant apps or IOT devices.

2.7.2 TILT Clinic in cooperation with InnoSportlab

(April – May 2020)

InnoSportLab Sport & Beweeg

InnoSportLab Sport & Beweeg is a non-profit innovation center, located in Eindhoven, who innovate to make sports and exercise a matter of course. To accomplish this they work together with end-users, companies, governments and knowledge institutions. Together they invent smart new products, services and methods that contribute to this mission, within both the sports environment and public space.

Assignment

The assignment concerned the development of two products/services that thrive on data gathered in public spaces: “Meet & Move” and “Neighbourhood Movement map”. The focus of this clinic was to develop insights into the possible data protection issues related to these products/services, and subsequently create the necessary underlying documentation for accountability purposes.

Meet & Move uses smart technology (for example, artificial intelligence and Bluetooth) to efficiently and effectively measure exercise behaviour in public spaces. The following parameters were to be measured: Meeting (Group size, Hotspots, User peak times) and Activity (different levels of intensity). InnoSportLab Sport & Beweeg tasked students with answering the following questions:

- ◆ ◆ ◆ Could InnoSportLab, in consultation with a municipality, hang up measuring instruments themselves in public spaces such as WiFi / Bluetooth beacons and (passive thermal) cameras?
- ◆ ◆ ◆ Under what conditions could they use camera images in public space to recognize moving / meeting patterns using AI technology?
- ◆ ◆ ◆ The same question for Bluetooth use, in order to be able to continue to track people at central points via Bluetooth / WiFi, in combination with camera images.

- ◆ ◆ ◆ Should they have filtered out certain data? Did they need to store certain data and should they have consider where to store data? Could they, and if so under what conditions, give people unique IDs based on recognition?
- ◆ ◆ ◆ If the project concerns the actual processing of personal data, what was needed in terms of accountability to meet the minimum requirements of the GDPR and could the students provide these? measures could be taken to mitigate risks

The Neighbourhood Movement map is a platform that collects information from residents, in order assist municipalities organize their neighbourhoods in an exercise-friendly manner. Residents are asked for: age, social-cultural situation, place of residence (zip code), motivation and/or obstruction to move. To grade the ease of movement, InnoSportLab uses this information to distinguish different district persona in a neighbourhood. Residents further indicate their wishes and needs on a map. Here district, persona, and place of residence are linked to certain wishes and needs. Students were asked to review the possibility of this, as well as to investigate the relevant conditions for this under the GDPR. The students were then tasked with assessing what measures need to be in place in order to process relevant personal data in conformity with the GDPR.

2.7.3 TILT Clinic in cooperation with WECS

(October 2020 – March 2021)

WECS

Women in Energy, Climate and Sustainability (WECS) is a public foundation established to promote gender equality as an enabler for the transition towards a climate neutral economy in Europe and worldwide. WECS objective is to facilitate gender diversity and women empowerment in the fields of energy, climate and sustainability. WECS serves as an enabler for projects and partnerships designed to achieve the objectives of the foundation, which are closely aligned with and supportive of a number of relevant international initiatives, including:

- ◆ The Paris Agreement
- ◆ The United Nations Sustainable Development Goals, in particular, Goal 5: Gender Equality; Goal 7: Affordable and Clean Energy; Goal 12: Responsible Consumption and Production; and Goal 13: Climate Action.
- ◆ The EU strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050
- ◆ The European Green Deal
- ◆ The European Gender Strategy.

WECS is represented by Dr. Gokce Mete, Head of Knowledge, and Daria Nochevnik, Head of Operations and Communication.

Assignment

Recent data from the International Renewable Energy Agency (IRENA, 2019) showed that women represented about 32% of workforce in the renewables industry, which is only 10% higher compared to the share of women in the traditional oil and gas industry. At the same time, women were likely to be employed in lower-paid, non-technical and administrative positions in the sector than in technical, managerial or policy-making roles. When it comes to senior management roles in the power and utilities sector women held less than 15% (EY, 2019). In the public sector, women held about 17% of high-level decision-making positions in the environment, transport, and energy sectors across Europe (EIGE, 2012). The status quo in the industry was in sharp contrast with the fact that women represent more than half of university students, and almost 50% the workforce across the world. Data and current research on gendered perspectives on social equality and women's access to the decision-making processes are limited to developing world context (Global South). However, with the emergence of new technologies, new energy carriers, and the ongoing digitalization in the energy sector, the importance of analyzing the impact of energy projects and transformations on gender equality and inclusion in the developed world becomes necessary. Further, as the numbers above show, the involvement of women

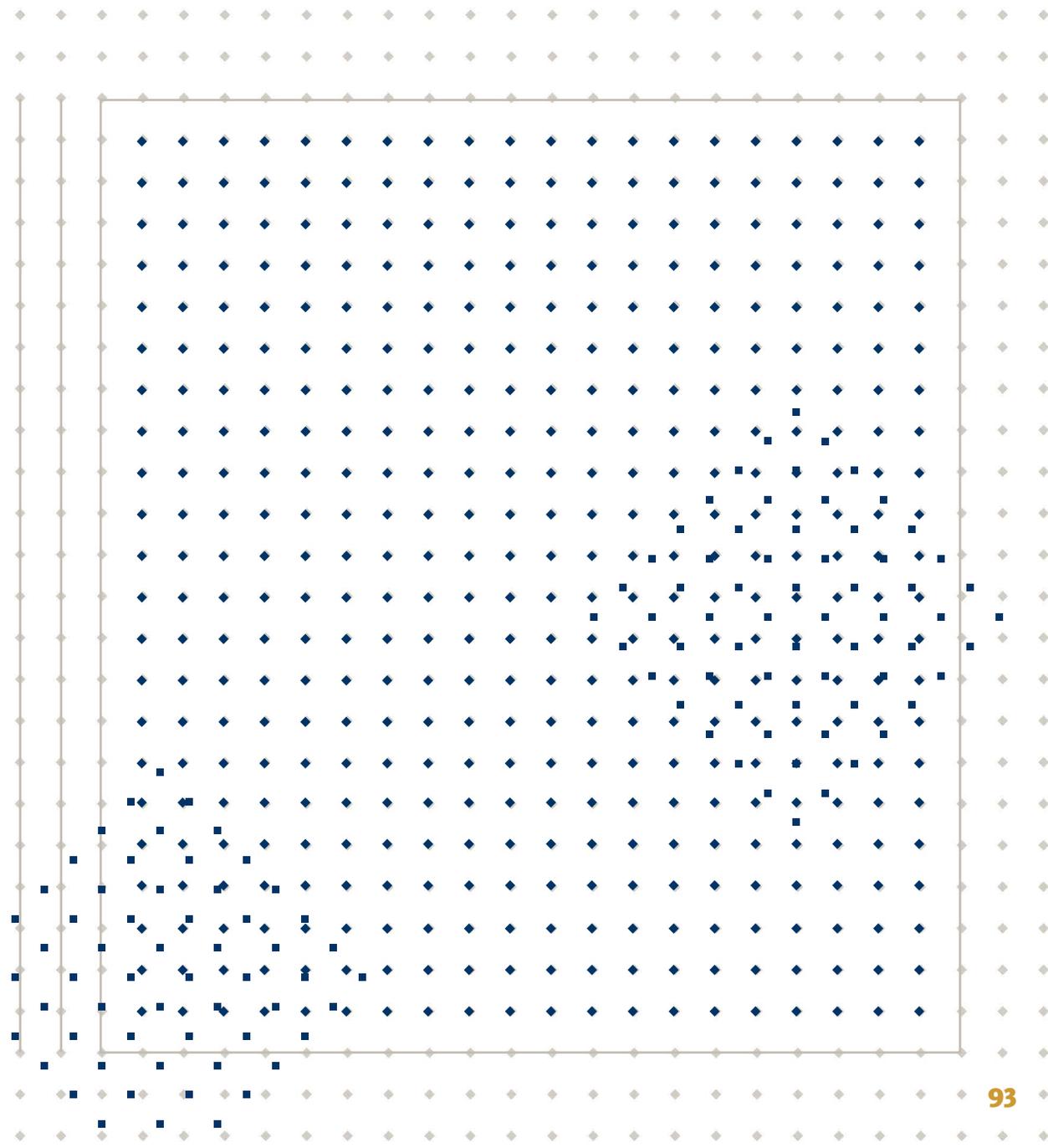
- ◆ working in the in the energy sector is an issue. Against this background, WECS was seeking to develop a methodology towards a model Gender Impact Assessment in the energy sector, to be presented to the European Commission, with a view to be streamlined into the European Green Deal and European Gender Strategy.

◆ ◆
Project milestones for the students included:

- ◆ ◆ ◆ Identifying existing Gender Impact Assessment toolkits developed by national governments, EU institutions or international organisations (i.e. World Bank) in the energy and other sectors, such education, health and town planning.
Identifying best practices, if any, in the energy sector or in other sectors.
Mapping out lessons learned from environmental and social impact assessments (whether and if so, how gender specific questions have been included).

The final goal of the project was for the students to produce:

- A report on milestones 1-3 on the key findings, presented to the WECS Foundation.
- A model methodology for a gender impact assessment of projects in the energy sector.



Francisco Duque Lima

(student)

The academic experience has always been one of personal contact, engagement, and live presence: in classrooms, in lecture halls, in conferences, in a bar after an exam, at a friend's house, a library, a study room, a friend's defense room, and eventually your own defense room. The term Academy, originally the name of the garden in which Plato taught and engaged in discussion with his pupils, reverberates with the call to gather and interact with others, in the great pursuit of personal development.

However, during this past year, we lost access to those lecture halls, classrooms, bars, libraries and, at times, even to the gardens—but not to the academic experience.

My experience as a student that completed most of their Master's program during multiple and successive lockdowns is, ultimately, a great one: call it rosy retrospection, but upon graduating from a program one

can't help but feel a sense of accomplishment, pride, and gratitude towards their peers and teachers, despite all of the hardships involved.

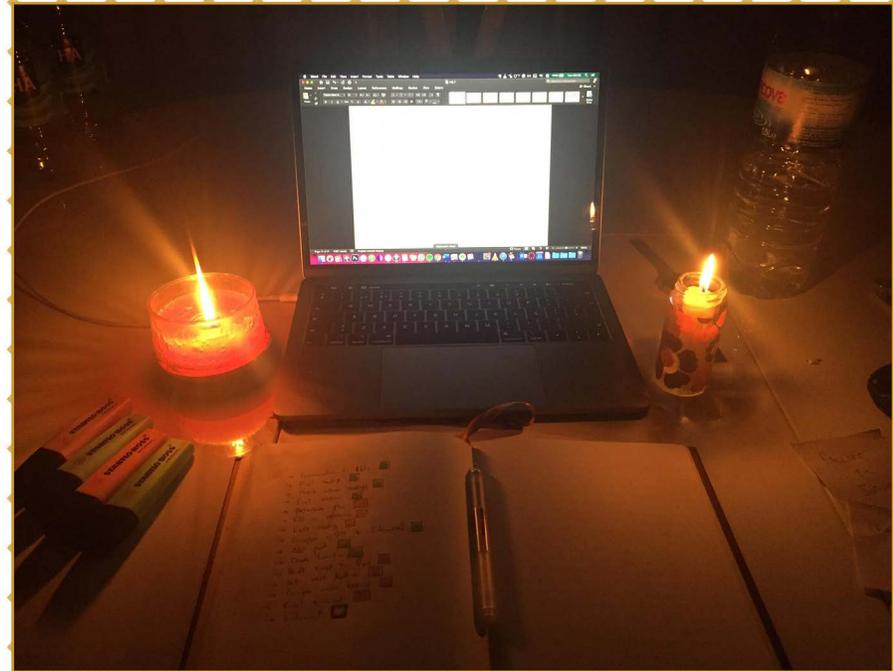
Predictably, having classes online is not the same as dressing up, cycling, grabbing a quick coffee and entering a bustling classroom. But, by staying inside, how many rainy days did we collectively avoid? Literally, and figuratively: how many days were we feeling not so great, and stayed home taking care of ourselves without the fear of missing out on a class, or ruining the semester, because we could actually attend that class from home?

Similarly, I believe the classroom experience and the space for discussion were not lost in this online setting. While it is true that it is easier to engage in discussion with peers or to privately approach a teacher in a classroom setting (and I do not doubt this shift to the online environment resulted in a bombardment of the lecturers' inboxes), I also feel the online environment deserves its credit: existing communication channels and lecturers' availability reached an all-time high, which made it easier for shier or struggling students to speak out without succumbing to their fears.

Conversely, there seems to exist a consensus in regards to the exam

experience: things were not so great. For teachers, the struggle of avoiding fraud, developing test questions that could not be cheated on, and dealing with an array of technical issues; for students, the horrific possibility of one day having to face the dystopic proctoring overlords, as well as the struggle with harder and more demanding tests, many of which a time-controlled frenzy, others an experience almost solely focused on complying with the different and ever-complexing rules of virtual evaluation systems as to not get inadvertently flagged for fraud.

Research, however, seemed to me to have been the least affected aspect of education, probably because of its inherently individual character. Although the adverse conditions may have amplified the solitude of producing and drafting a dissertation alone, teachers and supervisors seemed increasingly aware, empathic and communicative, which greatly humanized the entire process. Notwithstanding, staying at home all the time will increase our chances of having to deal with the occasional crisis, like a persistent city-wide power outage the night before a chapter deadline, for example. While it is true that attending University will put us through countless ceremonies and rites, no one expects the need to perform a candlelit ritual in order to finish a chapter of their thesis just in time (see picture below).



Even so, the strangest and possibly most anticlimactic part of the process was, in hindsight, the thesis defense. While a virtual defense may have helped those who struggle with speaking in public by keeping their audience restricted/invisible, to others, what should feel like a rite of passage simply felt like the last of many formalities, completed through a quick, scheduled, lacklustre operation. After speaking to an empty room, there is no applause. The final step is completed, the Zoom call

reaches its end, and you're left with silence and the realization that you're not going to have a final word with your supervisors, hug your family, or celebrate with your friends. There are no pictures, no handshakes, no laughs.

Looking back, and taking everything into consideration, it feels as if the new evaluation methods, new systems, constant flow of assignments, slight lack of harmony between courses and the collective experience of figuring out how to do education in this new universe, stacked on top of all the stress regarding health and family life, isolation and solitude, created an overall hazy and confusing setting for everyone. Although I feel the university has done everything within its possibilities to assist and accommodate its staff and students during this period, some of these feelings are, ultimately, inevitable.

Indeed, pursuing a degree in these conditions cannot be generally described as 'easy'—the stress of not keeping track of your dates and deadlines and feeling simultaneously out of place and worried about a worldwide disaster surely seem mostly negative. However, it is the entire display of human overcoming and compassion for one another that, ultimately, made this experience a positive one—because facing all of this together made each and every one of us forever better.

Better at paying attention to each other's mental health and well-being, better at understanding the struggles of one another, better at being more lenient with deadlines and demands, better at taking care of ourselves, better at giving those who normally don't feel comfortable speaking up more and more space to do so, better at respecting each other's personal space and time, better at being tolerant, better at being empathic, better at connecting, better at many of the things that make education so great.

Those are the things that we will bring with us for when we meet again—in the classrooms, the lecture halls, the auditoriums, the bars, the libraries, in the gardens of Academy.

Eleni Kosta

2020 is a year to remember. It was an educating year. Not only because it forced me to realize how important social contacts are, how fragile our society is and how weak we are all when public health is threatened. But also because it brought me my second son, a miracle in the most difficult period for me and our family. It forced me to work under different kind of pressure, it helped me realize that I can really multi-task and that in the end I have more energy in me than I even thought. It taught me that stressing out does no good when you have to deal with situations beyond your power and control. And it reminded me that I should be thankful of what I have in life. 2020, thank you for teaching me modesty and prudence. I shall never forget.



Paul de Hert

Covid lockdowns and LTMS part-time work

It takes savoir faire to do a job, but I humbly suggest that it takes even more of that resource to do a job as a part-timer. The human factor is what it is: it is something we need, but it is not totally in our control. Connections are made à géométrie variable, and some connections take time. The unbendable human factor disregards all appointment details (one day, two days, or more). The part-time employee better reckon with this. Feeling at home with colleagues can demand a lot of the available 'part-time'-time.

The working environment is a crucial enabling/disabling factor. To point at 'the management' in defining that environment is only part of the story. This critical element can be in the details or in the spirit of the working environment. So what are those details? In the case of LTSM (Let The Spirit Motivate), things are easy. There you have a gath-

ering of strong minds that accept long time slots dedicated to study and focus and supported by a staff that has developed the samurai art of marching silent. But these people understand balance and the need to refresh through interaction. Tuesdays at LTSM have been for a while one long coffee break with meetings, encounters and seminars. Some events are programmed on Wednesdays, but that is it. Other days are filled with silent energy and dedication: the Spirit World then demands that all engage in truth-seeking and science production.

Employees with a part-time appointment have no difficulty here. O, sancta simplicitas! They make sure to take the full advantages of this organizational mode. They are present on Tuesdays whenever they can and whenever they feel a need to boost the human factor. Or not.

With Covid lockdowns, strategies need to be revised, but what is possible? It is possible to keep in touch with this Spirited World via technological and mental media, but this will probably not be an everlasting solution. For some part-timers like me there are border controls and checks (in the 21st century!) and only seminars will not do it as a 'refill through interaction'-device. So sitting out Covid at home is the intermediary solution. Dreaming of having some of the old back is the other solution.

LTSM has everything in it to blend this Covid experience with its own DNA to prepare for the post-Covid future. The old working routine was partly Covid-proof. A working environment is not wholly determined by materials parameters like location and the likes. The attitude is key and the attitude in this group was powerfully resistant to disruptive surprises. The buzz day-arrangement (concentrating human interaction) and the idea to rationalize the working schedule to a certain extent can be upheld. For full-time people, more flexibility in choosing working hours and working space (at home or at LTMS) can be allowed. For part-time people, like me, it would however be sad to do away with the privilege to take part in the group dynamics on the buzz days. It is the human factor at its best.

FINANCES

Main content

- Tilburg University
- European Commission (EU)
- Netherlands Organization for
Scientific Research (NWO)
- Others

3. Finances

LTMS is funded through a mix of internal funds provided by Tilburg University (35%), as well as external funds (65%). Large international projects are funded by the European Commission (EU) and by the Netherlands Organization for Scientific Research (NWO), public authorities and private firms.

3.1 Tilburg University

For the education:

- in the **Master in Law & Technology** program;
- data Science education, both in the joint Eindhoven University of Technology and Tilburg University **joint Bachelor**, as well as in the **Data Science and entrepreneurship** at JADS and the **Master Data Science and governance** at Tilburg University;
- LTMS contribution to the Bachelor Global Law with the Law, Technology and Society course;
- as well as contributions in the **Master European Law** and **Master Rechtsgeleerdheid**.

For research:

- TILT's 5 year research program, **Understanding the Mutual Shaping of Regulation, Technology, and Normative Notions**;
- into the Law & Technology signature plan;
- the Sectorplan SSH program (**Digital Legal Studies** – From regulating behavior to regulating data);
- into **Regulation, Ethics and Accountability in Data Partnerships for Humanitarian Aid**;
- into how data portability in big data affects individuals, innovation and competition.

3.2 European Commission (EU)

European Research Council (ERC), for the project **Understanding information for legal protection of people against information-induced harms (INFO-LEG)**.

European Research Council (ERC), for the project **A framework for Data Justice on the global level**.

The European Research Council (ERC), for research on **the resilience of non-State regulatory bodies in times of crisis**.

Directorate-General for Justice and Consumer, for a study on **certification ex art. 42/43 GDPR**, under the frame-work contract N° JUST/2014/DATA/FW/0038.

Directorate-General Migration and Home affairs for the project **Public-Private Partnerships on Terrorism Financing (ParTFin)**.

Research Executive Agency, for the project CSI-COP: **Citizen Scientists Investigating Cookies and App GDPR compliance**.

Jean Monnet Centre of Excellence, for the network: **Consumers and SMEs in the Digital Single Market**.

European Union Intellectual Property Office (EUIPO) to participate in the **Collection of National Key Enforcement Judgments related to IPR as National Expert for the Netherlands**.

3.3 Netherlands Organization for Scientific Research (NWO)

The Dutch National Research Agenda (NWA) - **INTERSECT – An internet of secure things**.

In cooperation with the think tank NGInfra, for research into **legal and**

organizational network and governance aspects of data-driven innovations in infrastructure management.

ZonMw for the project **Preconditions for Covid-19 mobile apps: A feature-level investigation of user acceptance based on insights from South Korea and Canada, applied in the Netherland**.

NWO Responsible Innovation Program for the project **The Role and Responsibilities of Public Actors in Distributed Networks Transparency, Trust and Legitimacy by Design**.

Consortium member in the **NEON** project.

Rubicon grant for **Anna Berti Suman** for the project **Sensing for Justice - Citizen Sensing as a source of evidence in environmental justice litigation and as a tool for environmental mediation (SensJus)**

3.4 Others

Luminate Organization, Inc to support the **Global Data Justice project**.

Institute of the German Economy Cologne e.V. for the project **Innovation and digital platforms**.

The Young Academie for an event on Understanding the **private sector's impacts on Dutch scientific Research**.

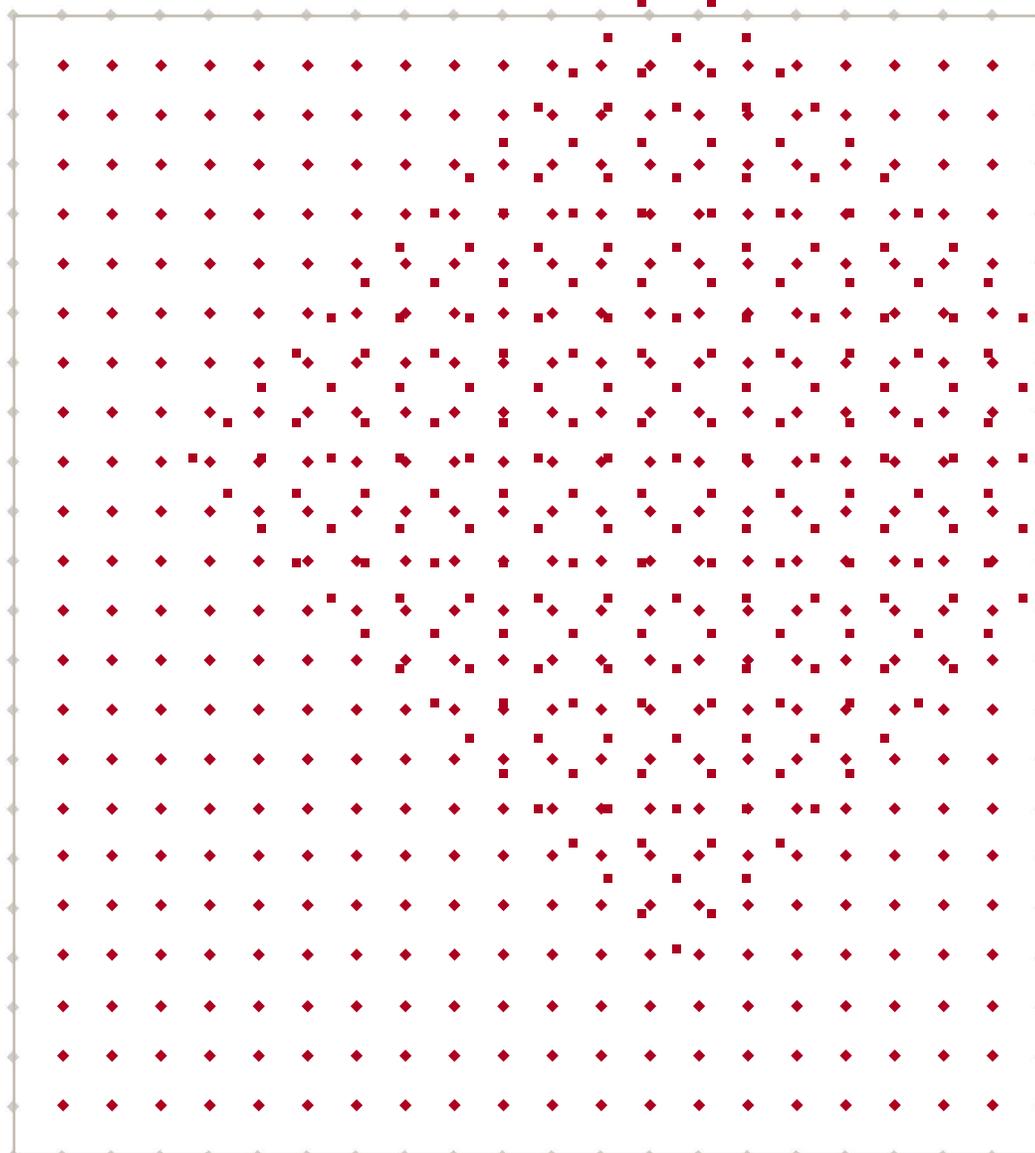
WODC (Research and Documentation Centre) for the project on **Deepfake, hobbydrones, facial recognition**.

In cooperation with Elisabeth-TweeSteden Ziekenhuis (ETZ), Tilburg School of Humanities and Digital Sciences, Departement Communicatie en Cognitie (DCC) on the We Care project **Recording of Clinical Consultations (during clinical visits at ETZ)**.

Rechtbank Oost-Brabant gesponsorde leerstoel **Rechtspraak, recht en technologie**

Digital Clearinghouse, funded by grants from the Open Society Foundations, the Omidyar Network, and the King Baudouin Foundation and is jointly hosted by Tilburg University, the University of Namur and the European Policy Centre.

Ministry of the Interior and Kingdom Relations, for the project **Non-discrimination by design**



VISITORS

Main content

Fully or partially staying
at LTMS in 2020

4. Visitors

Fully or partially staying at LTMS in 2020

Research visitors

- ◆ Heike Felzmann (The National University of Galway, Galway, Ireland)
- ◆ Teresa Quintel (Université de Luxembourg)
- ◆ Kaisa Huhta (University of Eastern Finland)
- ◆ Katharina Paul (University of Vienna)
- ◆ Guest Lectures
- ◆ Miguel Perez Guerra
- ◆ Hans Graux

- ◆ Louis Jonker
- ◆ Paul Lugard
- ◆ Ruben Roex
- ◆ Frank Vogt
- ◆ Reinoud Westerdijk

Research Associates

- ◆ A. (Angela) Daly (Queensland University of Technology, Australia)
- ◆ H. (Heleen) Janssen (BZK)
- ◆ E.M.T. (Eric) Lachaud (Tilburg University, the Netherlands)
- ◆ F. (Federica) Lucivero (King's College London, United Kingdom)
- ◆ E. (Eliza) Mik (City University of Hong Kong)
- ◆ S. (Stefania) Milan (University of Amsterdam, the Netherlands)
- ◆ B.C. (Bryce) Newell (University of Kentucky, Lexington, United States of America)
- ◆ D. (Dmitrii) Trubnikov
- ◆ E.W. (Eric) Verhelst (Tilburg University, the Netherlands)
- ◆ N. (Nicolo) Zingales (Tilburg University, the Netherlands)

External PhD candidates

- ◆ E. (Emre) Bayamlioglu
- ◆ A. (Anna) Butenko

T. (Tom) Chokrevski
S. (Silvia) de Conca
L. (Liebrich) Hiemstra
J. (Jingze) Li
P. (Patrick) McCutcheon
M. (Maryam) Pourrahim
M. (Manuella) van der Put
C. (Claudia) Quelle
I. (Ivan) Skorvanek
M. (Maria Luisa) Stasi
A. (Arnout) Terpstra
B. (Blanka) Vitez

Student assistants

Sean van Berlo
Djara Braggaar
Francisco Duque da Silva Coelho Lima
Celine Fischer
Madalena Gomes Cruz
Ana Hriscu
Laura Kaschny
Anne de Laat

Philippe Martens
Caleb Meyer
Anne Peters
Daphne Stevens
Bilgesu Summer
Alisa Verhagen



Aviva de Groot

I can't remember a year in which I had more discussions about expertise, and about experts, than I did in 2020. What is it and who are they? Questions that should always bother us, urgently brought to the fore in a time where some experts, and not others, some knowledges, more than others, were selected to inform pandemic politics. It's not just what solutions are sought. It's what problems are addressed. At the same time, I was confronted with the need to develop my own expertise differently. Gone were the physical interactions that feed my information position: with people, in places, on public transport. I can't remember a year in which I had more thoughts on serendipity than I did in 2020. Of all the needs that can be re-shaped digitally, being around others by chance, cannot. It's not just that finding answers works differently. It's the questions that don't get raised. Having a room, in a house, to have these thoughts in, is luck. I can't remember a time where I've more urgently wanted to share it with random strangers than 2020.

Maurice Schellekens

Covid-19 and education: an impression

The general impression shared by many people is that Covid-19 makes things more difficult. In large part, this is probably true. However, this is not true across the board. For education, I can see actual upsides. For many years, courses tended to be taught along well-proven lines, without much change from year to year. Of course, the materials of the course were brought up-to-date. Here and there, a small adaptation was made to account for student feedback or changes in the examination rules. Covid-19 proved to be an opportunity (with a bit of stick to it) to re-appraise how courses are taught and to change the method of teaching. Where lectures traditionally were a fuzzy mix of knowledge transfer (the lecturing) and discussion (triggered by brave students asking a question in a densely populated lecture room), Covid-19 necessitated to distinguish more clearly between different dimensions of teaching. The pure knowledge transfer is now packaged in knowledge clips. Students

can watch the knowledge clips at a time of their choosing. A part of a clip that a student finds more difficult to comprehend can be watched anew. Students tend to appreciate this. Probably, this is the formalization of a practice that long existed in the shadows. Pre-Covid students tended to make 'bootlegs' of lectures and there was a vivid market in elaborated transcripts of lectures. For the teacher, the knowledge clips may give rise to a time saving. If the law does not change too much from year to year, knowledge clips can be reused. The most profound improvement is that the time freed up can be used for discussion with and training of students through dialogue in Zoom workshops or tutorials. Students and teacher have much more opportunity to interact with each other. As a teacher, I have the impression that I know my students better than in a traditional lecture. In a traditional lecture hall, you know the faces of some students, but you know no names. On Zoom, you know who is talking to you (the name is indicated). The greater intensity of contact with students allows you to get a picture of individual students, their personality, who is bright, who is hard-working, who is interested, and so on. All in all, I think education has improved. However, we are not in an optimal state yet. Still there are many students who listen in and do not actively participate in workshops. So there is scope for improvement, but the shake-up that Covid caused likely continues to have an impact when the disease is long since forgotten.

APPENDICES

Main content

- Appendix 1 –
Facts & Figures
- Appendix 2 – Output
- Appendix 3 – Events

Appendix 1

Members

Members per 31 December 2020

Abbreviations

RGT:	Regulation and Governance of Technologies
II:	Institutions
CP & IN & IP:	Competition, Innovation and Intellectual Property
AI & R:	Artificial Intelligence and Robotics
P & DP & DS:	Privacy, Data Protection and Data Science
CS:	Cybercrime, Surveillance, and Cybersecurity

Seniors

	RGT	II	CP & IN & IP	AI & R	P & DP & DS	CS	FTE
Anna Berti Suman PhD Researcher	◆	◇	◇	◇	◆	◇	1.0
Floris Bex Full Professor	◇	◇	◇	◆	◆	◇	0.2
Stephanie Bijlmaekers Assistant Professor	◇	◆	◇	◇	◇	◇	1.0
Konrad Maciej Borowicz Assistant Professor	◇	◆	◇	◇	◇	◇	1.0
Tineke Broer Assistant Professor	◆	◇	◇	◇	◇	◇	1.0
Colette Cuijpers Assistant Professor	◆	◇	◇	◇	◆	◇	0.4
Panos Delimatsis Full Professor	◇	◆	◆	◇	◇	◇	1.0
Damien Geradin Full Professor	◇	◇	◆	◇	◇	◇	0.2
Inge Graef Associate Professor	◇	◇	◆	◇	◆	◇	1.0
Leigh Hancher Full Professor	◇	◇	◆	◇	◇	◇	0.2
Paul de Hert Associate Professor	◇	◇	◇	◇	◆	◇	0.2

Seniors	RGT	II	CP & IN & IP	AI & R	P & DP & DS	CS	FTE
Esther Keymolen Associate Professor	◆	◇	◇	◆	◇	◇	1.0
Bert-Jaap Koops Full Professor	◇	◇	◇	◇	◆	◆	1.0
Eleni Kosta Full Professor	◇	◇	◇	◇	◆	◇	1.0
Tetyana Krupiy Researcher	◇	◇	◇	◆	◇	◇	1.0
Saskia Lavrijssen Full Professor	◆	◆	◇	◇	◇	◇	0.6
Ronald Leenes Full Professor, Director LTMS	◆	◇	◇	◆	◇	◇	1.0
Aaron Martin Researcher	◇	◇	◇	◇	◆	◆	1.0
Sunimal Mendis Assistant Professor	◇	◇	◆	◇	◇	◇	1.0
Gert Meyers Researcher	◆	◇	◇	◇	◇	◇	1.0
Lokke Moerel Full Professor	◇	◇	◇	◆	◆	◇	0.2
Giorgio Monti Full Professor	◇	◇	◆	◇	◇	◇	1.0

Seniors	RGT	II	CP & IN & IP	AI & R	P & DP & DS	CS	FTE
Merel Noorman Assistant Professor	◇	◇	◇	◆	◇	◇	0.8
Enrico Partiti Assistant Professor	◇	◆	◇	◇	◇	◇	0.9
Emmanuel Pernot-Leplay Researcher	◇	◇	◇	◇	◆	◇	1.0
Robin Pierce Associate Professor	◆	◇	◇	◇	◇	◇	1.0
Corien Prins Full Professor	◇	◇	◇	◇	◆	◇	0.2
Nadezhda Purtova Associate Professor	◇	◇	◇	◇	◆	◇	1.0
Leonie Reins Assistant Professor	◆	◆	◇	◇	◇	◇	1.0
Marijke Roosen Researcher	◇	◇	◇	◆	◇	◇	1.0
Alex Ruiz-Feases Researcher	◇	◇	◆	◇	◇	◇	1.0
Maurice Schellekens Assistant Professor	◇	◇	◇	◆	◆	◇	1.0
Bart van der Sloot Associate Professor	◇	◇	◇	◇	◆	◇	1.0

Seniors	RGT	II	CP & IN & IP	AI & R	P & DP & DS	CS	FTE
Siddharth de Souza Researcher	◆	◇	◇	◇	◇	◇	1.0
Kees Stuurman Full Professor	◇	◇	◇	◇	◆	◇	1.0
Linnet Taylor Associate Professor	◆	◇	◇	◇	◆	◇	0.8
Christina Winters Researcher	◆	◇	◇	◇	◇	◇	1.0
Bo Zhao Researcher	◇	◇	◇	◇	◆	◆	1.0

Abbreviations	
RGT:	Regulation and Governance of Technologies
II:	Institutions
CP & IN & IP:	Competition, Innovation and Intellectual Property
AI & R:	Artificial Intelligence and Robotics
P & DP & DS:	Privacy, Data Protection and Data Science
CS:	Cybercrime, Surveillance, and Cybersecurity

Juniors	RGT	II	CP & IN & IP	AI & R	P & DP & DS	CS	FTE
Can Atik PhD Researcher Promotor: Giorgio Monti	◇	◇	◆	◇	◇	◇	1.0
Jasper van den Boom PhD Researcher Promotor: Giorgio Monti	◇	◇	◆	◇	◇	◇	1.0
Magda Brewczynska PhD Researcher Promotor: Eleni Kosta	◇	◇	◇	◇	◆	◇	1.0
Lisa van Dongen PhD Researcher Promotor: Giorgio Monti	◇	◇	◆	◇	◇	◇	1.0
Brenda Espinosa Apráez PhD Researcher Promotor: Saskia Lavrijssen	◆	◆	◇	◇	◇	◇	1.0
Léo Gargne PhD Researcher Promotor: Panos Delimatsis	◇	◆	◆	◇	◇	◇	1.0
Aviva de Groot PhD Researcher Promotor: Nadya Purtova	◇	◇	◇	◆	◆	◇	1.0

Juniors	RGT	II	CP & IN & IP	AI & R	P & DP & DS	CS	FTE
Paul Halliday Lecturer	◇	◇	◆	◇	◇	◇	1.0
Olga Hryniv PhD Researcher Promotor: Panos Delimatsis	◇	◆	◇	◇	◇	◇	1.0
Shazade Jameson PhD Researcher Promotor: Linnet Taylor	◇	◇	◇	◇	◆	◇	1.0
Lucas Jones Lecturer	◆	◇	◇	◇	◇	◇	1.0
Irene Kamara PhD Researcher Promotor: Eleni Kosta	◇	◇	◇	◇	◆	◇	1.0
Laura Kaschny PhD Researcher Promotor: Saskia Lavrijssen	◆	◇	◇	◇	◇	◇	1.0
Charmian Lim PhD Researcher Promotor: Floris Bex	◇	◇	◇	◇	◆	◇	1.0
Hellen Mukiri-Smith PhD Researcher Promotor: Linnet Taylor	◇	◇	◇	◇	◆	◇	1.0

Juniors	RGT	II	CP & IN & IP	AI & R	P & DP & DS	CS	FTE
Mara Paun PhD Researcher Promotor: Corien Prins	◇	◇	◇	◇	◆	◇	1.0
Tjaša Petročnik PhD Researcher Promotor: Giorgio Monti	◆	◇	◆	◇	◇	◇	1.0
Costin Pușcașu PhD Researcher Promotor: Robin Pierce	◆	◇	◇	◇	◆	◇	1.0
Shanya Ruhela PhD Researcher Promotor: Panos Delimatsis	◇	◆	◇	◇	◇	◇	1.0
Sascha van Schendel PhD Researcher Promotor: Eleni Kosta	◇	◇	◇	◇	◆	◆	1.0
Gargi Sharma Researcher	◇	◇	◇	◇	◆	◇	0.4
Zuno Verghese PhD Researcher Promotor: Panos Delimatsis	◇	◆	◇	◇	◇	◇	0.8
Shakya Wickramanayake Lecturer	◆	◇	◇	◇	◇	◇	1.0

Staff facts & figures



Number of staff members



61 academic staff(+ 6 support staff members)

All dates below based on 61 staff

Gender



36 female (59%)

25 male (41%)

Temporary/ tenured



17 tenured (27,5%)

44 temporary contracts (72,1%)

Age distribution

average age: 38,6

age	20-30	30-40	40-50	50-60	60-70
staff	12	27	11	8	3

Rank

Doctored

Lecturer

3

Researcher

10

PhD students

20

Assistant professor

8

Associate professor

8

Full professor

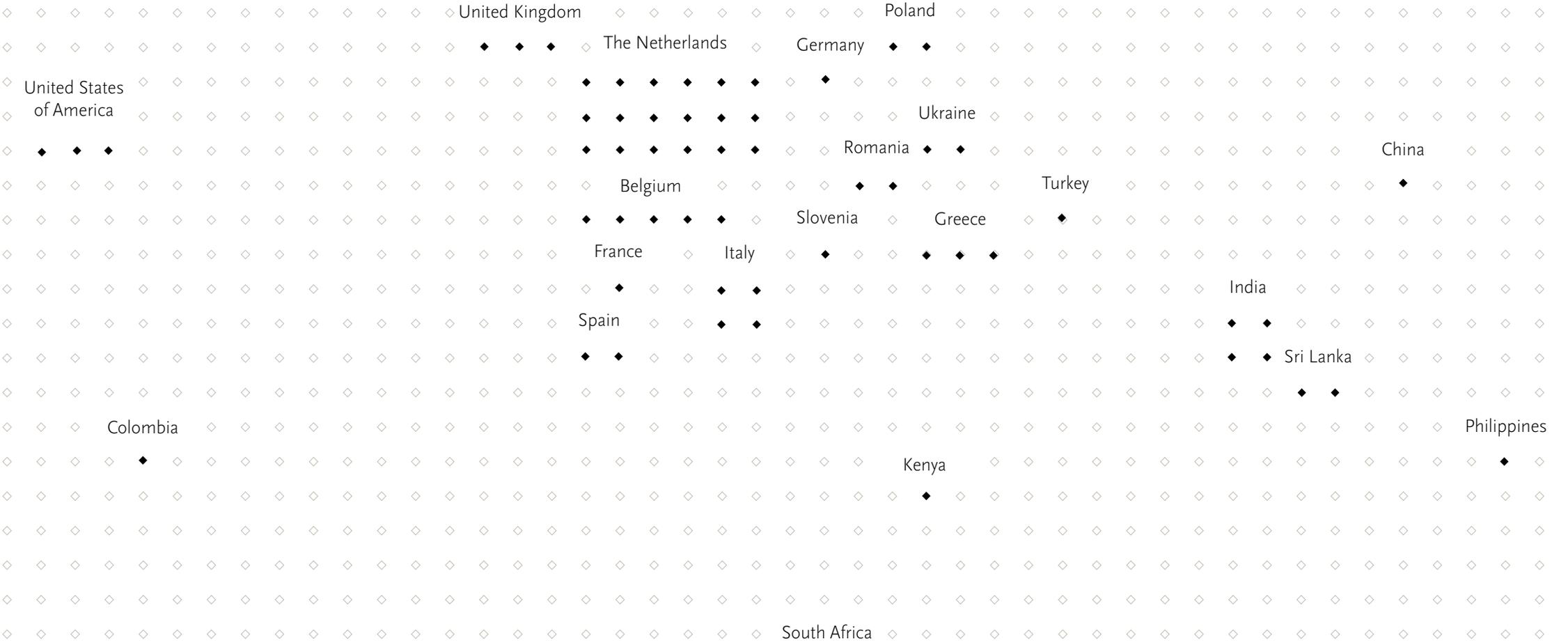
12

34 doctorates (57,7%)

27 non-doctorates (44,3%)

Where we come from

Approximate visualisation



CO2 Footprint

This is the first LTMS annual report that takes into account our carbon footprint. Unfortunately, it is difficult to produce an accurate account in hindsight.

The tables below provide an estimate of distance travelled and the corresponding CO2 emission that comes with it.

The tables below are estimated on the basis of data provided by 47 LTMS members.

Table work commute

Modality	km.	CO2 emission*
Train	226.788 km	0 (6803,6 kg)
Car	211.040 km	22581,3 kg
Bike	26.271 km	420,3 kg
Walking	924 km	8,3 kg

* The estimates are based on an average of 4 working days in Tilburg over 40 weeks of working time in a year. According to the NS, trains run fully on renewable energy and hence should not produce any CO2. In 2012, trains produced 30 gr/kg CO2, which means that LTMS train travel would amount to something like 6803 kg CO2. The average CO2 of cars in the Netherlands bought after 2014 is 107 grams per kilometer (for petrol cars) for small cars. In 2012 this was 109, 133, 169 respectively for small, medium and large cars. In comparison to cars (and trains), cyclists and walkers hardly produce any CO2. A human produces on average 900g CO2 per day. A cyclist produces 16 gr/km CO2. Let's assume a pedestrian produces 9 gr/km.

1 <https://9292.nl/co2-informatie>

2 <https://www.clo.nl/indicatoren/nlo13412-koolstofdioxide-emissie-per-voertuigkilometer-voor-nieuwe-personenautos>

3 <https://9292.nl/co2-informatie>.

4 <https://www.ikhebeenvraag.be/vraag/2908/Hoeveel-CO-sub-2-sub-produceer-ik-gemiddeld-als-fietser-per-kilometer>.

5 <https://www.fietsberaad.nl/Kennisbank/CO2-doelstelling-alleen-haalbaar-met-de-fiets>
"Volgens berekeningen van TNO verbruikt een fiets(er) 21 gram CO2 per kilometer.

Daarvan is 5 gram terug te voeren tot de productie en het onderhoud van de fiets, 16 gram komt voort uit het feit dat een fietser extra voedsel verbrandt. Bij de elektrische fiets komt 17 gram CO2 per kilometer voor rekening van de fiets (7 gram voor de productie en 10 gram voor de stroom). Daar komt nog ongeveer 5 gram bij de voor de fietser zelf."

Business travel

Academics travel a lot. Be it for conference visits, (guest) lectures, project meetings, assessment procedures, field work and more. Some of the destinations visited by LTMS staff in 2019 were: Ispra, Florence, Japan, Washington DC, Moscow, Tel Aviv, Hong Kong, Berlin, Brussels, Leuven, Dubai, Singapore, Warsaw, Nairobi, Ottawa, Lyon, Istanbul, London, Australia, Freiburg, Graz, Beijing, Bilbao, Boston, Seville, and many more.

From the destinations you can gather that the majority was visited by plane. Closer by European destinations were generally visited by train (e.g., Brussels, Paris, London, Lyon).

On the basis of the reported trips, a reasonable estimate of the total distance travelled by air and train within Europe in 2019 is 118.786km, or 23757 Kg CO₂. Long distance flights amounted to 369514 km, or 54318 Kg CO₂.

This brings us to an estimated minimum emission of
Taking into account missing data, the total CO₂ footprint of the department in 2019 could have been in the bandwidth of $0 + 22581 + 420 + 8 + 23757 + 54318 = 101.084$ kg CO₂

How did we do in 2020? We haven't calculated that in the amount of detail we did for 2019, but we can take budget and spending as a proxy. Of our 2019 travel budget we actually spent 59%, in 2020 that was 27%. That is a

50% reduction. One should take into account that we were running 'normally' for the first 2 months in 2020. If we take this into account and assume more or less linear spending of the budget over the year to simplify, then we can conclude that total cost spent on travel for the remainder of 2020 was less than 20k€.

A rough estimate of our CO₂ footprint based on travel expenditure and the 2019 data amounts to 36100 kg CO₂.

- 6 On the basis of calculations with <https://www.klimaatplein.com/gratis-co2-calculator/>
- 7 On the basis of calculations with <https://www.klimaatplein.com/gratis-co2-calculator/>

Irene Kamara

**Finalising a PhD dissertation during Covid,
in lockdown, with a toddler.**

2020 has certainly been a challenging year for all of us, and I was no exception. A year of human loss, the anxiety of a global pandemic, uncertainty, lockdowns and constraints for personal freedoms and daily routines.

For me, it was also the year I finalized my PhD dissertation. The goal in the path of every PhD researcher; a journey with ups and downs, moments of pride and self-confidence, but certainly also moments of doubt. If one adds to the mix a pandemic and tending to the needs of a toddler, that's a recipe for despair. Or maybe not?

Yes and no. What seemed an impossible task, I can now say in retrospect, worked. Working passionately towards a goal also keeps one's

mind focused, and distracted (as much possible) from the daunting reality of Covid. The tender love of a toddler helps realize the importance of living in the moment and offers the best hope for tomorrow.

There were undoubtedly also moments of despair. But here is where seeking support was important. My partner, and by phone my family and friends and PhD friends, helped. Having understanding supervisors was also important. Especially prof. Kosta, whom I wholeheartedly thank for always being there for me as a colleague and a person. Working in an environment like LTMS, which during these difficult times focused on our well-being more than anything else, has been more than what I could wish for.

In sum, on top of its horrors, 2020 was a year for self-learning, reflection, testing one's own limits, and strengthening human relations, even from a safe distance. This is what I will keep as a lesson for the future.

Tanya Krupiy

My research project examines how equality and human diversity may be protected in the context of the delegation of the decision-making task to an artificial intelligence system. I have been asked to comment on how the Covid-19 pandemic influenced my work. To be frank with you, I was raised not to talk about the difficulties which I may be going through in the public domain. I usually have these conversations with family and close friends. I can say that the pandemic created psychological and physical pressures on me. What I can say is that doing yoga and outdoor sports on a regular basis helped me to stay resilient. I had to rethink how I organize my working space. I am grateful to LTMS for assisting me to create a more ergonomic workspace at home. Our thoughts matter. I have been putting in effort to be deliberate about what thoughts to cultivate. I am very grateful to Paul de Hert for acting as my mentor during this difficult year. He has the ability to tell it like it is while being constructive, supportive and inspiring. A big thank you to Paul! Additionally, I am grateful to LTMS for allowing

me to use my unused travel funding for the year 2020 for training and professional development. As for the difficult parts, I leave this information for my family. As Dr Seuss pointed out, the more one tries to escape difficulties the faster they find one. I keep on doing and learning and hoping. I wish everyone good health.

Appendix 2

Publications

Academic publications - Journal articles

Berti Suman, A.

- ♦ ♦ ♦ Berti Suman A., Micheli, M., Ponti, M., & Craglia, M., Emerging models of data governance in the age of datafication, *Big Data & Society*, 7, 2, 1-15, (15 p.)

Bex, F.

- ♦ ♦ ♦ Atkinson, K., Bench-Capon, T. J. M., Bex, F., Gordon, T., Prakken, H., Sartor, G., & Verheij, B., In memoriam Douglas N. Walton: The influence of Doug Walton on AI and law, *Artificial Intelligence and Law: An International Journal*, 28, 281-326, (46 p.)

Brewczyńska, M.

- ♦ ♦ Brewczyńska, M., Poland. The Polish government's actions to fight Covid-19: A critical look at the 'selfie app' and direct access to location data, *European Data Protection Law Review*, 6, 2, 301-307, (7 p.)

Broer, T.

- ♦ ♦ Broer, T., Technology for our future? Exploring the duty to report and processes of subjectification relating to digitalized suicide prevention, *Information*, 11, 3, 170

Graef, I.

- ♦ ♦ Graef, I., Hybrid differentiation and competition beyond markets, *Competition Policy International - Antitrust Chronicle*, June 2020, 11, 1-8, (8 p.)
- ♦ ♦ Graef, I., The opportunities and limits of data portability for stimulating competition and innovation, *Competition Policy International, Antitrust Chronicle*, 2, 2, 1-8, (8 p.)

Graef, I., & Costa-Cabral, F.

- ♦ ♦ Graef, I., & Costa-Cabral, F. (2020). To regulate or not to regulate Big Tech, *Concurrences*, 2020, 1, 24-29, (6 p.)

Graef, I., Husovec, M., & van den Boom, J.

Graef, I., Husovec, M., & van den Boom, J., Spill-overs in data governance: Uncovering the uneasy relationship between the GDPR's right to data portability and EU sector-specific data access regimes, *Journal of European Consumer and Market Law = EuCML*, 9, 1, 3-16, (14 p.)

Koops, B-J.

Hoepman, J-H., & Koops, B-J., Offering 'home' protection to private digital storage spaces, *SCRIPTed*, 1, 2, 359-388, (17 p.)

Krupiy, T.

Krupiy, T., A vulnerability analysis: Theorising the impact of artificial intelligence decision-making processes on individuals, society and human diversity from a social justice perspective, *Computer Law and Security Review*, 38, 105429, 1-25, (25 p.)

Lavrijssen, S., & Vitez, B.

Lavrijssen, S., & Vitez, B., The energy transition: Democracy, justice and good regulation of the heat market, *Energies*, 13, 5, 1088, 1-24, (24 p.)

Leenes, R.

Jaatun, M., Pearson, S., Gittler, F., Leenes, R., & van der Zwet, M, Enhancing accountability in the cloud, *International Journal of Information Management*, 53, August 2020, 101498

Kuss, P., & Leenes, R., The ghost in the machine: Emotionally intelligent conversational agents and the failure to regulate 'deception by design', *SCRIPTed*, 17, 2, 320-358, (39 p.)

Monti, G.

Monti, G., Four options for a greener competition law, *Journal of European Competition Law & Practice*, 11, 3-4, 124-132, (9 p.)

Monti, G., EU merger control after CK Telecoms UK investments v. commission. *World Competition : Law and Economics Review*, 43, 4, 447-471, (25 p.)

Partiti, E.

Partiti, E., Trust in global governance: Ensuring trustworthiness of transnational private regulators, N.Y.U. *Journal of International Law and Politics*, 52, 2, 415-484, (70 p.)

Partiti, E., Regulating trade in forest-risk commodities. *Journal of World Trade*, 54, 1, 31–58., (28 p.)

Pierce, R

Fosch Villaronga, E., Čartolovni, A., & Pierce, R., Promoting inclusiveness in exoskeleton robotics: Addressing challenges for pediatric access, *Journal of Behavioral Robotics*, 11,1, 327-339, (13 p.)

Pusceddu, P.

Pusceddu, P., Hic sunt dracones? Mapping the legal framework of China's innovation policy: Standardization and IPRs, *International Review of Intellectual Property and Competition Law*, 51, 5, 559-593, (35 p.)

Pusceddu, P. , Special economic zones, legal innovation, technology, and IP disputes: Quo vadis China? *Transnational Dispute Management*, 2020, 5, 1-34, (34 p.)

Reins, L.

Fischer, C., Reins, L., Burtraw, D., Langlet, D., Löfgren, A., Mehling, M., Weishaar, S., Zetterberg, L., van Asselt, H., & Kulovesi, K., The legal an economic case for an auction reserve price in the EU emissions trading system, *Columbia Journal of European Law*, 26, 2, 1-35 (35 p.)

Mete, G., & Reins, L., Governing new technologies in the energy transition: The hydrogen strategy to the rescue?, *Carbon and Climate Law Review*, 14, 3, 210-231, (22 p.)

Ruiz Feases, A.

Ruiz Feases, A., Sharpening the European Commission's tools: Interim measures. *European Competition Journal*, 16, 2-3, 404-430, (27 p.)

Schellekens, M.

Schellekens, M., Conceptualizations of the controller in permissionless blockchains, *JIPITEC: Journal of Intellectual Property, Information Technology and E-Commerce Law*, 11, 2, 215-227, (13 p.)

Sloot, B. van der

Sloot, B. van der, The quality of law: How the European Court of Human Rights gradually became a European Constitutional Court for privacy cases. *Journal of Intellectual Property, Information Technology and E-Commerce Law: JIPITEC*, 11, 2, 160-185, (26 p.)

Taylor, L.

Taylor, L., The price of certainty: How the politics of pandemic data demand an ethics of care, *Big Data & Society*, 7, 2, 1-7, (7 p.)

Taylor, L., & Dencik, L., Constructing commercial data ethics, *Technology and Regulation*, 2020, 1-10, (10 p.)

Taylor, L., & Meissner, F., A crisis of opportunity: Market-making, big data, and the consolidation of migration as risk, *Antipode*, 52, 1, 270-290, (21 p.)

Zhao, B.

Zhao, B., Unraveling home protection in the IoT age: Smart living, mixed reality, and home 2.0, *The Columbia Science and Technology Law Review*, 21,1, 1-38. (38 p.)

Academic publications – Books and edited volumes

Berti Suman, A.

Berti Suman, A., *Sensing the risk: A case for integrating citizen sensing into risk governance*, Open Press TiU, (210 p.)

Berti Suman, A. & Fathisalout Bollon, M. (eds.), *Legal, social and ethical perspectives on health & technology*, Presses Universitaires, Université Savoie Mont Blanc

De Souza, S.

de Souza, S. P., Rehman, N., & Sharma, S. (Eds.), *Crowdsourcing, constructing and collaborating: Methods and social impact of mapping the world today*, Bloomsbury India, (202 p.)

Geradin, D.

Argenton, C., Geradin, D., & Stephan, A., EU Cartel *Law and Economics*. Oxford University Press, (336 p.)

Leenes, R. & Hert, P. de

Hallinan, D., Leenes, R., Gutwirth, S., & de Hert, P. (eds.), *Data protection and privacy: Data protection and democracy*, Computers, Privacy and Data Protection, 12, Hart Publishers, (336 p.)

Monti, G.

Monti, G., Botta, M., & Parcu, P. L. (eds.), EU state aid law: *Emerging trends at the national and EU level*, Edwar Elgar Publishing Ltd., (264 p.)

Slot, B. van der, Paun, M., & Leenes, R.

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Enrico Partiti

It is quite telling of the amount of time I used to spend on trains that I learned about the Brabant lockdown while checking my emails at Amsterdam Amstel train station, all groggy and ready to drag myself on the usual 7:43 train to Tilburg. Mostly because of the extremely tight two-minute connection in Den Bosch, and NS' general suckiness, my work commute has been characterized by unhealthy stress, heavy sweating, occasional loud cursing, and one train crash. For someone traditionally unproductive at the office and who wrote probably three quarters of his PhD in various cafes and bars, the possibility to work from home free from an early morning rise, a stressful trip and ever-uncertain arrival times had an immediate feel of relief.

Granted, the first weeks of lockdown and working from home were as stressful and scary as a ride on the 17:27 sprinter from Tilburg University station under a heavy snowstorm. But after having sorted out essential matters with my partner, such as who gets to use the bedroom iMac and when, a sense of normalcy quickly set in. The days were boring but surprisingly

productive. I even started working on chronically postponed projects such as the revisions of my dissertation and a few old articles. As we got settled, new unexpected questions arose. By mid-March, we ran out of ideas of what to cook for lunch. By April, our living conditions could be defined as somewhat feral. By May, I ran out of sweatpants and finished Netflix. And so on.

The lockdown also let me pick up new hobbies and rekindle old ones. My mid-morning cappuccino allowed me to hone every day my long-forgotten skills as a barista (my student job back in Italy). By the beginning of the summer, I finally managed to pour some decent latte art—an achievement that I celebrated as a World Cup victory. With my life goals being achieved, I had to find something else to do. I have always been an avid reader, but in recent times I had lost my focus a bit. Free from any other distractions, in the past year I devoured some 40 books. I fell in love with the Latin American writers and I since then replaced Roberto Baggio's poster in my bedroom with that of Roberto Bolaño.

Old passions and a slower pace definitely helped me in finding resilience and solace in spite of adversity, and an unexpected productivity. But I would like to see my colleagues one day soon.

I don't care if I have to take the train.

Margot Luyckx

Student

My experience as a student used to be formed by classrooms, libraries, cafeterias, meeting friends for study sessions and coffee breaks, and discussing paper topics with professors after class. It is weird to realize that all of that is now somehow embodied by my laptop. My entire academic life takes place on my computer screen. It has certainly been a challenge to shape education when all these aspects suddenly become unavailable and even unsafe. This points out the huge privilege I enjoyed all these years in being able to study and learn without having to worry about my safety or health.

It is nice to see that both students and professors have found a way to adapt to these circumstances through a lot of trial and error. Although, there is still much room left to grow in developing online education, I believe that through open, honest and respectful communication students and professors will manage online education in a way that meets everyone's expectations.



Appendix 3

Activities

Events LTMS 2020

LTMS PhD Defenses

8 May 2020

- ◆ ◆ **Anna Berti Suman**, *Sensing the Risk. In search of the factors influencing the policy uptake of citizen sensing* (Online event)

18 May 2020

- ◆ ◆ **Lorenzo Dalla Corte**, *Safeguarding data protection in an open data world: On the idea of balancing open data and data protection in the development of the smart environment* (Online event)

16 June 2020

- ◆ ◆ **George Comenus**, *Protectionism in the Era of Globalisation: the misuse of anti-dumping instruments from an EU perspective* (Online event)

22 June 2020

- ◆ ◆ **Olia Kanevskaia**, *The Law and Practice of Global ICT Standardization* (Online event)

6 October 2020

- ◆ ◆ **Paulan Korenhof**, *Let's forget about it. The web of problems for the right to be forgotten* (Online event)

LTMS WIP Meetings

WIP Meetings are internal events where LTMS members present their own work at an early stage, for comments and discussion.

28 January 2020

- ◆ ◆ **Nadya Purtova and Ronal Leenes**
Code as personal data

29 September 2020

- ◆ ◆ **Maurice Schellekens**
System risk in self-driving-vehicles

10 November 2020

Bo Zhao

The China's rising data power and the impact

TILT Seminars

TILT invites people working in the domain of law, technology, and society to give guest seminars on a regular basis.

9 January 2020

Heike Felzmann, (National University of Ireland)

Robots in the Web of Care

11 February 2020

Teresa Quintel (University of Luxembourg)

Applicability of the Law Enforcement Directive – Grey Zones:
Interoperability and Financial Intelligence Units

3 March 2020

Kaisa Huhta (UEF Law School)

The roles of the State and the markets in EU energy law:
A focus on security of supply

26 May 2020

Leslie Francis (The University of Utah)

The Perils of De-identified Data: It's data use, not de-identification,
that matters

30 June 2020

Antoinette Rouvroy (University of Namur)

Algorithmic Governmentality: "Law in the blindspot of computation"
(Cancelled event)

8 October 2020

Bert Jaap Koops (Tilburg University)

The Concept of Function Creep

24 November 2020

Gijs van Maanen, (Tilburg University)

Open ground water data in Brabant: a philosophical ethnography

15 December 2020

Sandra Wachter, (University of Oxford)

Towards fair, transparent and accountable Ai in Europe

Workshops and conferences – TILT

LTMS organizes larger conferences and workshops, devoted to specific topics open to everyone interested in our research themes and activities. More often than not, those larger events are used to bring together researchers, practitioners, policy makers, and civil society at the intersection of law and regulation, technology, and society to share insights, exchange ideas and formulate, discuss and suggest answers to contemporary challenges related to technological innovation.

6 March 2020

Tilburg University: Social event / Sectorplan

7 – 8 April 2020

Tilburg University: BILETA 2020

Regulating Transitions in Technology and Law

(Cancelled event due to Covid-19)

9 April 2020

PLSC-Europe 2020 (Cancelled event due to Covid-19)

14 May 2020

Tilburg University: Kick-off event / Sectorplan

(Cancelled event due to Covid-19)

11 June 2020

Tilburg University: LTMS PhD Colloquium

(Cancelled event due to Covid-19)

2 December 2020

Digital Legal Talks

Speakers:

Ronald Leenes, Tilburg University

Ronan Fahy, University of Amsterdam

Inge Graef, Tilburg University

Pieter Wolters, Radboud University Nijmegen

Matthias van der Haegen, Maastricht University

Julie Cohen, Georgetown Law School

Frank Pasquale, Brooklyn Law School

Pietro Ortolani, Radboud University Nijmegen

Catalina Goanta, Maastricht University

Mireille van Eechoud, University of Amsterdam

Bart van der Sloot, Tilburg University

Joris van Hoboken, University of Amsterdam

Joaquín Santuber, Hasso-Plattner-Institut

Christian Dremel, Norwegian University of Science and Technology (NTNU)

María José Hermosilla, The Adolfo Ibáñez University

Geoff Gordon, TMC Asser Instituut

Primavera de Filippi, National Center of Scientific Research (CNRS)

Nadya Purtova, Tilburg University

Cristiana Santos, University of Utrecht

Nataliia Bielova, INRIA Sophia Antipolis

Bo Zhao, Tilburg University

Sunimal Mendis, Tilburg University

Gert Meyers, Tilburg University

Giovanni De Gregorio, Bocconi University

Aurelia Tamo-Larrieux, University of St. Gallen

Simon Mayer, Erasmus University Rotterdam

Zaira Zihlmann, University of Lucerne

Ron Yu, University of Kansas School of Medicine

Paddy Leerssen, University of Amsterdam

Oles Andriychuk, University of Strathclyde

Tom Julius Vennmanns, Radboud University Nijmegen

Floris Bex, Tilburg University

Federica Giovanella, University of Udine

Minke Reijneveld, Radboud University Nijmegen

Raphaël Gellert, Radboud University Nijmegen

TILEC Seminars

A Seminar is devoted to a specific topic within the TILEC research program. It is organized for the benefit of faculty members and other researchers at Tilburg University.

15 January 2020

- ◆ ◆ **Marco Pagnozzi**, University Naples Federico II
Vertical Contracting with Endogenous Market Structure

12 February 2020

- ◆ ◆ **Joost Poort**, UvA
The Decline of Online Piracy: How Markets – Not Enforcement – Drive Down Copyright Infringement

11 March 2020 (Cancelled event due to Covid-19)

- ◆ ◆ **Natalia Fabra**, University Carlos III Madrid
Price Exposure and Market Power: Learning from Changes in Renewables Regulation

29 April 2020 (Cancelled event due to Covid-19)

- ◆ ◆ **Jean Christophe Graz**, (University of Lausanne)
The power of standards

6 May 2020 (Cancelled event due to Covid-19)

◆ ◆ ◆ **Gani Aldashev**, Université Libre de Bruxelles

17 June 2020 (*Online event)

◆ ◆ ◆ **Horst Eidenmueller**, Oxford University

What is an Arbitration? Artificial Intelligence and the Vanishing Human Arbitrator

28 October 2020 (*Online event)

◆ ◆ ◆ **Stefan Bechtold**, ETH Zurich

European Privacy Law and Global Markets for Data

18 November 2020 (*Online event)

◆ ◆ ◆ **Natalia Fabra**, University Carlos III Madrid

Technology-Neutral vs Technology-Specific Procurement

9 December 2020 (*Online event)

◆ ◆ ◆ **Jean Christophe Graz**, (University of Lausanne)

The Power of Standards: Hybrid Authority and the Globalisation of Services

Workshops and conferences - TILEC

TILEC organizes larger conferences and workshops, devoted to specific topics open to everyone interested in our research themes and activities. More often than not, those larger events are used to bring together academics, policy-makers and representatives from the business world.

25 March 2020 (Cancelled event due to Covid-19)

◆ ◆ ◆ **Conference on Competition law enforcement in the 21st century: Are the rules and institutions fit for purpose?**

Organised by TILEC, with the support of Geradin Partners

Speakers:

Damien Geradin, TILEC, Tilburg University/ Geradin Partners

Jorge Padilla (Compass Lexecon Europe, Compass Lexecon)

Pierre Régibeau, DG Competition, European Commission

Cristina Caffarra, European Competition Practice, CRA

Martin d'Halluin, Associate General Counsel, News Corp

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Vanessa Turner, Competition, BEUC

Andrea Gomes da Silva, CMA

Ioannis Lianos, Hellenic Competition Authority

Konrad Ost, Bundeskartellamt

Jacques Steenbergen, Belgian Competition Authority

15 and 16 October 2020 (Online event)

TILEC – Hamad Bin Khalifa University and National and Kapodistrian University of Athens; Athens PIL co-organised an Online Webinar on:

The International Investment Law & State Capitalism Colloquium

Keynote:

Rob Howse, New York University

Speakers:

Photini Pazartzis, National and Kapodistrian University of Athens; Athens PIL

Susan Karamanian, Hamad Bin Khalifa University College of Law

Panos Delimatsis, LTMS, TILEC, Tilburg University

Georgios Dimitropoulos, Hamad Bin Khalifa University

Anastasios Gourgourinis, National and Kapodistrian University of Athens; Athens PIL

Leonardo Borlini, University Bocconi

Josef Ostransky, European University Institute

Lauge Poulsen, University College London

Jiangyu Wang, City University of Hong Kong

Michail Dekastros, Sidley Austin LLP

Qingxiu Bu, University of Sussex

Eirini Kikarea, University of Cambridge

Julien Chaisse, City University of Hong Kong

Eric De Brabandere, Leiden University

Roberto Echandi, World Bank

Catharine Titi, French National Centre for Scientific Research (CNRS)-CERSA, University Paris II Panthéon-Assas

Federico Ortino, King's College London

Sebastián Mantilla Blanco, University of Bonn

David Roney, Sidley Austin LLP

Alexandr Svetlicinii, University of Macau

Manu Misra, Fundação Getúlio Vargas School of Law

Konstantina Georgaki, European Commission (DG FISMA); University of Oxford

Theodore Fortsakis, National and Kapodistrian University of Athens

Ming Du, Durham University

Bianca Nalbandian, University of Luxembourg

Wei Yin, Southwest University of Political Science and Law

20 November 2020 (Online event)

An Online Workshop on:

Economic Governance: Law, Markets, and Organizations

Speakers:

Kathryn Spier, Harvard Law School

Jens Prüfer, Tilburg University, TILEC

Andy Newman, Boston University

Maitreesh Ghatak, London School of Economics

Gani Aldashev, Université libre de Bruxelles, ECARES

3 and 4 December 2020 (Online event)

An Online International Conference on:

The evolution of transnational private rule-makers: Understanding drivers and dynamics

Organized by the Tilburg Law and Economics Centre (TILEC) and supported by the European Research Council (ERC Consolidator Grant Agreement 725798 – REVEAL)

Keynote:

Fabrizio Cafaggi, Italian State Council

Emilios Avgouleas, University of Edinburgh

Speakers:

Panos Delimatsis, LTMS, TILEC, Tilburg University

Rosalba Belmonte, University of Perugia

Jan Wouters, University of Leuven

Eleni Tsingou, Copenhagen Business School

Konrad Borowicz, LTMS, TILEC, Tilburg University

Pierre Hugues Verdier, University of Virginia

Margarita Nieves Zárate, University of Groningen

Slobodan Tomic, University of York

Rebecca Schmidt, University of Oslo

Daniel Quiroga Villmarin, Graduate Institute

Juliane Reinecke, King's College

Alessandra Arcuri, Erasmus University Rotterdam

Enrico Partiti, LTMS, TILEC, Tilburg University

Tim Büthe, Technical University of Munich

Abdel Alshafan, Technical University of Munich

Tetty Havinga, Radboud University

Paul Verbruggen, Tilburg University

Stephanie Bijlmakers, LTMS, TILEC, Tilburg University

Olia Kanevskaia, University of Leuven

Justus Baron, Northwestern University

Matteo Ortino, University of Verona

10 December 2020 (Online event)

An Online TILEC Lecture on:

Legal Institutions and Economic Development

Speaker:

Gani Aldashev, Université Libre de Bruxelles and Ronald Coase Visiting Professor, Tilburg Law and Economics Center (TILEC), Tilburg University

Club Med / Club IO - TILEC

Club Med (for Club Mededingingsrecht – or competition law, in Dutch) meetings have long been a cornerstone of TILEC's weekly activities. In the Club Med, recent legal and policy developments are discussed, including Commission decisions, judgments of the European or US courts, legislative initiatives, and policy guidelines. In the Club IO, recent advances in the economic analysis of institutions, competition, or innovation are discussed. Sometimes they are linked to preceding Club Med presentations.

22 and 29 January 2020

Giorgio Monti, LTMS, TILEC, Tilburg University, **Enrico Partiti**, LTMS, TILEC, Tilburg University **Inge Graef**, LTMS, TILEC, Tilburg University and **Francisco Costa Cabral**, LTMS, TILEC, Tilburg University

Revision of Commission Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements

5 February 2020

Michiel Bijlsma, CPB, TILEC

Data and Competition

8 April 2020 (Online event)

Jens Prüfer, TILEC, Tilburg University

"Rulers, Religion, and Riches: Why the West Got Rich & the Middle East Did Not," by Jared Rubin

15 April 2020 (Online event)

Moritz Suppliet, TILEC, DG COMP

Vertical Mergers in the Media Industry: The European Commission's Economic Assessment in Telia/Bonnier Broadcasting

3 June 2020 (Online event)

◆ ◆ ◆ **Madina Kurmangaliyeva**, TILEC, Tilburg University
Algorithmic Risk Assessment in the Hands of Humans

25 November 2020 (Online event)

◆ ◆ ◆ **Inge Graef**, TILEC, Tilburg University and Alex Ruiz Feases, TILEC,
Tilburg University
FTC v Qualcomm Case

16 December 2020 (Online event)

◆ ◆ ◆ **Marie Le Mouel**, TILEC, Tilburg University
Killer acquisitions” by Cunningham, Ederer and Ma, forthcoming in
the Journal of Political Economy.

◆ ◆ ◆ **Work-in-progress (WIP) meetings - TILEC**

◆ ◆ ◆ WIP Meetings are internal events where TILEC members present their own
work at an early stage, for comments and discussion.

19 February 2020

◆ ◆ ◆ **Enrico Partiti**, LTMS, TILEC, Tilburg University
Zero Deforestation Regulation

26 February 2020

◆ ◆ ◆ **Konrad Borowicz**, TILEC, Tilburg University
Contracts as organizations: trade associations and the evolution of
financial boilerplate

4 March 2020

◆ ◆ ◆ **Peerawat Samranchit**, TILEC, Tilburg University
Price Competition under Search with Inaccurate Recommendations

22 April 2020 (Online event)

◆ ◆ ◆ **Liebrich Hiemstra**, TILEC
Energy Trading and its Multiplicity of Supervisors

13 May 2020 (Online event)

◆ ◆ ◆ **Gijsbert Zwart**, RUG and TILEC
Competition for single-homers

20 May 2020 (Online event)

◆ ◆ ◆ **Panos Delimatsis**, TILEC
Service directive / Airbnb case

27 May 2020 (Online event)

◆ ◆ ◆ **Stephanie Bijlmakers**, TILEC

'No iso-fix for human rights: a critical perspective on ISO26000'

10 June 2020 (Online event), (Cancelled event)

◆ ◆ ◆ **Phuc Phung**, TILEC

The proper Scope of Government in Hospitals

24 June 2020 (Online event),

◆ ◆ ◆ **Damien Geradin**, TILEC

The antitrust case against the Apple App Store

01 July 2020 (Online event),

◆ ◆ ◆ **Peerawat Samranchit**, TILEC

The dynamic of leveraging in digital ecosystem

02 September 2020 (Online event),

◆ ◆ ◆ **Tobias Klein**, TILEC

A Simple Test for Data-Drivenness of Markets

09 September 2020 (Online event),

◆ ◆ **Can Atik and Bertin Martens**, TILEC

Governing Agricultural Data and Competition in Data-driven Agricultural Services: Evaluating Voluntary Ag-Data Rules in the US and EU from Farmers' Perspective

16 September 2020 (Online event),

◆ ◆ **Ittai Shacham**, TILEC

Advertising Quantity Regulation and Content Quality Distortion

30 September 2020 (Online event),

◆ ◆ **Madina Kurmangaliyeva**, TILEC

Search Engines, User Information, and Quality

07 October 2020 (Online event),

◆ ◆ **Jens Prüfer and Inge Graef**, TILEC

Governance of Data Sharing: a Law & Economics Proposal

14 October 2020 (Online event),

◆ ◆ **Anna Butenko**, TILEC

Inevitable convergence between EU energy and ICT sector regulation: Security and reliability of electronic communications as an example.

21 October 2020 (Online event),

Eric van Damme and Giorgio Monti, TILEC

Guidelines Sustainability agreements Opportunities within competi-
tion law – the ACM's approach

04 November 2020 (Online event),

Michael Verba, TILEC

The Right Sort?: How Two-Tiered Patent Systems Induce Sorting

11 November 2020 (Online event),

Yueting Yu, TILEC

Pay-as-Bid Auctions in Electricity Markets

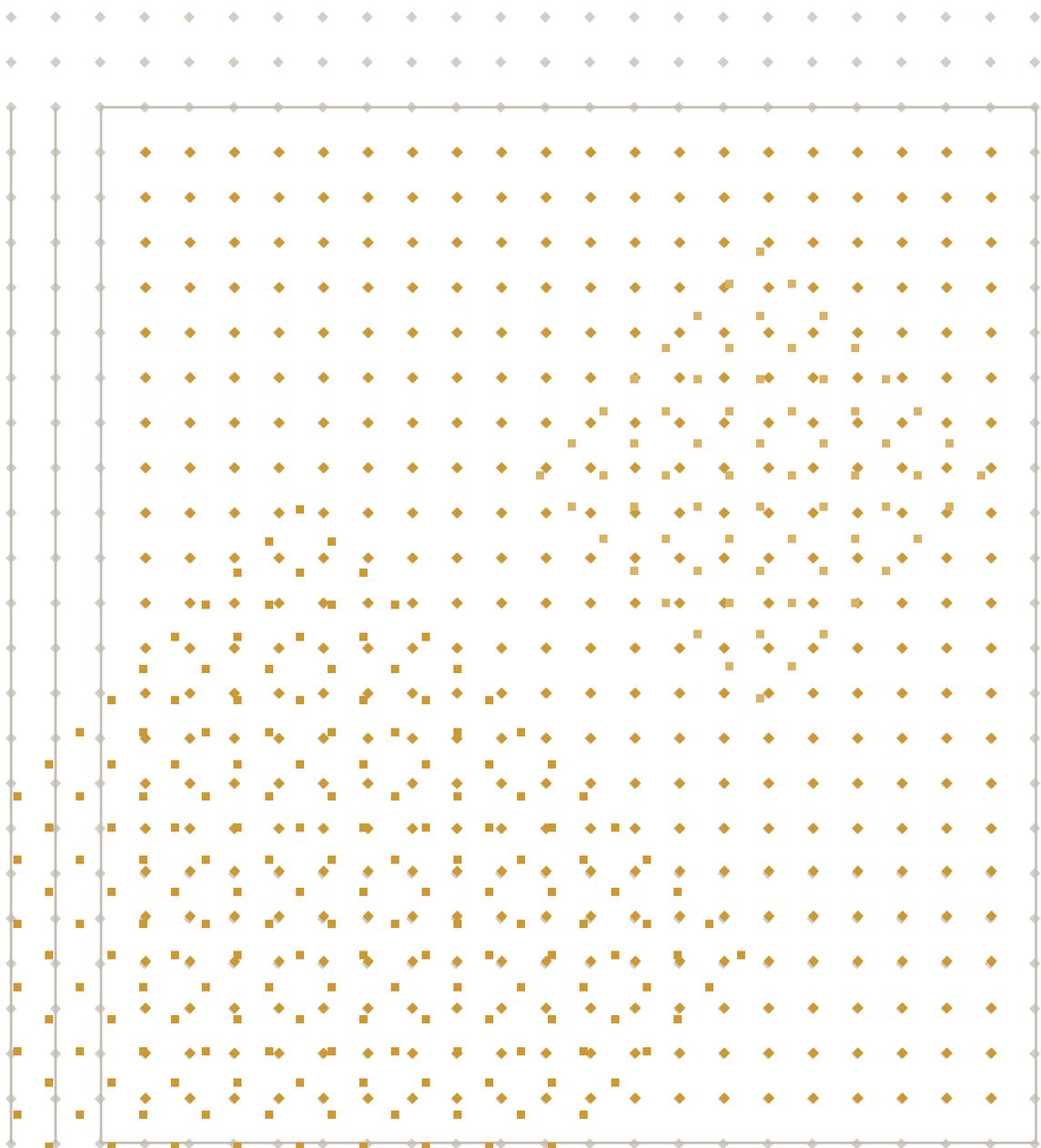
Other Internal Events - TILEC

21 January 2020

TILEC New Year get together
Tilburg University

25 September 2020

TILEC Annual Retreat
Online Meeting / faculty Club, Tilburg University



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