Regulation by technology

symposium
Friday 4 February 2011, Academie voor Wetgeving, Lange Voorhout 62, Den Haag

In 1999, Lawrence Lessig caused something of a stir with the publication of his book ‘Code and other laws of cyberspace’. The book addressed the regulation of cyberspace. More than any other social space, cyberspace would be controlled depending upon the architecture, or "code," of that space. This means that legislators as well as those seeking to protect cyberspace against regulation, need to focus on the work of computer scientist and designers rather than merely looking at written law.

Code, technology, or architecture do not only regulate behaviour in cyberspace. Architecture has long been used to regulate the behaviour of norm subjects, speed ramps and revolving doors being well known examples. Yet, it appears that the implications of regulation by technology is not fully appreciated by the legislature. Especially the shortcomings, for example the lack of transparency and its potential democratic deficit are not fully understood.

This symposium brings together 4 legal scholars to present and discuss the nature, issues and practical examples of techno regulation.

programme
14:00 - 14:45 dr. Ronald Leenes
Techno regulation, discipline by any other name?

14:45 - 15:30 dr. Mireille Hildebrandt
Challenges for a Vision of Ambient Law

15:30 - 15:45 tea break

15:45 - 16:30 dr. Andrew Murray
Regulating a Communications Society: Nodes and Control in a Virtual Space

16:30 - 17:00 Demetrius Klitou
Privacy-Invading Technologies & Privacy by Design: Safeguarding Privacy, Liberty and Security in the 21st Century

17:00 - 18:00 drinks
Ronald Leenes — Techno-regulation, discipline by any other name?
Architecture is politics. Artifacts are generally constructed on purpose and many have an effect on the behaviour of individuals. As such, architecture can be used in regulating society, as speed ramps convincingly show. But is this limiting (or facilitating) behaviour by means of technology, regulating society or is it merely disciplining society. Individuals can decide not to comply with legislation but are generally forced to obey the restrictions imposed upon them by techno-regulation, speed ramps barely leave room for negotiation. Many prominent examples of techno-regulation can be found in the context of ICT, for instance DRM, content filtering, Privacy enhancing technologies. Users in these context are typically bound by the norms embedded in the technology, without these norms being very transparent. Techno-regulation in the ICT context is most prominently driven by industry, not government.
The combination of the obscurity of the norms embedded in the technology, the strict enforcement of these norms and the process of their enactment raise many questions regarding their legitimacy and hence regarding their legal status. Building on earlier work, this paper will explore the different forms of techno-regulation instituted by both public and private regulators in more detail and try to answer the question under which circumstances techno-regulation goes beyond mere discipline. It addresses questions such as how should techno-regulation (by public and private regulators) legally be understood? What is the role of transparency, legitimacy, accountability in the domain of techno-regulation? What is the role of government in self-regulation by technology?

Mireille Hildebrandt — Challenges for a Vision of Ambient Law
The vision of Ambient Law proposed that in the face of an increasingly proactive technological infrastructure lawyers and legislators should learn to articulate legal protection into our digital environment. The right to privacy, due process and non-discrimination warrants effective remedies beyond the written law. The lawmakers’ Pavlov response of introducing yet another set of administrative rules will not protect the inhabitants of smart environments, such as the Internet of Things or Ambient Intelligence. Instead, an Ambient Law should be developed that enables ‘legal protection by design’. The vision of Ambient Law builds on similar notions within the domain of ethics of technology (e.g., privacy by design, privacy by default, value-sensitive design).
Expanding on previous publications I will engage with three possible objections. Firstly, some authors favour so-called technology-neutral regulations; they think that regulators should avoid technology dependence when formulating legal norms. Second, some authors might equate this approach with taking a ‘command-and-control’ perspective; they assume that the intervention of the democratic legislator actually implies a top down perspective, compared to e.g. public-private cooperation. Third, some authors equate the idea of Ambient Law with technological enforcement of administrative law, suggesting that Ambient Law merely uses technology to enforce legal rules. I will argue that all three objections misconstrue the notion of Ambient Law, and miss the point that law-as-we-know-it is already technologically embodied. Moving from the technologies of the script to those of mobile interconnected digital computer systems requires creative re-enactment of legal norms into the novel infrastructures.

Andrew Murray — Regulating a Communications Society: Nodes and Control in a Virtual Space
In 1996 John Perry Barlow made his now infamous Declaration of Independence for Cyberspace. In this the Cyberlibertarian ethos was laid out: “We must declare our virtual selves immune to your sovereignty, even as we continue to consent to your rule over our bodies. We will spread ourselves across the Planet so that no one can arrest our thoughts.”
Since that date much has changed. The work of a number of US Cyberpaternalist philosophers such as Jonathan Zittrain, Jack Goldsmith, Joel Reidenberg, Yochai Benkler and most famously Lawrence Lessig has illustrated the fundamental weaknesses in Barlow’s (and therefore Cyberlibertarianism’s) basic premises. This does not mean though that because one can be controlled in cyberspace, one ought to be controlled or even one will be controlled. The distinction is between the ability to control and the effectiveness and legitimacy of control mechanisms. It is this distinction which is at the heart of Network Communitarianism and which is likely to come more to the fore as the network is replaced with the cloud, always on data, augmented reality and mobile data communications. The key issue for regulators now is the strength of the network and the ability of regulators to control within the network.

Building upon previous regulatory designs of the author and taking account of nodal governance theory as developed by Clifford Shearing, this paper aims to demonstrate that the key to building effective and legitimate regulation in the virtual space is to recognise and harness key nodal connections and key nodes themselves. It will make use of Actor-Network Theory to demonstrate how the cybercommunity functions as both a community and a group of individual nodes and will seek to develop Foucault’s theories of communicative “power” as a means of communicative control.


This paper presents the results of PhD research which assessed the privacy threats or risks, applicable US/UK/EU laws, relevant legal deficiencies and corresponding potential solutions for remedying these deficiencies for the following four privacy-invading technologies: Body Scanners, RFID implants, CCTV microphones and CCTV loudspeakers. The assessment essentially concluded that in all four cases technological and design-based solutions could play a critical role in ensuring privacy against the intrusive capabilities of these latest technologies and enforcing the applicable principles of privacy, while also maintaining, if not enhancing, the apparent security gains of these technologies.

biographies
Ronald Leenes (r.e.leenes@tilburguniversity.nl)
Ronald Leenes is full professor in Regulation by Technology at TILT, the Tilburg Institute for Law, Technology, and Society (Tilburg University). His primary research interests are privacy and identity management, regulation of, and by, technology. He is also involved in research in ID fraud, biometrics and Online Dispute Resolution. Ronald has co-edited several volumes on technology and regulation, including ‘Constitutional Rights and New Technologies’ (TMC Asser press, 2008), ‘Computers, Privacy and Data Protection: an element of choice’ (Springer, forthcoming), ‘Privacy-Enhancing Identity Management’ (Springer, forthcoming).
He is currently elaborating on his inaugural lecture ‘Harden Lessen – apologie van technologie als reguleringsinstrument’ for Legisprudence.

Mireille Hildebrandt (Mireille.Hildebrandt@vub.ac.be)
Mireille Hildebrandt is Full Professor of Smart Environments, Data Protection and the Rule of Law at Radboud University Nijmegen, Associate Professor of Jurisprudence at Erasmus University Rotterdam and senior researcher at the centre for Law Science Technology and Society, Vrije Universiteit Brussel. She edited ‘Profiling the European Citizen. Cross-Disciplinary Perspectives’ (Springer 2008), together with Serge Gutwirth and ‘The Philosophy of Law meets the Philosophy of Technology. Autonomic Computing and Transformations of Human Agency’ Routledge forthcoming), together with Antoinette
Rouvroy. She is also editor of *Criminal Law and Philosophy* and of *Rechtsfilosofie & Rechtstheorie*.

**Andrew Murray** (a.murray@lse.ac.uk)
Andrew Murray is Reader in Law at the London School of Economics. He is a Fellow of Gray's Inn, a Visiting Fellow of the University of Gothenburg and Legal Project Lead of Creative Commons England & Wales. He specialises in Cyber-regulation and Governance and New Media & Communications Regulation. Andrew advises on e-commerce and Web 2.0 projects and has contributed to the *New Oxford Companion to Law and the International Encyclopaedia of Communication*.


**Demetrius Klitou** (dklitou@carsa.es)
Demetrius Klitou has a degree in international relations and was trained in diplomacy at MEDAC. He subsequently obtained a LL.M. in public international law at Leiden University. He is currently working at a consultancy specializing in project management, innovation and strategic public policies. He previously worked at the European Commission, DG Information Society and Media (Directorate H: ICT Addressing Societal Challenges). He conducted his PhD research at eLaw@Leiden, Centre for Law in the Information Society.

**registration**
Admission to this symposium is free of charge. Registration includes coffee/tea; light snacks. Mail in your registration to: academie@acwet.nl.

**contact**
Lucy Brouwer of Karin van der Els

Academie voor Wetgeving
Lange Voorhout 62
2514 EH Den Haag

T 070-312 98 30
F 070-312 98 49
E academie@acwet.nl