

# Rethinking the Rules for an Information Society in Flux

IViR Research Program 2018-2023

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# 1. Introduction

This document sets out the Institute for Information Law's research program for the 2018-2023 interval. It is intended to serve a dual purpose: (1) to externally inform the academic research community, funding agencies and grantors, and society at large, of the Institute's ambit and its mid-term scientific ambitions, and (2) to internally guide and give direction to 'the institute', i.e. all the researchers that are associated with IViR, with the aim of focusing scarce research resources on core issues of information law, while ensuring coherence and consistency in the institute's research endeavours.

To say that the information society is dynamic is to state the obvious. This dynamism means that the exact boundaries of this field of research are hard, if not impossible, to predict, even for the relatively short time frame of five years. The way in which information is created, produced, disseminated and used keeps changing. IViR has remained flexible in adapting to what are sometimes radically new developments. Perhaps more than in the past, IViR's present program will remain relatively open-ended, leaving ample room for unforeseen but promising research strands to be explored, and for research projects and funding opportunities to be seized.

The Institute for Information Law (IViR), operational since 1986 and officially established in 1989 by decree of the UvA Board of Directors, is the oldest research institute within the Faculty of Law of UvA, and is currently one of the largest research centres in the field of information law in the world. Information Law has been recognized as a focal point of research since the Dutch Ministry of Education appointed IViR as a centre of excellence in academic research in 1986. It since became and has steadily remained, a Research Priority Area (RPA) of the Law Faculty and of the University of Amsterdam. In its 2006 'Onderzoeksvisie' and several more recent policy documents the University of Amsterdam Board of Directors (College van Bestuur) expressly cites Information Law as characteristic of UvA research.

The present research program builds upon its predecessor, the IViR Research Program 2012-2016 'Information Law: Expanding Horizons', which as recent reviews of the Institute's research programme by the VSNU and by the University of Amsterdam demonstrate<sup>1</sup> has proven to provide a robust, practicable, productive and forward-looking framework for the Institute's research planning, coordination and output. The present program incorporates several suggestions for further improvement from these external reviews.

## **Mission**

The Institute's mission is to further the development of information law within a legal framework that accommodates the needs and interests of the information society, its citizens and its industries in a just and balanced way, while respecting fundamental rights and democratic freedoms. Information law thus normatively integrates the law relating

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<sup>1</sup> Research Review Amsterdam Research Institute of Legal Studies, 13 February 2017; Advies Universitaire Onderzoekscommissie (UOC) 2017.

to the production, marketing, distribution and use of information. What characterizes the information law paradigm, and sets it apart from strictly functionally defined legal domains, is that formerly distinct issues and sectors, which are intrinsically connected or converging, are treated within a single, coherent normative framework that is primarily informed by the three fundamental rights that define a just information society: the rights to freedom of expression and information, the rights to privacy and data protection and intellectual property rights. Importantly, this paradigm anchors and brings coherence to the present research program and protects the Institute and its researchers from being distracted by some of the law and digital technology related 'hypes' that present themselves almost on a daily basis.

The Institute has played a pioneering role in this approach, which has been followed by scholars and research institutes at home and abroad, and it is today a global leader in its field. In pursuit of its mission, IViR has set three strategic goals: first, to produce cutting-edge scholarship and maintain its leadership position; second, to conceive and develop legal concepts and doctrine that suit the requirements of the information society and help define the information policy agenda at the national, European and international levels; and, third, to promote the paradigm of information law in law and legal scholarship worldwide.

With the ambition to further consolidate IViR's leading position in the field of information law and policy in the Netherlands, Europe and beyond, specific targets are, first, to identify emerging legal challenges to the information society and be the first to address them through outstanding research; second, to further expand and strengthen the institute's international academic network; and, third, to enhance multidisciplinary co-operations both within UvA and through external collaborations.

### **Paradigm, research questions and methods**

*Information law aims to understand how regulation and market power affect communications media, information markets, communication infrastructures and the information society at large, and to offer solutions that contribute to a just and well-functioning information society.*

Information law is a normative concept, which means that its aim is to contribute to a legal framework that best serves the information society while respecting fundamental rights and freedoms. As the law relating to the production, marketing, distribution and use of information, information law is a functional discipline that cuts across traditional boundaries of legal research and teaching, comprising a wide set of legal issues at the crossroads of intellectual property, media law, telecommunications regulation, freedom of expression and information and right to privacy. Although many current problems of information law are directly related to and influenced by technological developments, in particular advances in the field of information and communications technology, the paradigm of information law is essentially 'technology-neutral', *i.e.* not confined to any particular type of information technology. As the Association of Universities in the Netherlands (VSNU) has recognized in various evaluations of IViR's research output, the Institute's early choice to focus on information (law) rather than on information technology (law) distinguishes its research program from comparable programs in the Netherlands and abroad.

Information is a multi-faceted phenomenon. As an economic good, its production, distribution and use are the driving force of the growing information economy. As a cultural good, information is the building block of cultural development and expression. As 'news', information is an essential ingredient of the democratic process. As personal data, information is the quid pro quo of a business model that underlies the social media. While information's intangible, volatile and non-rivalrous qualities make it difficult for traditional legal disciplines, such as private law and criminal law, to conceptualize and systemically integrate, the paradigm of information law is comprehensive. This allows for the development of a legal framework that takes into account and integrates economic, political, social and cultural information policy objectives.

IViR brings together all the disciplines necessary to answer these questions. The field of information law therefore cuts across traditional legal boundaries and increasingly draws from research in other disciplines, such as communications science, media studies, economics, data science and informatics. The Institute's multidisciplinary approach towards information law necessitates a variable methodology. Research methods applied depend on the type and goals of a specific research project, using either descriptive, comparative, and normative/ argumentative legal methodology, or a combination of these – mixed – methods. IViR research projects increasingly comprise empirical research components that require appropriate (e.g. quantitative or qualitative) methods. Since the Institute cannot aspire to have all relevant non-legal disciplinary knowledge and knowhow available in house, it has established a core capacity in the most relevant disciplines – economics, communications sciences and humanities – while fostering institutional collaborations with research institutes from other disciplines, such as communications science, cultural studies, and computer and data sciences, and mediating between these disciplines.

### Research strategy

Information law is one of the Research Priority Areas (RPAs) expressly designated by the University of Amsterdam's Executive Board to "represent the very best the UvA has to offer in terms of research and are also areas in which the UvA is a worldwide leader".<sup>2</sup> IViR has played an important role in establishing the university's profile as a world-leading university in the field of information and communications studies. By initiating and sustaining interdisciplinary collaborations with other UvA institutes and centres, IViR has built bridges across the faculties.

The institute's mission directly informs its research strategy. The strategy aims at producing scholarly output that lives up to rigorous academic standards, while feeding into societal discussions and policy debates on information law-related issues at the national, European and international levels. This "360 degree approach" towards research and valorisation is reflected in IViR's research strategy that values both cutting-edge scholarly publications and ground-breaking policy-oriented studies and reports. IViR initiates research on the conditions that a new project, first, is situated within the general domain defined in its research program; second, addresses an important research question; and, third, has potential impact on the shaping of the information society.

<sup>2</sup> Cf. <<http://www.uva.nl/en/research/research-at-the-uva/research-priority-areas>>.

Another strategic consideration in undertaking a new research project or opening a novel strand of research is its potential for inter- or multidisciplinary research, which allows the Institute's legal specialists to interact with its growing staff of researchers from other disciplines, such as economics, philosophy and communications sciences, or with its research partners from the non-legal disciplines. A further strategic benchmark is whether the potential research project bears the promise of contributing to the Institute's long-term continuity and sustainability.

Following these principles and guidelines, IViR undertakes commissioned research that contributes to producing scientific excellence and societal relevance, while allowing the Institute to grow even in times of tightening faculty budgets. All research activities undertaken by IViR must conform to the Declaration of Scientific Independence of the Royal Netherlands Academy of Arts and Sciences and the relevant European principles on research integrity.<sup>3</sup> IViR, therefore, refrains from providing consultancy services, or undertaking commissioned research that is not carried out in complete independence, or cannot be published in full.

Since its inception the Institute has steadily grown to its present size as the largest research institute in the UvA Faculty of Law, and one of the largest of its kind in the world. This growth has been managed by the Institute's strategy of building its own research capacity, while also attracting invaluable international research talent from elsewhere. Many of the Institute's professors, senior and junior staff members are former IViR PhD candidates, postdocs and research assistants who have gradually climbed up the ranks to their current positions. Outside the University of Amsterdam, and even outside the Netherlands, several professorships are currently held by IViR alumni, enhancing the Institute's reputation and endorsing the information law approach. IViR actively supports the career opportunities of its researchers within and outside the University of Amsterdam. An important feature of IViR's research strategy are the master and research programs in Information Law that are coordinated and taught by Institute staff, which allow for research talent development and recruitment at an early stage.

Yet another element of IViR's research strategy is to actively initiate and sustain institutional arrangements and cooperation with leading research centres across the globe, while also seeking collaboration with other departments within the UvA Faculty of Law wherever possible. With the Institute's increasing focus on multi- and interdisciplinary research, IViR has established strategic partnerships within the University of Amsterdam in relevant non-legal domains, such as communications science, media studies, economics, data science and informatics.

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<sup>3</sup> European Commission, The European Charter for Researchers, Commission Recommendation of 11 March 2005. The European Science Foundation, The European Code of Conduct for Research Integrity, March 2011.

### **Structure and outline of the research program**

The present research program first – horizontally – identifies a number of major long-term (technological, economic, social, and cultural) *themes* of particular relevance to the information society that pose important challenges to the field of information law, and inform the Institute’s research agenda for the coming years. The program then systematizes its main research topics – vertically – around three *clusters*, each associated with a separate phase or role in the value chain of the information market.





## 2. Themes: Main Developments in the Information Society

The information society is in constant flux, influenced by the combined forces of disruptive information technology, new markets and business models, newly dominant intermediaries, changing consumer habits and demands, and concomitant regulatory responses by governments and regulators – with obvious and immediate ramifications for information law. While Europe, which is the locus and geographical focus of much of the Institute’s research, still provides robust guarantees for core fundamental information rights and freedoms, preserving a truly free and open information society poses constant challenges to the law.

Previous research programs have identified various long-term trends and developments that shape the field of information law, such as changes in the relevant value chains; the centralization of computing and storage services and facilities away from clients “in the cloud”; the dramatic shift from desk-top computing to intelligent connected devices; the spectacular rise of digital platforms and the social media; and the conundrum of information security. These trends will continue to deeply affect the information society and economy for the years to come, and thereby inform much of the Institute’s research program.

In addition, a number of more recent challenges to the information society are identified as relevant themes below. Note that many of these themes intersect or partly overlap.

### **Mass personalisation**

The term personalised communication refers to the paradigmatic shift from traditional mass communications media, such as newspaper publishing and broadcasting that traditionally offered content indiscriminately to mass audiences, to information services that offer to consumers ‘personalized’ content and other information customized on the basis of individual consumers’ profiles. Through personalized news content, search results and apps, consumers can be addressed individually on a massive scale, to match their consumption patterns and preferences; health information can be targeted and shared to enhance specific lifestyles; political information can be adjusted to individual voter profiles. The personal data thus harvested on a large scale are monetized by the intermediaries involved in ‘mass personalization’, notably search engine providers and social media, for targeted advertising or direct marketing purposes.

Personalized communication can also lead to manipulated or biased communication that deprives users from access to more meaningful or more diverse information. And personalization of information offers unprecedented opportunities for abuse by stereotyping, discriminating and sorting society into virtual profiles. Mass personalisation of communication evidently triggers important questions in various subdomains of information law, including data protection law, competition law, consumer law, media and telecommunications regulation and, more generally, fundamental rights.

### **Dis- and re-intermediation**

The networked environment of the Internet allows information services providers to directly reach out to businesses and consumers, by using virtual market places, social media, content aggregators or other, mostly cloud-based platforms to bypass traditional distributors and intermediaries. This process of disintermediation is having a sweeping impact on the information industry and information society, at various levels. By offering targeted advertising to their enormous user bases, these platforms have captured large portions of the advertising market that traditionally supported the production of local content by the 'mass media'. At the same time, these platforms have become – often dominant – new intermediaries in their own right, helping individuals in their role of citizens or consumers to navigate the seas information, to interconnect and exchange information.

The powerful network effects and economies of scale that are inherent to many of these services provided over the Internet have led to extreme market dominance by just a handful of market players. The unprecedented political and market power of these global actors, all headquartered in the United States, directly challenges the regulatory autonomy of states (including the European Union), and prompts the need for novel approaches in a variety of legal domains, including competition law, jurisdiction, information security, intermediary liability, and private international law.

With trusted curated content providers, such as newspaper publishers and broadcasters, rapidly losing control over their audiences and advertising revenue, issues of transparency and reliability of 'news' arise. More generally, disintermediation and personalization of communication together deeply affect the 'public sphere', which may have consequences for the democratic process. This may necessitate revisiting, and perhaps reinvigorating, the roles of public service media and public libraries as trustees of the public sphere and guarantors of a trustworthy public information supply, and could justify sustainable (financial) support for independent, quality journalism and content.

### **Datafication**

Data has emerged as one of the key resources of the information society. Both public and private organizations increasingly rely on the highly automatized, and algorithmically aided collection and analysis of data to inform themselves about the state of the world, prepare and support decisions, often on a global scale. Many of the new business models are driven by 'datafication', i.e. the phenomenon that practically all aspects of human life are turned into data that can be commodified, monetized and traded. Datafication is symptomatic for the ongoing shift from industrial to information society, and unsurprisingly comes with new calls for novel property rights.

Datafication is related to "big data", a loosely defined term that commonly refers to very large-scale data processing and analytics performed on raw (untreated) data sets or on data extracted from other sources, to establish data patterns for a wide variety of purposes, such as statistical analysis, medical research, journalism, search, navigation, consumer profiling, marketing, robotics/deep learning, education, et cetera. Together, datafication and big data raise important challenges across the entire spectrum of information law, ranging from

questions regarding data ownership to lawful data access, and from personal data control to the governance and security of big data.

### **Algorithmic processing and machine learning**

Advances in artificial intelligence and machine learning have enabled so-called algorithmic agents to assume an increasingly important role in a wide variety of tasks and functions traditionally carried out by human actors, such as aggregation, news selection, targeted advertising, and even content creation. Algorithmic processes also play essential roles in filtering unlawful content and in copyright management and enforcement systems. For example, the content identification and takedown procedures that leading platform providers have developed and implemented, are powered by artificial intelligence.

The proliferation of these algorithmic processes raises important normative and ethical questions in the entire field of information law, not only regarding transparency, due process, accountability and governance, but also in respect of fundamental freedoms that may become compromised by automated content selection and micro-targeting of users. Algorithmic content creation evidently also poses challenges to 'anthropocentric' laws of intellectual property.

### **Decentralized databases: the promises and perils of blockchain technology**

From its inception information law has been challenged by the speed of technological development, and the sweeping societal changes new technologies often promise, and in some cases deliver. One example is blockchain technology, which promises widespread disruption of existing social institutions through the decentralization of large scale databases, and the interactions they enable, account for, and represent. It is yet unclear whether this particular form of technology will have as much impact as is currently believed.

Nevertheless the questions it raises add new dimensions to the ones posed by earlier generations of digital technologies. Which social domains, markets, institutions are most prone to be disrupted by the decentralization of data-control? How will blockchain-based global digital services and their underlying technological architectures be governed and regulated, especially if they are open, and lack easily identifiable custodians? Will this technology become an enabler or the enemy of the policy values that underlie information law?

### **Trade and investment in information goods and services**

Whereas earlier incarnations of international trade law were concerned primarily with facilitating trans-border trade in commodities and tangible goods, the scope of international trade and investment law has widened to cover creative works, inventions and other intangibles protected by intellectual property rights (e.g. by way of the WTO TRIPs Agreement or in myriad 'Free Trade Agreements'). This means International information flows are increasingly governed by international and regional trade and investment agreements.

With more recent trade arrangements extending even further to information services and data flows generally, the norms of information law nowadays regularly intersect with the rules of international trade and investment, leading to paradigmatic conflicts between, for example, free trade-driven demands for liberal data exchange and data protection regimes primarily informed by fundamental rights. Global data flows force governments to re-negotiate the interplay between domestic public policy and user rights with international digital trade that is bound to influence the governance of key technologies of the 21st century.

## 3. Research Clusters and Topics

In line with the Institute's 2012-2016 research program, the present program seeks to bring focus and coherence by organizing its research around three 'clusters', each associated with a distinct phase in the information value chain: (1) the creation and production of information; (2) the transmission and communication of information; and (3) the end use (consumption) of information. Each of these clusters is governed primarily by one of three basic legal principles to underlie the paradigm of information law: (1) intellectual property, (2) freedom of communication (freedom of expression and information), and (3) informational privacy. Within each cluster several topics of ongoing and future research on the Institute's agenda are identified below, without however enumerating an exhaustive research agenda. Evidently, since information transactions commonly transcend clusters, and entities often take on multiple roles in the communications process, specific research topics will regularly be situated across more than one cluster, in which case these principles concurrently apply. Whereas each of these principles is enshrined in European human and fundamental rights law, none is absolute. Rather, these rights and freedoms will tend to compete, and in many cases collide with each other in distinct situations. Many of the salient issues of information law concern these areas of colliding legal principles.

The Institute's main research agenda for the coming years is situated where horizontal themes (identified in Section 2) and vertical clusters intersect, as is illustrated by the specific research projects and potential topics of research identified under each cluster. In light of the highly dynamic and often unpredictable development of the information society, this enumeration of specific projects is not meant to be in any way exhaustive.

All clusters are impacted by rapid technological change. They share normative concerns, and all reflect ongoing power struggles for control over the Internet. Note that these clusters mainly serve as organizing principles, and do not imply that research topics are to be studied in isolation. Information law is a transversal legal discipline; its underlying principles intersect clusters and themes in all directions.

### **Cluster 1: Creation and production of information**

The first cluster focuses on information creation and production. Not all data is created equal and there are different legal approaches to their protection, from intellectual property to the fundamental rights approach with regards to personal data. The emerging landscape of information law is diversifying with new legal properties and proprietary practices taking shape around various types of information. Evidently, much of the research in this context is situated within the field of intellectual property law, in particular copyright law. However, information 'property' may and will also follow from other legal regimes, such as contract law, trade secret protection, personal data protection and technical control (DRM). Here, the advent of blockchain technology that allows secure, non-breakable and potentially complex smart contracting, raises important new questions. More generally, the very nature and solidity of user interests and freedoms under copyright and similar regimes merits reconsideration. If copyright exceptions reflect fundamental rights, such as freedom of expression, should these user freedoms and interests not be transformed, and

conceptualized, as proper user rights?

One of the overarching themes in this cluster is the need for copyright reform. Since the early 19th century copyright law has served as the principal legal instrument for promoting and rewarding the production of information in the cultural realm, and has remained essentially unchanged. How to craft the contours of a copyright system for the 21st century that caters for the needs of a modern information society, where the traditional intermediaries that largely informed the copyright laws of past, have all but disappeared? Reform of intellectual property laws also challenges its underlying rationales. How to navigate between the justice-based rationale that traditionally justified intellectual property (IP) law in much of Europe with the utilitarian approaches that dominate the United States and many other countries? Perhaps pragmatism and evidence-based policy development in IP law making is the way forward.

Among the other research topics to be addressed in this cluster, is copyright enforcement, which in recent years has moved away from targeting direct infringers towards imposing higher standards of liability on (potentially 'innocent') intermediaries. One of the main challenges is to find a middle ground between effective enforcement and respect for user rights and freedoms, without compromising the integrity of the Internet as an open network. Internet 'piracy', more generally, remains an important item on the Institute's research agenda. Calls for stricter enforcement from stakeholders are usually justified by the harmful effects of unauthorized uses on markets for cultural goods. But what, really, are the effects of online piracy on consumer markets?

Traditionally, access to and use of public sector information are viewed in light of democratic principles: as a means to ensure accountable and participatory government. 'Open by default' is becoming the dominant principle. Public sector information and data are also commonly viewed as valuable resources for other reasons: as inputs for innovative products and services developed by the private sector as well as for data-driven policymaking and effective and efficient public service delivery. Modern government may increasingly have to rely on proprietary private sector data and tools (e.g. for data analytics, automated decision making) for the execution of public tasks. This raises questions about access and accountability. The regulatory framework needed to prioritize, reconcile and effectuate the attendant objectives and interests is still piecemeal and has yet to overcome the traditional silos of private law (s.a. intellectual property) and public law (rights to access information, disclosure duties). The development of open science is a case in point.

Calls for 'open data' are particularly loud in the field of publicly funded science, and increasingly imposed by funding agencies and regulated at the EU level. Access to existing research data and data sets is important not only for deontological reasons (namely, to allow verification or and replication of empirical research), but also to facilitate further data analysis. Moreover, the economic promise of data mining might justify broad-ranging limits to copyright and database rights in the EU. But apart from the self-evident benefits of unfettered access to research data, there may be legitimate reasons, such as protection of personal data, or safeguarding of commercialisation opportunities for not making all data equally 'open'.

The ongoing disintermediation has led traditional newspaper publishers to press for a new neighbouring right in press publications that would give the publishers leverage to deal with news aggregators, which is gaining support with the EU legislature, but not in academia. Another promising topic of research is the increasing use of artificial intelligence (AI) in creative design or technical invention also poses important new challenges in the realm of intellectual property law.

### **Cluster 2: Communication of information**

The second cluster centres on the communication of information; this cluster is normatively informed primarily by freedom of expression and information enshrined, inter alia, in the European Convention on Human Rights and the EU Charter. Many of the main research issues in this cluster are related to increasing dominance of the social media, and the way this has affected public debate. This raises important legal and ethical challenges for preserving robust public debate in democratic societies. How to safeguard a vibrant public sphere where communication channels are increasingly individualized and monetized, and the traditional 'mass media' are losing their audiences and advertising income? What are the positive obligations of States to create a favourable environment for participation in public debate by everyone and to help preserve pluralism in the evolving multi-media environment? How can the social media and other online gatekeepers be held more responsible and accountable for the information services they facilitate and monetize? More generally, research in this cluster queries what changes have occurred to the digitally mediated public sphere and how this impacts normative values of our democratic societies.

While recent calls for a cure against the perceived dangers of 'filter bubbles' and 'fake news' and other forms of disinformation may perhaps justify a greater role for the State or for trusted state-funded media, States cannot be assumed to always be best friends of freedom of expression. The rise of populist and authoritarian politics means that freedom of expression and free media is once again under threat, and may require revisiting and strengthening freedom of expression in its original incarnation, as a freedom from state intervention. Even in liberal democracies, hard-core fundamental freedoms remain highly relevant as the Internet and social media have increasingly become subjected to State surveillance. Here, as elsewhere in information law, the challenge is to find the right balance between protecting respect for fundamental rights and freedoms, and society's expectations of security.

As in previous research programs of the Institute, a core topic in this cluster remains the role and legal status of online intermediaries, such as Internet service providers, social media platforms, online video aggregators and operators of search engines. To what extent may such intermediaries be subjected to legal responsibilities and obligations, taking into account their critical role as facilitators of communications over the Internet? Whereas these platforms have initially enjoyed relative immunity under the safe harbours of the E-Commerce Directive, there is growing consensus that certain intermediaries may need prescriptive regulatory incentives to assume responsibility or liability for unlawful or otherwise undesirable practices carried out by their users. Moreover, recent mass-scale breaches of personal data protection have inspired calls for more direct regulatory intervention.



With growing responsibilities and liabilities come overlapping, and often conflicting, rules that apply to online intermediaries from such diverse fields as intellectual property law, audio-visual media law, telecommunications regulation, information security and data protection law. One of the challenges of information law remains to promote sound evidence for policy makers, and to inject legal consistency and reason into these concurrent regimes. Global data flows take the challenge to develop interoperable rules and regulations to the international level, and thereby pose thorny conflicts about power, profits and politics.

### **Cluster 3: Information use**

This cluster of research topics focuses on the position of end users of information products and services. This cluster is normatively informed primarily by the right to informational privacy, which is a fundamental right protected, inter alia, under the EU Charter. Additionally, the rights of end users of information may also be served by a variety of other norms and doctrines, such as consumer protection, unfair competition law, media law and market regulation.

As in previous research programs, rethinking data protection law remains an important focal point of research. Existing European and national rules on data protection are still largely based on the autonomy of citizens (the 'consent' approach). Would a more regulatory/interventionist approach better safeguard rights to privacy? If not, how can individual privacy rights best be designed to effectively empower users?

But even duly empowered users will have little to negotiate with the behemoths of the information age that dictate their terms of use upon the users, and increasingly engage in algorithmically determined, potentially unfair trade practices. Is it possible to define unfair algorithmic practices, based on the normative values and goals underlying unfair commercial practice law, non-discrimination law, or sector-specific regimes? Like other research in this cluster, this is normative research with a strong empirical component.

Rights of informational privacy have also become critically important in vertical relationships, as the state and state agencies routinely collect sensitive personal data for purposes of law enforcement and security, and for a variety of public services (e.g. public transport).

Online platforms affect users in many respects, and their modus operandi may have far-reaching consequences for user rights and freedoms on the ground. Often overlooked is the fact that users make a critical contribution to the way platforms function. Future research will look at the relationship between users, platforms and other constituents, and new ways of organizing the societal responsibility and governance of platforms, taking into account new concepts and theory developed elsewhere, such as the philosophical enquiries into the problem of many hands.

Updating consumer protection and market regulation to the demands of the digital economy and the needs of the digital consumer remains an important research topic in this cluster. One of the challenges here is to conceptualize in a more inclusive and systematic way the rights of consumers of information products and services in an area where multiple legal regimes intersect or overlap: consumer law, unfair competition law, personal data protection

and media regulation. In this context, especially the protection of consumers of so called “free services”, revising unfair commercial practice law in the light of behavioural targeting and profiling, and the identification and protection of new kinds of particular vulnerable consumers deserve attention.

