openlaws

Deliverable 1.3.d2

Comparative country report:

White paper on the openlaws.eu open innovation community

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Document prepared by: Chris Marsden (Sussex)

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Document Authors

Chris Marsden CM

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Participant List

	Short Name	**Organisation Name**	**Country**
1	UVA	Universiteit van Amsterdam	NL
2	SUSS	University of Sussex	GB
3	LSE	London School of Economics and Political Science	GB
4	ALP	Alpenite srl	IT
5	SUAS	Fachhochschule Salzburg GmbH	AT
6	BYW	BY WASS GmbH	AT

Executive Summary

The final comparative report D1.3.d2 makes a series of suggested reforms to systems based on country case studies. For this purpose, the key functionalities of the existing legal publishing system are summarized and described. This activity involved a review of the existing information systems and legal databases already in use and will produce a specification of the requirements of the system on the basis of the analysis of social, legal and market requirements. The case studies represent the key socio-economic and legal aspects of the services and illustrate the main functionalities, structure and operation of the proposed services[1]. The findings have been informed by key informant interviews and form a working assumption. The interviews were supported by the literature review and the insights of workshops.

The UK context is a developed legal market, with a strong user base of local and multinational firms, advanced university libraries and researchers, and law reports published by both commercial publishers and two legal charities: British and Irish Legal Information Institute (BAILII) and Incorporated Council of Law Reporters (ICLR). UK legal data is generally open to reuse and access with the exception of case law restrictions – where a virtuous open data circle has been hampered by legacies of closed copyright in the gift of individual judges and in practice their clerks, which remains unreformed. This led to restrictively licensed underfunded systems belonging to legal educational charities BAILII and ICLR. Reforms to case law release and funding would enable the UK to be seen as a ‘best of breed’ open legal data example.

The Netherlands has a mature, well-developed service industry, with a long-standing history of powerful professional publishers, and a particularly innovative public sector. The Dutch government was already keen in the mid-1990s to improve public availability of government information online and continues to work today on making this data truly accessible and manageable to the public at large. It pursues open access and open data policies[2]. Primary legal information is among the many types of government information that is increasingly released as open data (legislation, court decisions, parliamentary records). As a result uptake of open access in legal publishing is gaining pace, albeit that the effect is most notable in academic publishing. The two largest legal publishers, Wolters Kluwer and SDU, have traditionally enjoyed a competitive advantage over their peers, given their historical ties to the public sector. Several smaller specialized publishers cater to specific target groups: students, legal specialists in a particular field, etc. Fairly new market actors in the Netherlands are legal content integrators, which offer search, access and information management services to the private and public sectors.

Austria is one of the leading EU Member States with respect to legal information systems and access to justice[3]. The RIS is an award-winning centralized expert systems, containing legislation and case law in one platform. Despite financial limitations of the government, the platform continuous to make information accessible for free in

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[1] Marsden, C. [2015] Openlaws D 1.2.d3 Case study 2: United Kingdom report for legal, social and business aspects of re-use of legal information; Marsden, C. [2014] Openlaws D1.1.d1 State-of-the-art report for legal, social and business aspects of re-use of legal information; Marsden, C. [2014] Openlaws D 1.2.d1 Template for country case studies; Marsden, C. [2014] Openlaws D 1.2.d2 Case study 1: European institutions report for legal, social and business aspects of re-use of legal information

[2] Salamanca, Olivia and Mireille van Eechoud (2015) Openlaws D1.2.d5 – The Netherlands, Case Study, Openlaws.eu

[3] Wass, Clemens (2016) Openlaws D1.2.d4 – Austrian Case Study, Openlaws.eu

accordance with the PSI Directive, also via a new REST interface. There are four dominant legal publishers in Austria, having a long history in the book-printing industry. The publishers are an intermediary and an information broker, ensuring high quality standards for legal information. Open access publication is a topic of interest, especially pushed by NGOs and research institutions. It is still a rather long way to general OA publication in the legal domain in Austria, the Netherland remain a role-model. New technology like Google as well as mobile devices are changing the legal land-scape in Austria. Government and commercial publishers are more and more opening up their content (the government via open data portals, the publishers in a first step via opening their search to users and the search engine indices of Google and Microsoft), making Austrian law more accessible. From a European perspective, there is still a lot to do. Austrian legislation and case law is only partly connected to EU legislation and case law. The introduction of ELI and ECLI will certainly help to build a more interconnected network. OpenLaws could provide the necessary legal infrastructure, to connect Austrian and EU primary sources – and potentially legal data sources from other EU Member States as well.

European legal data is so open to reuse and access that it is the ‘exception that proves the rule’ – in that the national systems under examination may have less a virtuous circle and more a system hampered by legacies of closed and restrictively licensed underfunded systems. This will be a major research theme in national case studies. We can conclude that though European legal information may not be as widely reused and repurposed as US federal law, it is nevertheless a best of breed example for the Member States to emulate where possible.

Our recommendations lie in the six areas we identify as offering continued obstacles to Big Open Legal Data[4]. These were presented in outline at the BILETA conference and Open Data Institute in spring 2015, LAPSI2.0 workshop in 2014, and in the final Openlaws conference in March 2016[5]. The six cross-cutting challenges are:

1. Legal publishing profession: socio-economics and path dependence
2. Court system: judicial independence & digitisation
3. Copyright
4. Government data
5. Human right to privacy and access to law
6. Austerity economics.

First is the challenge to **legal professional publishing**. It is not the first profession to be digitized, and medical publishing has a similar structure of two giant multinational publishers resulting. Both professions are wary of disintermediation, with doctors and lawyers largely self-regulatory with fierce independence of government regulation. Prices paid for academic/professional comment reflect that leading experts in both fields give their information to publishers freely, which are then repackaged and resold with interest. This is an amazing business model for publishers, which we ex-

[4] See Marsden, C. [2015] Open Access to Law – How Soon? Computers and Law, Issue 2. http://www.scl.org/site.aspx?i=ed41009

[5] Marsden, C. [2015] 9 April: Access to EU law compared to UK, 30th BILETA conference, University of West of England, at http://www.slideshare.net/EXCCELessex/open-laws-bileta15; Marsden, C. [2015] 20 March, Hacking the Law, Open Data Institute, London http://www.slideshare.net/EXCCELessex/hackingthe-law-ridays; [2014] Sept 4: Openlaws LAPSI2 meeting, University of Amsterdam Library at http://www.slideshare.net/EXCCELessex/openlaws-lasi2-meeting-amsterdam-4914

plore in Methods.

Recommendation 1: Open Access to Legal Information is as fundamental as that to medical information. Professionals, especially funded by public sector investment such as civil servants, judges and academics should be encouraged to publish using open access by default.

Second is the challenge to the **court system**. While legislation is a success story for BOLD, IT for courts is antiquated: judgments are only now commonly word processed. The move to a paperless court rooms mean IT on tablets. The impetus is the sixth challenge: austerity economics. Court systems are looking to reduce costs/delays, with Online Dispute Resolution (ODR) as well as online intermediation and adjudication. The use of video/audio/digital forensic evidence is increasing. What is needed is extension of IT reforms to prescribe or at least urge open access to law. Note for instance the UK court system e-judiciary plan for investment worth £780m, yet with no commitment to open access.

Similar problems occur with reports and other documents generated by, or commissioned by, government both federal and regional/local, to aid policy making. This grey literature should also be published on an open access basis and placed in a government repository using open standards. The European Commission has recently declared that:

> "Greater access to court files for third persons is not only recommended, it is necessary in view of the above mentioned problems ranging from some inconveniences to infringements of procedural rights, acknowledged as a fundamental human rights (i.e. right to fair trial and equality of arms)… Certain aspects of (in)accessibility of Court files cause serious legal problems, and may, arguably, even violate internationally recognised fundamental human rights, such as equality of arms….It can be argued that, in a case where one party has access to a certain document to which she also refers, but to which the adversary party does not have access, the right to a fair trial is violated."[6]

There are particular issues with CJEU files[7].

Recommendation 2: Open Access to Court Decisions (especially those that set precedents) is also fundamental. Reforms to create IT for judges should mandate publishing of decisions using open access and open standards (such as ECLI) by default. The same open standards should be used for government-funded 'grey literature' (policy making aids) such as SIGLE[8].

The third challenge is to **copyright** in legal publication. Judges' copyrights are a historic legacy of the independent judiciary, defended under the Bill of Rights 1689. Government copyright on its 'own' legislation dates to the Statute of Monopolies 1603. However, opening access to citizens of this fundamental knowledge is vital – dating to Martin Luther's 1517 'Ninety-five theses'. Note the previous printing revo-

[6] EC (2013) PE 474.406 National practices with regard to the accessibility of court documents, Directorate General For Internal Policies Policy Department C: Citizens' Rights And Constitutional Affairs Legal Affairs, authored by Vesna Naglič, 19 April 2013 Cited in European Parliament http://www.europarl.europa.eu/RegData/etudes/etudes/join/2013/474406/IPOL-JURI_ET(2013)474406_EN.pdf

[77] Decision of the Court of Justice of the European Union of 11 December 2012 concerning public access to documents held by the Court of Justice of the European Union in the exercise of its administrative functions (OJ C38, 9.2.2013, p. 2-4)

[8] See https://en.wikipedia.org/wiki/System_for_Information_on_Grey_Literature_in_Europe

lution relied on open access to Bible publishing, the natural law of the Middle Ages. Now in the digital era, the copyleft movement very strong in Europe, and prosumers are innovating in areas where governments and markets are not, such as with Legal Information Institutes and the RIS app.

Recommendation 3: Copyleft for Legal Information should be encouraged where it creates value that government and market fail to provide. Publishing of primary legal material in open access formats using open access by default should be pursued wherever possible.

The fourth challenge is to **open government data** more generally, and the creation of metrics for government success in opening legal data. The Open Data revolution since mid-2000s has been characterized as Digital Era Governance 2.0[9]. The Open Knowledge Foundation and Open Data Institute very active in this area. Open access to legislation is now on the OKFN scoreboard[10]. Netherlands and UK lead the high scorers, and Austria's RIS:app highly successful. The next step is to include case law, where the example is set by EU law using EurLEX. The problem is not confined to Europe: Adam Ziegler of Harvard University's Library Innovation Lab remarked, "We are in an era of amazing progress in access to government data, but where are we with the law? Almost nowhere, unfortunately."[11]

Recommendation 4: Metrics for Open Legal Data should be published, including legislation, case law in appeal courts, and eventually commentary and grey literature.

The fifth challenge is to basic human rights in the digital era. Fundamental knowledge of European law is vital to enforcing Article 6, European Convention on Human Rights and the Charter of Fundamental Rights[12]. While Aristotle first declared that "Ignorance of the law is no excuse", the digital era gives the basis for the practical application of this moniker, as recognized by the Council of Europe Committee of Ministers in 2014[13]. Provision of legal education to general public has been substituted by that of the legal profession as a proxy for public. Equality of arms may be aided by digital law, for instance in ODR only where governments provide access to legal information as well as knowledgeable apomediaries to help citizens. A continued need for experts to help plaintiffs will prevail, even if wills, property, basic contract can be automated[14].

Recommendation 5: Human Rights Impact Assessments for Implementation of Open Legal Data should be published, including a survey of their affect on non-professional

[9] Margetts, Helen and Dunleavy, Patrick (2013) The second wave of digital-era governance: a quasi-paradigm for government on the Web, Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences VL - 371 at http://rsta.royalsocietypublishing.org/content/371/1987/20120382.abstract
Dunleavy and Margetts (2010) The Second Wave of Digital Era Governance, APSA 2010 Annual Meeting Paper, Available a http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1643850

[10] http://index.okfn.org/dataset/legislation/UK ranked equal No.1 in 2014, Netherlands/Austria joint 7th.

[11] Laird, L. (2016) "As Governments Open Access to Data, Law Lags Far Behind" available at http://www.abajournal.com/news/article/as_governments_open_access_to_data_law_lags_far_behind

[12] Pretto and others v. Italy, no 7984/77, § 26; Werner v. Austria, no. 21835/93, §41-51; Szucs and others v. Austria 20602/92, 21835/93, 28389/95, 28923/95, 33730/96, 38549/97, 35437/97.

[13] CM/Rec(2014)6 16/04/2014, Recommendation of the Committee of Ministers to member states on a guide on human rights for Internet users, (Adopted by the Committee of Ministers on 16 April 2014 at the 1197th meeting of the Ministers' Deputies).

[14] Pasquale, Frank (2016) Automating the professions: utopian pipe dream or dystopian nightmare, LA Review of Books at https://lareviewofbooks.org/review/automating-the-professions-utopian-pipe-dream-or-dystopian-nightmare

plaintiffs using both traditional court and ODR systems.

The final challenge relates to the costs associated with digital transformation of BOLD, and the challenge to austerity: economics. Costs of public IT provision are almost always under- estimated, yet in this case, crowd-sourcing has bene very effective for social entrepreneurs such as BAILII and latterly RIS:app and Openlaws. Openlaws builds on the success and very significant achievements by LIIs. Opening access to law arguably can cost-effectively help to transform citizen access to law in areas such as Challenge 2 and Challenge 5.

Recommendation 6: Progress towards Open Legal Data should be assessed in the same way as that in other crowd-sourced areas of the sharing economy, and should be a Horizon2020 and Digital Agenda 2020 priority challenge.

We can represent best practices in these six areas, shown in the following table.

Table: Six Bold Challenges and Better Practices

BOLD Challenge	**Examples of Better Practice**
Legal Professional Publishing	Forms of open access: ICLR and BAILII
Court system Judicial independence & digitisation	Legislation.gov.uk API No plans in MoJ IT for courts
Copyright; Reuse cases	Open access journals; EurLEX copyright policy
Government data PSI & Open Data reforms	ODI, OKFN, hackathons, code camps
Human rights: Access to justice	Citizen use of BAILII, RIS:App
Austerity economics: Cost of databases	Ars Acqui; BAILII; RIS:App

BOLD solutions must meet six challenges with a holistic method comprising:

- Interdisciplinary approach: challenges are legal, technical, social, economic
- International approach: lawyers' work increasingly is across jurisdictions;
- Interdependent approach: The solution is not step change in each challenge but across all six areas.

We noted a particular legal challenge that is explored further in the BOLD2020 Vision document: the licensing & copyright regulatory environment in the EU. We further argue that continued study is needed of data protection issues and Linked Open Data (LOD).

How quickly might these Recommendations be achieved? In the short term (1-2 years), we argue governments should promote release of legislation and case law as open data. In the medium term (3-7 years), we might hope for harmonized copyright & database rights in official documents across EU. Governments also need to strengthen the PSI Directive to oblige public access to case law, and the legislative record, as recognized by the LAPSI2 final report[15]. Only then might we partially ap-

[15] See LAPSI 2.0 Thematic Network (2013-14) CIP-ICT PSP-2012-6 Grant agreement No 325171

proach the Aristotlean ideal of expunging the access issue in ignorance of law, and producing Bentham's one (not very great) book in digital form.

https://ec.europa.eu/digital-single-market/news/legal-aspects-public-sector-information-lapsi-thematic-network-outputs and specifically LAPSI2 (2014) LAPSI Position paper on Access to Data, at http://ec.europa.eu/newsroom/dae/document.cfm?action=display&doc_id=8341

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1 Introduction

The CAMPO analysis explains how and whether the environment (institutions, policies and the legal community) is finally developing in which open access models such as openlaws.eu can take root and flourish, in terms of cases, legislation[16], regulatory instruments and academic-expert analysis[17]. The analysis explains how and whether the environment (institutions, policies and the legal community) is finally developing in which open access models such as openlaws.eu can take root and flourish. The key functionalities of the existing legal publishing systems are summarized and described.

This activity involved a review of the existing information systems and legal databases already in use and a specification of the requirements of the system on the basis of the analysis of social, legal and market requirements. Voluminous existing literature was examined in D.1.1.d2 (State of the Art Report), which provides a useful selection for those unfamiliar with the field[18].

Table 1: Workstream 1 Country Reports by Author, Year, Deliverable, Title

Marsden, C.	[2014] D 1.2.d1	Template for country case studies
Marsden, C.	[2014] D1.1.d1	State-of-the-art report
Marsden, C.	[2014] D 1.2.d2	Case study 1: European institutions
Marsden, C.	[2015] D 1.2.d3	Case study 2: United Kingdom
Salamanca, van Eechoud	[2015] D1.2.d5	Case study 3: Netherlands
Wass, C.	[2016] D1.2.d4	Case study 4: Austria

The case studies represent the key socio-economic and legal aspects of the services and illustrate the main functionalities, structure and operation of the proposed services. The findings are informed by key informant interviews and form a working assumption. The interviews were supported by the literature review, and the insights of workshops. OpenLaws populated the study with empirical research, and conducted a web-based survey in May-June 2014, which produced over 200 responses.[19] The detailed responses to the survey support the country case studies. The empirical interviews follow a general template adapted to local circumstances for each stakeholder/country case.

[16] See for prior art Donelan, E. (2009) "European Approaches to Improves Access to and Managing the Stock of Legislation" Statute Law Review. 30(3), 147.

[17] See D'spremont, J. and Van den Herik, L. (2013) "The public good of academic publishing in international law." Leiden Journal of International Law. 26(1), 1-6; Frosio, G. (2014) „Open Access Publishing: A Literature Review“, CREATE Working Paper 2014/1 at http://www.create.ac.uk/publications/000011 pp70-74.

[18] This includes: Danner, R. A. (2012) "Open Access to Legal Scholarship: Dropping the Barriers to Discourse and Dialogue" Journal of International Commercial Law and Technology. 7(1), 65-79; Holmes, N. (2010) "Free case law - an overview." Internet Newsletter for Lawyers. 2010 Jul/Aug, 1-3; Sheridan, J. (2014) „Big Data for Law“ at http://www.infolaw.co.uk/newsletter/2014/03/big-data-for-law/

[19] For raw anonymized analytics, see https://docs.google.com/forms/d/1MVdScU8Unm0sdNBXsTgMM2A36TPvnlduMsjdIWo4DLE/viewanalytics

2 CAMPO Methodology

The case studies rely on a Soft Systems Methodology (SSM) framework in order to identify the key components of the problem and provide the key specifications for the system that is to be built, while the third activity will rely on a combination of desk research, in-depth interviews, and focus groups. Previous studies of government data – notably law – have demonstrated the need for an interdisciplinary methodology such as SSM. This suggests the need for a framework that examines technical, bureaucratic ('socio-institutional'), economic and legal barriers to wider access to law. An approach which focuses only on law, market, technology or bureaucracy would fail to provide a holistic explanation of successes and failures of national approaches explored in case studies. Explicitly acknowledging these perspectives forces us to consider the impact of any proposed changes on the people involved.

We use soft systems methodology (SSM) in the specific case studies, the standard method for exploring systems of production which is suitable for legal information publishing. SSM as a seven-stage methodology proceeds with:

1. Entering the problem situation.
2. Expressing the problem situation.
3. Formulating root definitions of relevant systems.
4. Building Conceptual Models of Human Activity Systems.
5. Comparing the models with the real world.
6. Defining changes that are desirable and feasible.
7. Taking action to improve the real world situation[20].

The dynamics of the method come from the fact that stages 2-4 are an iterative process. Lancaster proposed criteria for analysis summarized in the mnemonic CATWOE:

1. Clients (beneficiaries, who benefit or suffer from system operations)
2. Actors (responsible for implementing, carrying out system activities)
3. Transformation (transformation that inputs to this system bring about in becoming outputs)
4. Worldview (what justifies the existence of this system, and makes it meaningful?)
5. Owner (Who has the authority to abolish this system or change its measures of performance)
6. Environmental constraints (which does this system take as a given?).

Explicitly acknowledging these perspectives forces us to consider the impact of any proposed changes on the people involved. Basic criteria by which system performance (CATWOE) can be measured are efficacy, efficiency, effectiveness:

- Efficacy (E1) - indicates, whether the transformation provides the intended outcome
- Efficiency (E2) - indicates, whether the least possible amount of resources is being used to implement the transformation
- Effectiveness (E3) - indicates, whether the transformation helps to realize a more long-term goal (i.e. if it fits into a long-term strategy of the system).

Note that the creation of large legal data sets in themselves is only an E1 goal, while E2 depends on a variety of technical and organisational factors, and E3 depends on user satisfaction measured ultimately in measures of innovative use of legal data, and

[20] See Checkland, Peter B. (1981, 1998) Systems Thinking, Systems Practice, John Wiley & Sons Ltd.; Checkland, Peter B. and Scholes, J. (1990) Soft Systems Methodology in Action, John Wiley & Sons Ltd.; Checkland, Peter B. (2000) Soft Systems Methodology: A thirty year retrospective. Systems Research and Behavioral Science, 17, 11–58.

more directly in user satisfaction and increased productivity based on new usages of legal information retrieval tools.

While actors are clearly country-specific, the Context, Methods, Practices and Outcomes can more easily be compared. The analysis of institutional and business model barriers to open access used the CAMPO methodology (Context, Actors, Methods, Practices, Outcomes) to structure the four country case studies. The empirical interviews follow a general template outlined in Table 1 adapted to local circumstances for each stakeholder/country case. Within each category, an interdisciplinary approach is taken. It has been designed and deployed in the European Internet Science project notably Moranda and Pavan[21], and is based on a straightforward descriptive framework appropriate for examination of a discrete environment such as legal information. The detailed responses to the survey support the country case studies.

Table 2 CAMPO framework

CAMPO	Description	Added value
Context	Initial part of the case study outlines the overall context in which the community emerges/operates – type of legal informatics technology	Systematic catalogue of cases/actors/issues
Actors	What type of community is observed (primary groups, market actors, user groups etc.)	
Methods	Investigation method: Details of procedures to map the case study and the techniques used to perform analysis (research design details + actual methods)	Catalogue of methodological approaches to investigate different communities
Practices	Dynamics of interaction: Illustration of dynamics observed in each case study	Detailed insights on interplay
Outcomes	Summary of integration at EC level	Conclusions, limits of analysis for member states

Qualitative interviewing of experts and other stakeholders was carried out using ‘snowball’ sampling based on prior search of literature, policy presentations and otherwise publicly acknowledged experts and representative stakeholders[22]. The breadth of stakeholders interviewed was broad and includes experts from: academia, government departments and agencies using and creating legal data including courts services, private entrepreneurial publishing houses, multinational legal publishers, standards bodies, non-governmental organizations and government policy officials with both domestic and international responsibilities[23]. Note that the publication of draft case studies and final comparative report were accompanied by dissemination and feedback mechanisms both on- (e.g. via posting on open access websites, promotion

[21] See Marsden, C., Pavan E. et al (2013) Deliverable 6.1: Overview of user needs analysis, plus draft catalogue of design responses to needs analysis, Internet Science Consortium at http://www.internet-science.eu/biblio/reports

[22] Goodman, L.A. (1961). "Snowball sampling". Annals of Mathematical Statistics 32 (1): 148–170. doi:10.1214/aoms/1177705148

[23] Baker, Sarah Elsie and Edwards, Rosalind (2012) How many qualitative interviews is enough. Discussion Paper, UK Economic and Social Research Council National Centre for Research Methods at http://eprints.ncrm.ac.uk/2273/ Edwards, Rosalind and Janet Holland (2013) What is Qualitative Interviewing? Bloomsbury Academic at: http://www.bloomsbury.com/uk/what-is-qualitative-interviewing-9781849668095/#sthash.upoeZB2W.dpuf

via social media and comment promotion via referral to the WS1 Wiki) and offline (via workshops and conferences in-country, at EU and international levels).

It is now possible to carry out analysis of CAMPO as methodology for country case studies[24], noting the particular role of judicial independence and equality of arms/human rights in legal information access. This method has been previously used in community formation, blockchain analysis.

When we examine the country case studies, we are cast into socio-legal comparative analysis of both laws and customs, as well as business and public administrative practices. To an extent, we are also cast into a methodological dilemma of putting together qualitative and quantitative method and academic culture, identified by C.P. Snow in 1959 and by others since[25]. We do this with mixed methods, in particular numerical and qualitative survey data as well as secondary analysis of others' data analysis.

We also are confronted with the legal academy and legislators' own paradox: lawyers claim wider access to law is a basic public need and good, yet restrict that access in the interests of the professional intermediary, and claimed judicial inefficiencies that can result from ill-educated lay people representing themselves (see ICLR blog). In reality, therefore, policymakers and the central laws-consuming constituency (lawyers) are opposed to free access to law. To analyze their perspectives, one therefore needs a post-modern comparative approach, as well as including the insights of Foucault, Zizek and others that law is intended to control the lay populace, and access to laws is an element of that control, intermediated by late capitalist multinationals employing information technology to raise barriers and control access, restricted to those both wealthy and part of the mediaeval lawyerly guilds that control both judiciary and higher levels of the profession in all three countries[26].

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[24] See for comparison the in-depth country study from a decade prior to this project: Marsden, Cave, Hoorens (2006) Better Re-Use of Public Sector Information: Evaluating the Proposal for a Government Data Mashing Lab",October 27 at: http://dx.doi.org/10.2139/ssrn.2142023 (19.2.2016).

[25] Snow, C.P. with Introduction by Stefan Collini (1993) The Two Cultures & A Second Look: An Expanded Version of The Two Cultures and the Scientific Revolution, Cambridge University Press

[26] Siems, Matthias (2016) Postmodern and Socio-Legal Comparative Law https://drive.google.com/file/d/0B-rh5ZtSRYAeaWNCRS1GbDI5YW8/view

3 Context in Comparator Countries

The initial part of the case studies outlined the overall context in which the community emerges/operates, and the environment of legal informatics technology deployed. The main findings are summarized below.

Table 3.1 CAMPO context

EU	UK	Netherlands	Austria
1958, Official Journal to publish multinationally uses permissive 'copyleft' licensing to ensure the widest possible dissemination and knowledge of European law at national level. The task of disseminating European law across the six original members, then to the 12, 15, 27 and current 28 has been a preoccupation of legal informatics in the European Union. Eur-Lex free to end users – comprehensive database. EU institutions, objectives and norms in Commission Decision 2011/833/EU	Large mature market with main working language English. Commercial dominance by large multinational legal service providers and law firms. UK not an original EEC member, 1974 expansion member with drafting language status. UK High Court and commercial arbitration cases heard in London have a very significant influence over international trade law due to the historic position of London as an arbiter of international disputes.	Mature and well-developed legal information services market (albeit language constrained), long-standing history of professional publishing (Kluwer, Elsevier etc). Particularly active and innovative public sector, so far focused on accessibility to legislation and case law. EU legislation and case law have a strong impact on the legal system. Court's interpretations and gap-filling decisions are integral part of what is 'the law'.	Austria has a civil law system with legislation as the central source of law. Case law is important for the interpretation though. EU legislation and case law have a strong impact on the legal system. There is an advanced public legal information system for Austrian legislation and case law, operated by the Austrian Federal Chancellery. The system is not interconnected with European sources of law. Several private publishing companies provide added-value information, mainly publishing commentary in printed and electronic form.

3.1 Legal System Context

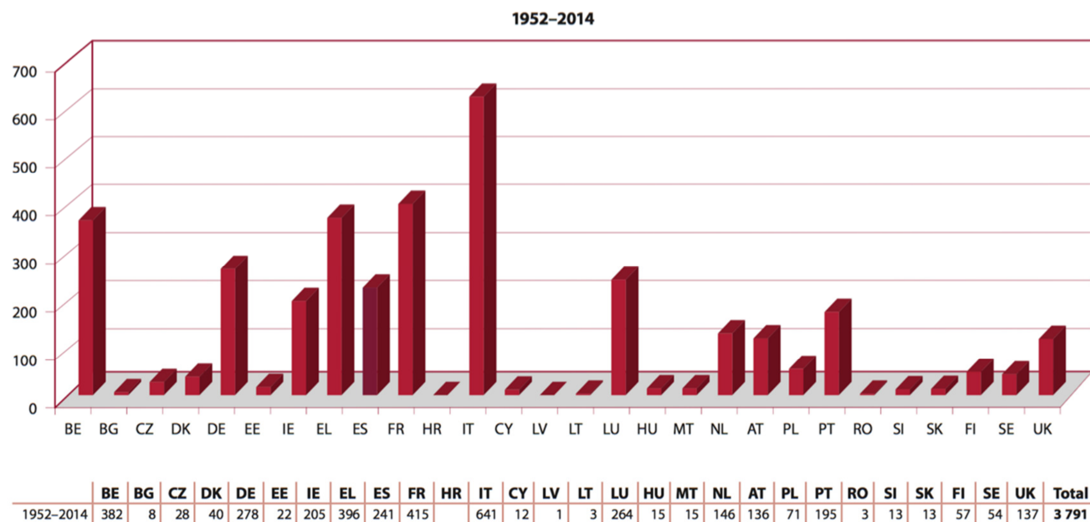
Their lengthy legal traditions, with minor constitutional interruptions in the twentieth century, makes England, Netherlands and Austria rather hard cases to propose a policy as revolutionary as lowering the barriers to legal education and open access to law. They are all "old cases", with largely unbroken legal histories stretching back to the twelfth century, by contrast with the European institutions' legal system which dates to 1958. Unsurprisingly, historical legacy and resistance to radical change in publishing, especially in automated digital publishing, is much greater in country case studies than EU law. Austria is a relatively small EU Member State, but active in European case law and the European Court of Justice (ECJ). Austria since 1995 (when Austria joined the EU) has 447 new references for preliminary rulings.[27] In that two decades, Netherlands, founding Member with twice as many citizens, presented 909 cases; UK, Member since 1973 and with a population eight times as big as Austria, filed 573 cases.

[27] European Court of Justice, Annual Report 2014, http://curia.europa.eu/jcms/upload/docs/application/pdf/2015-04/en_ecj_annual_report_2014_pr1.pdf (19.2.2016).

Austria	Verfassungsgerichtshof	5	
	Oberster Gerichtshof	103	
	Verwaltungsgerichtshof	81	
	Other courts or tribunals	258	447
Netherlands	Hoge Raad	253	
	Raad van State	101	
	Centrale Raad van Beroep	59	
	College van Beroep voor het Bedrijfsleven	151	
	Tariefcommissie	35	
	Other courts or tribunals	310	909
United Kingdom	House of Lords	40	
	Supreme Court	5	
	Court of Appeal	74	
	Other courts or tribunals	454	573

Table 3.2: New references for preliminary rulings

There have been 136 actions in its entire historic membership taken against Austria for failure to fulfil its obligations, compared to the Netherlands (146) and the UK (137) in their longer memberships.



	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	Total
1952–2014	382	8	28	40	278	22	205	396	241	415		641	12	1	3	264	15	15	146	136	71	195	3	13	13	57	54	137	**3 791**

Chart 1: General trends in the work of the Court (1952-2014)

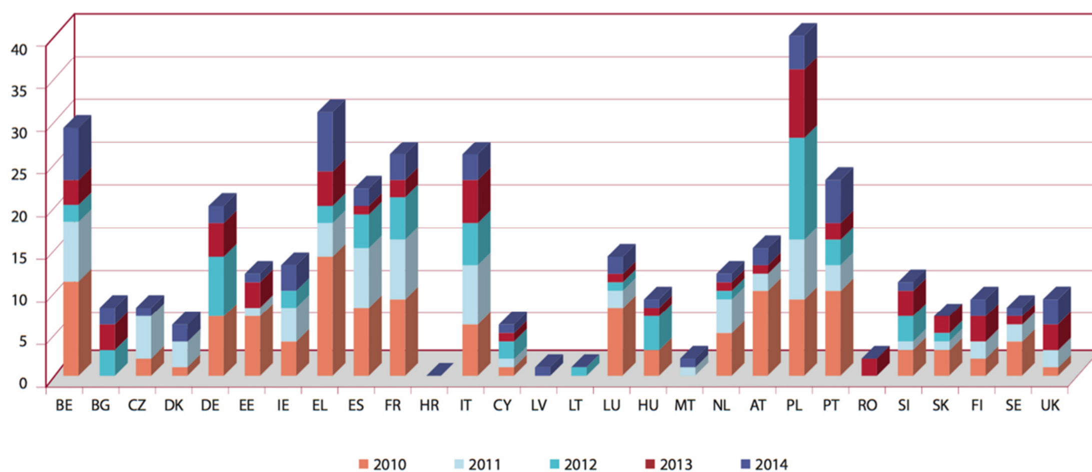


Chart 2: New cases – actions for failure of a Member State to fulfil its obligation (2010-2014)

3.1.1 United Kingdom

The United Kingdom comprises four nations: Northern Ireland, Scotland and Wales, each with their own legislative assembly and devolved powers on many matters, and the United Kingdom Parliament which legislates for England and for the other three nations on retained powers. In practice, this means England – which dominates the Union with almost 90% of its population and the economic power of the City of London – is a very unitary state, sharing its legal system with Wales. The legal context discussed in this case study is that of England and Wales, not Scotland or Northern Ireland. England and Wales has been a unitary state for 500 years, and its legal powers and highest courts have been centralized in London over that time. The courts in London have also dominated commercial dispute settlement for the former British Empire (now Commonwealth of 53 nations)[28], as well as de facto for the Gulf states and other territories. It is thus a legal system both enormously centralized and enormously internationalized. It is important to note the private sector oriented reforms of the UK legal publication market in the period since the 1980s, and the massive expansion of both multinational law firms and legal services firms, including publishing, to serve that market. The Law Society of England and Wales commissioned Oxford Economics to report:

> "370,000 people are employed in legal services in the UK. 63 per cent are solicitors or employed by solicitor firms. Growth in the legal services sector has averaged 3.3 per cent every year for the last decade - outstripping UK economic growth rate of 1.2 per cent. Net exports of legal services have grown by an average of 5.6 per cent per annum over the last 10 years, to £3.6 billion."[29]

3.1.2 Netherlands

The Netherlands has a civil law system, influenced, amongst others, by the French Napoleonic Code and German law, in line with other legal systems present in Continental Western Europe. Case law is a key source for understanding the law, especially where statutory norms are of an open character. In practice, it is very relevant to the shaping of subsequent judicial rulings, of law and of policy. Lower courts will follow Supreme Court (with the constitutional task to guard the unity of the law), CJEU and ECHR judgments, applying the usual methods of interpretation for cases that are not clearly addressed by higher courts. Access to court decisions is one important instrument, for both the court themselves (intra-court access) and the general public, to promote the unity of law.

The Dutch government has traditionally played an active role in releasing public sector information to its citizens, and saw, very early on, the opportunities that information and communication technologies (*ICT),* notably the internet offer in this respect. In other words, though the constitutional obligation to publish the laws and the 'copyright-free' status of laws as per the Dutch Copyright Act duly paved the way for the dissemination of legal information[30], it was very distinctively the policy undertak-

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[28] http://thecommonwealth.org/member-countries

[29] Law Society (2016) A £25 billion legal sector supports a healthy economy, 22 March, at http://www.lawsociety.org.uk/news/press-releases/a-25-billion-legal-sector-supports-a-healthy-economy/

[30] Article 88 of the Dutch Constitution declares that the 'publication and entry into force of Acts of Parliament shall be regulated by Act of Parliament. They shall not enter into force before they have been published'. In other words, laws must be published in order to have effect. Article 11 of the Dutch Copyright Act (DCA) also cleared that path further, indirectly incentivizing re-use and stripping legal datasets of a large part of its potential financial worth by asserting that 'no copyright subsists in laws,

en by the Dutch government since the late 1980s that was key to the development. This policy seems to have stripped away to a large extent the need for '*free access to law movements*', and legal information institutes in The Netherlands. In fact, these appear to be rather common law-related phenomena[31].

Another important characteristic of the Dutch state that helped ease the process is its unitary system, with a limited amount of rule-making at local and regional level, as well as a centralised judicial system.

However, it is worth noting that the original rationale for unifying and disseminating electronic legal information was efficiency driven. Until the early 1990s, the focus of the Dutch government was more on achieving efficient access to legal information for uses within public administration (law databases, parliamentary records system, etc.) than on informing citizens. The former State printer SDU was privatized, yet remained official printer and commercial exploiter of some legislative material. Kluwer became a major IT database expertise partner. Both remain the key legal publishers to date: SDU retained its traditional role as official printer and from there would venture into electronic (official) publishing, while Kluwer remained a powerful publisher of legal information with expertise (already at the time) in the provision of electronic access.

From the mid-1990s that the Dutch government started looking more to its own role in providing access to information to meet citizen needs, inspired by the development of the Web. In June 1997, the Dutch Ministry of Interior published a policy paper ('*Nota*') titled '*Towards the accessibility of public sector information (Naar Toegankelijkheid van Overheidsinformatie).* The paper set out a policy framework (*beleidskader*) for making electronic access to public sector information contribute to the democratic process and citizen participation, and to encourage the industry to develop new products and services based on government information[32]. Of particular relevance to this study, the document argues that *basic information* in a democratic constitutional state should be open and (electronically) accessible to all. Basic information comprises laws and regulations, court decisions and parliamentary records[33]. This position was confirmed in a later policy paper that also addressed access to administrative data and register data (e.g. cadastral, companies)[34].

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decrees or ordinances issued by public authorities, or in judicial or administrative decisions'.

[31] See J Bing , 'Let there be LITE: a brief history of legal information retrieval', European Journal of Law and Technology, Vol. 1, Issue 1, 2010 "Perhaps LIIs have been both most successful and most needed in jurisdictions where there has been a formal control of the publishing of legal sources, for instance by applying Crown Copyright. Partly, the LIIs represent a reaction to a restrictive and protective attitude towards making legal material available to the public."

[32] On a minor note, given the comparative purpose of these case studies, it might be worth noting that, already at the time, the UK website was considered *best in class* – and we presume, therefore, that it influenced the legal open data debate in the Netherlands.

[33] Regarding case law, it argues that decisions of particular importance for understanding the law should be published by the government itself. Access to administrative information is predominantly regulated by the *Wet openbaarheid van bestuur* (Wob). Finally, the document also tackles the issue of executive agencies and other government entities such as the Kadaster (the Cadaster), the CBS (National Statistics Office, *Centraal Bureau voor de Statistiek)* or the KNMI (Royal Meteorological Institute, *Koninklijk Nederlands Meteorologisch Instituut*). These were allowed to carry out certain market activities under strict conditions (e.g. no cross subsidies with public tasks).

[34] Memorandum presented to the Lower Chamber of the Dutch Parliament by the Minister for Urban Policy and Integration of Ethnic Minorities, '*Towards optimum availability of public sector information' (The Hague, April 2000, Lower Chamber, session year 1999-2000, 26 387, nr 7).*

3.1.3 Austria

Austria is a democratic, federal republic, covering nine provinces. Each of these nine provinces has its own government. On May 1st 1945 Austria's Constitution of 1920 as amended in 1929 (drafted by Professor Hans Kelsen) was re-enacted. Full sovereignty was re-established by the conclusion of a state treaty on May 15th 1955 between Austria and the Allies, France, the UK, the USA and the USSR. Austria declared its permanent neutrality by constitutional law and became a member of the United Nations. On January 1st 1995, Austria joined the European Union and also became a member of the European Currency Union. The 1995 enlargement of the European Union saw Austria, Finland and Sweden accede to the European Union. This was the EU's fourth enlargement and came into effect on the 1 January of that year. All these states were previous members of the European Free Trade Association (EFTA) and had traditionally been less interested in joining the EU than other European countries. The Austrian legal system is based on the civil law tradition and has its origin in Roman law.[35]

3.2 Legal Data Context

Legal texts are basic information of all democratic states. The Aristotlean argument is that everyone is presumed to know the law (*Ignorantia juris non excusat* when translated into Roman law or "ignorance of the law is no excuse"). Legal information must be accessible to all members of society to the widest possible extent, to aid inclusiveness and enable participation in public decision-making. In recognition of the public good in access to legal information, the EU and its Member States work to make laws, court decisions, etc. publicly available on line. Much has been achieved locally already. However, the sheer mass of legal norms, instruments and interpretations in courts decisions, commentaries and other sources makes it increasingly difficult for citizens, civil society, businesses and all involved in legal practices to locate the relevant law. Many have previously reflected on legal information in the wider setting of copy-righted public sector information (PSI) and the challenges of freeing such information (Ubaldi 2013). Many of the early tested ideas have flowered into the wider govern-ment #OpenData movement and work pioneered by the European Union 1989 Guidelines (Eechoud 2013), OECD and Gore-Clinton 'National Partnership for Re-inventing Government' (1993).

Legal data encompasses a three-part categorisation: legislation, case law, literature. There are several sub-fields which encompass the various regulatory and soft law documents that occupy the gaps between these three main categorisations. Legislation is collated by the government, case law has a less structured pattern of publication, and literature or commentary is found in learned journals and books, speeches by judges, online resources and the guidance issued by various bodies, notably Law Commissions, Law Societies/Bar Associations (LS/BAs), ministries and prosecutors, and other authoritative sources (authority claims combine expertise, organisation and venue of publication).

Big data for legal informatics predates the consumer Internet, with the Free Access to

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[35] Oehlboeck J., Gerstner I., updated by Barotanyi B. (member of the openlaws advisory board), The Austrian Legal System and Laws: a Brief Overview, http://www.nyulawglobal.org/globalex/Austria1.html (19.2.2016).

Law Movement (FALM) dating to the early 1990s when only corporations, governments and universities had high bandwidth networks capable of sharing such larger data sets. Much of the historic pre-Internet discussion of legal informatics relates to the effect of digital information retrieval on the work of lawyers and courts. Bing explained that the origins of legal informatics effects in access to law date from the 1970s in pioneering academic-professional collaborations . Biegel lays out the effects of the Internet on the usefulness of traditional enforcement techniques across several branches of the law, following the pioneering work of Berring. Katsch's pre-Internet but very Internet-aware critique of print media and transformative effect of digital information on the law, states: "The process of legal readjustment that will be necessary in the future may prove painful to those who idealize the current model of law, who mistakenly associate the rules of law with the rule of law, or who do not understand that what we have now is not perfect and has never been static." Suss-kind provides an updated provocation on the possible future effect of informatics on lawyers, including legal publishing.

The latest financial estimates for legal information and services are most accurate for the United States market, unsurprisingly given that the US is a single market that is still valued more highly than the entire rest of the world including the EU . According to Reed Elsevier, the second largest private legal information provider, the US market is 53% of the entire global legal services market of $625billion, with the whole of Europe at 30%. The market is growing at about 5% per annum. The same source (slide 10) suggests that the US market accounts for 57% of the entire legal information solutions market of US$18billion, with Europe 30% or $5.4billion in 2011. This market typically accounts for c.3% of the global legal services market, which includes law firm revenue and internal corporation and government spend. Glassmeyer and Smith state that "it is nearly impossible to find, cite or read the law in the United States without someone paying a for-profit corporation for the ability to do so". At an exchange rate in 2012 of approximately €1=$1.30, that values the European market as a whole at €4.15billion in 2012.

Note the dominant use of search engines to find publicly indexed law sources, notably Google. The Openlaws.eu 2014 user survey showed that Google remains more used than Lexis-Nexis or any other database. While this is a generic search engine rather than a legal-specific database, its powerful search ability means that it is the largest legal source index in the world, and its advertising-funded business model further distinguishes itself from subscription databases .

Much legal information remains published and administered by a limited number of organizations, typically in closed structures in public authorities and public private partnerships. This includes the management of legal metadata, which is the basis for automated processing. Legal scholars and practitioners publish mainly through traditional highly specialized commercial publishing or isolated websites. Return channels and interactivity with users are limited, and there is little space for contributions from wider communities. Fully automated processing of legal data is not yet possible. Strikingly, whereas in many domains such as spatial information (see INSPIRE[36]) and life sciences research data, open information infrastructures are rapidly developing, this is not the case for legal information.

[36] Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE), OJ L 108, 25.4.2007, p. 1–14, entered into force 15 May 2007

The challenge is to link local legal information and have in place structures to enrich it through aggregation and mass customization. The technological possibilities to achieve this are there. This contributes to better access to legal information and ultimately to better governance, both of which support higher social welfare goals.

3.3 Legislation

Legislation is in general not subject to copyright and can be freely reused – though there are exceptions such as the United Kingdom. Australia reformed its copyright for legislation very recently, permitting reuse and the creation of the AustLII database[37].

A relatively comprehensive European source is Eur-LEX, detailed in the EU case study. Comparative studies of European legislation show widely divergent practices in publication[38], as do studies of common-law (Anglo-American) legal systems[39].

3.3.1 Austria Legislation

The official Austrian legal information system RIS (Rechtsinformationsystem des Bundes) provides free access to legislation and case law in a centralized system. The platform has won several awards, including the IALL 2013 Website Award of the International Association of Law Libraries.[40] Since April 2012, the RIS data sets are also available for free as open data, which enables third parties to build applications on top of Austrian legislation and case law. This was the starting point of the successful RIS:App. The RIS open data interface was changed end of 2015 to a more comprehensive interface, providing not only federal and state legislation, but also case law from the high courts and several other lower courts.

3.3.2 Netherlands Legislation

In the course of the 1980s, the Dutch central government decided to outsource the creation of a consolidated databases with law and regulation to a consortium led by Kluwer. Departments of central government were guaranteed access under the contract. However, the consortium had also undertaken to exploit their product, a database called ADW*(Algemene Databank Wet- en Regelgeving)*, at their own risk and expense, serving the wider public sector but also companies and individuals at 'market' prices. The consortium retained the database IP rights in the collection, a controversial move[41]. Following the new access policy, as soon as the contract with Kluwer expired in 2000, a new deal was struck. The maintenance and consolidation of amendments was outsourced. The legislation database became freely accessible to everyone on the internet.

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[37] Rubacki Michael (2013) Free access online legislation in a federation: Achievements of Australian Governments and issues remaining, Presented at the AustLII Research Seminar, 7 May 2013, Australasian
Legal Information Institute (AustLII), Sydney, reproduced in 2 Journal of Open Access to Law 1 (2014) at http://ojs.law.cornell.edu/index.php/joal/article/view/9

[38] See Donelan, E. (2009) "European Approaches to Improve Access to and Managing the Stock of Legislation" Statute Law Review. 30(3), 147

[39] Cox, N. (2006) "Copyright in Statutes, Regulations, and Judicial Decisions in Common Law Jurisdictions: Public Ownership or Commercial Enterprise?" Statute Law Review. 27(3), 185

[40] International Association of Law Libraries, The IALL 2013 Website Award Winner is Austrian Legal Information System Rechtsinformationssystem des Bundes (RIS), http://iall.org/iall-2013-website-award-winner/ (19.2.2016), see also section 6 "Practices".

[41] See M van Eechoud, 'Openbaarheid, exclusiviteit en markt: commercialisering van overheidsinformatie', *Mediaforum* 1998-6, p 177-184.

Today, www.wetten.nl has *consolidated* legislation going back to 2002[42]. The maintenance of the legislation database is currently performed by SDU, on the back a public tender. It is, in fact, this database that also forms the basic element of the SDU commercial portals (OpMaat, Rechtsorde) and it is also one of SDU's selling points: the legislation database product can be offered for free. It is worth noting, for the sake of clarity, that the publication is offered in two different layers: *wetten.overheid.nl* responds to the needs to make the data user-friendly. The Open Data layer itself can be found at *www.data.overheid.nl/data/dataset/basis wetten-bestand*. Here, the *BasisWettenBestand*, the raw data, can be downloaded in bulk for future (re) use[43].
In the meantime, Kluwer continues to produce and maintain its own legislation database as the company believes it has at least as many functionalities as the one produced by the government (and maintained by SDU)[44]. By doing so it also retains the know-how and the product to be able to compete again in future public tenders.

As with Kluwer, it was also the former State printer, SDU, already privatised, that, further to the existing framework agreement regarding the publication of the official state bulletins, was also responsible for publishing parliamentary records (*kamerstukken, handelingen en officiële publicaties*) from 1995 onwards. These platforms ran in parallel to the information offered, in part, by the parliamentary website and later, since 1999, by overheid.nl[45]. In July 2009, the Electronic Publications Act (*Wet Elektronische Bekendmaking*) was enacted in the Netherlands. The law made electronic (pdf) versions of official publications the authentic versions. Centralised access to legal information under the new framework of www.officielebekendmakingen.nl is now as follows:

Table 3.3 Structure of Dutch Official Publications website

Officiele bekendmakingen, www.officielebekendmakingen.nl *(part of www.overheid.nl)*				
	Staatsblad	*Staatscourant*	*Tractatenblad*	Parliamentary Proceedings
Organ	Min. Justice, published by SDU	Min. Interior	Min. Exterior	Parliament
Content	Official Bulletin, laws, decrees, regulation (as per constitutional obligation)	Governement Bulletin', resolutions from the cabinet of ministers etc...	International agreements, decisions	Parliamentary Proceedings
Digital availability	Texts since 1995	Texts since 1995 (only partly available before 2009)	Texts since 1951	Texts since 1995.
Official (authentic) version	Digital (.pdf version), since 2009 Print, before 2009	Digital (.pdf version), since 2009 Print, before 2009	Digital (.pdf version), since 2009 Print, before 2009	Digital (.pdf version), since 2009 Print, before 2009
Available formats	Digital only: .pdf, .odt, .xml	Digital only: .pdf, .odt, .xml	Digital only: .pdf, .odt, .xml	Digital only: .pdf and .xml
Outside www.officielebekendmakingen.nl	----	----	----	- Texts 1814-1995 to be found in www.statengeneraaldigitaal.nl. Available under PDF or text - Pre-official and draft texts since 1995 also available at the websites of the individual chambers: www.eerstekamer.nl, www.tweedekamer.nl

Since 2013, some local and regional bodies have also decided to make their official bulletins (*Gemeentebladen, Provinciale bladen, Waterschapsbladen*) available through this (central) site[46]. A special unit working for the Ministry of the Interior is

[42] Unconsolidated legislation goes back much longer.
[43] P Bartelings, M van der Kaaij en J Soeters, Open Access in de juridische praktijk, 16 December 2013.
[44] Source: interview with Wolters Kluwer, May 2015.
[45] When overheid.nl was first launched in 1999 it still did not contain legislation, which was still under exclusive agreement of the Kluwer consortium.
[46] Local and regional bodies have an obligation to publish their *consolidated* regulation as per the central government's publishing infrastructure of overheid.nl (*Central Voorziening Decentrale Re-*

responsible for these publications. KOOP (Knowledge Centre for Official Government Publications) was set up with the mission to transition the official journals *Staatscourant*, *Staatsblad* and *Tractatenblad* to digital authentic versions and to enhance their visibility on the internet. It is now the body responsible for the upkeep of a consistent and standard procedure in the electronic publishing of official documents. KOOP works closely with SDU in this process.

3.3.3 UK Legislation

The range of institutions involved in the creation and development of European law is mirrored at national level in the case studies. Note that the national implementation of European law is a significant element of the legislative task of national governments (in the UK via the European Communities Act 1972). UK legal information space consists of: legislation, case law, commentary. We can break down the former into:

- Acts of Parliament, Stautory Instruments, Regulations, European implementing instruments
- other instruments such as Orders in Council (of the Privy Council) published in the Official Gazette,
- grey literature creating 'soft law' such as Impact Assessments.

Parliamentary and government documents are subject to Crown Copyright. Since 1889, Crown Copyright is administered by HMSO on behalf of government, a body formed in 1786 to print legislation and other official documents on behalf of the King's Printer. Despite this official function, other printers have over the course of time been used – HMSO itself was set up to prevent the corrupt practice then of auctioning the monopoly on official printing to the highest bidder. Legislation, legislative proposals, consultations and other official documents have only been free to the public since they were placed on the Internet by HMSO in the late 1990s.

Legislation is available via legislation.gov.uk though note from the Openlaws survey responses that legislation in preparation and during the interaction between institutions has been criticized by users[47]. This also brings into the legislative access environment the various regulators. The various websites of all these organisations need evaluation for ease of access, though all offer free access to materials at point of use. Note also the role of the executive agencies, such as Ofcom and the Competition and Markets Authority, the ministries such as the Department for Business with particular executive responsibility.

3.4 Grey Literature

In addition to national and European legislation, there is a growing body of subsidiary legislation, from that devolved to nations and regions (for instance autonomous regions such as Comunidad Valenciana or the nation of Scotland), as well as a body of secondary or enabling legislation/regulation that is in many countries much larger than primary (i.e. fully deliberated) legislation. In the UK, there are 3300 Statutory Instruments per year, a substantial rise since the 1980s. All instruments since 1987 are available in a much-used public database, legislation.gov.uk[48].

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gelgeving).

[47] For raw anonymized analytics, see https://docs.google.com/forms/d/1MVdScU8Unm0sdNBXsTgMM2A36TPvnlduMsjdIWo4DLE/viewanalytics

[48] See http://www.legislation.gov.uk/uksi

Database rights and updating procedures vary widely across member states, and the statutory databases may not be up to date at any one time given the restrained resources available to national records offices. As a result commercial offerings may be more reliable indicators of current legislation as updated[49].

The format and clarity of legislation is an important element in its presentation to the legal community and public. If legislation is presented in proprietary formats or in a manner which prevents effective linking (for instance with insufficient XML mark-up to individual sections), that can significantly compromise its usability. The use of common identifiers is essential to allowing re-use of legislative material, and may other good practices have been identified by Poulin[50]. As he explains, better access to legislation is of most use to that section of the public most engaged with legislative interpretation: professional lawyers.

Legislation is not merely consumed by citizens. Experiments are taking place in 'crowd-sourcing' legislative proposals via the Internet, but citizen-inspired petitions for law-making date to the earliest civilizations. Experiments with using Internet-based discussion to initiate law include the European Citizens' Initiative introduced under the Lisbon Treaty 2009[51].The most well-known recent examples are the proposed though non-enacted Icelandic constitution of 2011-12[52], the many 'federal popular initiatives' in Switzerland where direct democracy has an extensive unbroken history and which actually mandate legislators to enact legislation approved by referendum within a year[53], and in California and other members of the United States, where the Fifth Amendment to the Constitution permits constitutional amendments subject to ratification by three-quarters of states or of State Ratifying Conventions.

3.4.1 Secondary Material: Explanatory Notes and 'Soft law'

Alongside primary legal materials, there has been huge growth in secondary material which explains and aids interpretation of that primary material. This may include digitised parliamentary records, which now includes minutes of evidence to parliamentary committees and drafts of reports made available via parliamentary websites. There is also a large amount of material made available for parliamentarians to aid their debates which is then made public via the libraries of parliament[54], for instance detailing Impact Assessment methods used and the intention and debate which led to legislative initiatives[55]. This secondary evidence is vital to the courts and lawyers assessing test cases under new legislation.

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[49] See Hetherington, Simon (2007) *Halsbury's Laws of England: centenary essays*, LexisNexis Butterworths.

50 Poulin, Daniel (2014) Meaningful public access to legislation, presentation to Nudging Regulations conference, Canadian Institute for the Administration of Justice in Ottawa, September 9th, at https://lexum.com/en/publications/meaningful-public-access-legislation

[51] See Regulation (EU) No. 211/2011 of 16 February 2011 on the citizens' initiative, and http://ec.europa.eu/citizens-initiative/public/initiatives/finalised/answered?lg=en

[52] Wasserman, Todd (2011) *Iceland Unveils Crowdsourced Constitution*, Mashable, 29 July at http://mashable.com/2011/07/29/iceland-crowdsourced-constitution/

[53] For instance, the Executive Pay Law of 2013: http://en.wikipedia.org/wiki/Swiss_executive_pay_referendum,_2013

[54] See e.g. European Parliament Research Service (2014, 25 March) Net neutrality in Europe, 140773REV2.

[55] For instance, the recent detailed evidence in PE514.071 (2013, October) "Initial appraisal of a European Commission Impact Assessment (SWD (2013) 331, SWD (2013) 332(summary) of a Commission proposal for a Regulation of the European Parliament and of the Council laying down measures concerning the European single market for electronic communications and to achieve a Connected Continent, and amending Directives 2002/20/EC, 2002/21/EC and 2002/22/EC and Regulations (EC)

In many jurisdictions, the decision to open up parliamentary records/documents in legislative processes was informed by potential of digital technology and shift to digital within administrations/legislatures. Freedom of information (FoI) law has had a transformative effect on the amount of such material placed in the public domain, as has digitisation. Because of *trias politica*, FOI traditionally do not also cover documents from parliaments, courts (see e.g. Netherlands). The amount of material released through executive agencies at arms' length from ministries has also grown enormously, with for instance the websites of the communications regulators containing a huge amount of regulatory orders (e.g. Body of European Regulators of Electronic Communications). The appeals processes and tribunal data from these agencies has also substantially increased as the regulatory agencies' work has evolved, such that competition lawyers are often more concerned with decisions of the national competition agencies than the courts.

Furthermore, legislatures increasingly pay close attention to, or delegate detailed legislative research work to, statutory Law Commissions, which investigate areas of the law in need of reform. Added to such legal reform work is that of Parliamentary Commissions of Inquiry, often judge-led into particular incidents. Such inquiries can be enormously valuable but also enormously comprehensive, and were extremely difficult to research in the pre-digital era. However, recent advances in digital evidence submission have resulted in easy searching of for instance the UK Leveson Inquiry Part I, whose report alone amounted to 2500 pages[56]. Often these inquiries and commissions have their own website to establish their independence, which leads to problems in archiving the material available.

3.5 Case Law Reporting

Case law is an area of legal information publishing which has very significant challenges in different jurisdictions. Recently the 7th Framework Programme EUCases project has completed a state-of-the-art report in this area[57]. In some countries, case law of at least the constitutional or Supreme Court is published by government, with private publication of High Court or superior court proceedings, and no reporting except in unusual circumstances of lower court proceedings. Other countries have a far more comprehensive approach, with publication of judgements in even employment, immigration and other tribunal cases, and family court disputes. The latter categories involve sensitive personal information which on balance judges and court officials may not wish to see published, though interpretation of the transparency of justice requirement balanced against the protection of sensitive personal data varies substantially, driven in part by different traditions of transparency in publication.

We can therefore identify officially published, unofficially commercially published, and unreported cases. These vary so much by territory that they are dealt with in depth in country case studies for England and Wales, Netherlands and Austria. Historically, such materials were made available privately, with legal historians documenting both trial reports and customary law declarations by judges and monarchs dating to the early mediaeval period, in for instance Flanders, Germany and Eng-

[56] Leveson LJ (2012) *An Inquiry Into The Culture, Practices And Ethics Of The Press*. The full report is only 2500 pages, the evidence into the report is closer to 100,000 pages or 5,000,000 words.

[57] EUCases (2014) *Deliverable 1.1: Report on state-of-the-art and user needs* at : http://eucases.eu/d1_1/ summarised at http://eucases.eu/fileadmin/EUCases/documents/Presentations/Torino2014/APIS_LOD_State-of-the-art.pdf

land[58]. Much legal information also survives from the Roman period, which proved vital to formative pre-modern European conceptions of justice. Organised records of case law remained fragmentary until the eighteenth century in England, and in nations with less need of precedent-setting court reporting, this was even more the case. Therefore, the modern era of court reporting typically began with commercial publication on behalf of professional lawyers in the capital city, reporting on the higher courts. Customers were both lawyers and judges, but particularly the libraries of legal societies such as the Inner Temple in London. Edmund Coke's "Institutes of the Lawes of England" dates to 1628-44 and forms an early example of such works.

Lower US court decisions are now also very widely available, financed by credit rating agencies which have strong interests in ensuring transparent access to data on personal insolvency and debt judgments[59]. The US system is fragmented, partly due to the lack of a common citation system until the late nineteenth century when adopted by the founder of what became Westlaw. Similarly, English court cases relied on competition between private reporters to provide case summaries and judgements until the twentieth century. Even in the twenty-first century, there is fragmentation below the appeal court level[60].

3.5.1 English Case Law

Case law has also inherited an unusual legal status as a result of British history. Judges had vociferously maintained independence as a result of the tumultuous revolutionary seventeenth century political upheavals which resulted in Civil War, execution of the king, declaration of a republican Commonwealth, restoration of monarchy, deposition of monarchy and invitation to a reformed Dutch liberal monarch to form a limited parliamentary monarchy[61].

Judges' independence is maintained by their position independent of monarch, government and Parliament, and judges are formally not employed as civil servants by the Crown[62]. As a result, bizarre though it may appear, judicial statements including the actual decisions of judges are in the gift of the judge who may maintain copyright and decide where they are published. In practice, the shorthand writer for the court produced a verbatim transcript, which could then be used by both commercial reporters and the Incorporated Council of Law Reporters (ICLR) at the clerk of the court's discretion, as well as BAILII (British and Irish Legal Information Institute). English law reporters have been active since the early fourteenth century, editing reports from

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[58] See generally Musson, Anthony and Chantal Stebbings Eds. (2012) Making Legal History: Approaches and Methodologies, Cambridge University Press. Also see D. Heirbaut (2001) The Belgian legal tradition: does it exist?, in: H. Bocken and W. De Bond teds. Introduction to Belgian law. Mechelen pp 1-22. Brand, P. (1996) The Earliest English Law Reports, Voumes I and II, London: Selden Society.

[59] See https://www.pacer.gov/psco/cgi-bin/links.pl

[60] To take an example, Bailey Solutions Ltd provided the technical solution for Legal Online Research Databases (LORD) – a BIALL project designed to remove fragmentation of English law reports, by pooling metadata for titles. The problem remains unresolved due to lack of resources. Source: Openlaws interview with Penny Bailey, 28 May 2014.

[61] The last British King of England was deposed in1689, replaced by Prince William of Orange from the Netherlands followed by his descendants, then the Electors of Hannover whose descendants still reign. In this manner, monarchy remains limited yet has avoided the convulsions of the past 325 years in the rest of Europe. See Lesaffer supra n.2 at p387.

[62] Act of Settlement 1701 (12 and 13 Will 3 c 2 Article 3 clause 7) Judges hold their positions *quamdiu se bene gesserint*. They can only be removed upon the address (vote) of both Houses of Parliament.

the Papal Rota at Avignon[63].

The formalization of “official” law reports progressed rapidly from the foundation of the ICLR in 1865. As with so many English historical traditions, law reporting was seamlessly and effectively repurposed by the mid-Victorians into a process that continues to the current period. Case law encompasses the High Court of Justice, Courts of Criminal and Civil Appeal and Supreme Court, as well as specialist courts and tribunals. One should also note the decisions of the UK High Court and commercial arbitration cases heard in London have a very significant influence over international trade law due to the historic position of London as an arbiter of international disputes over for instance marine and insurance law. Commercial databases such as that of Reed-Elsevier (Lexis-Nexis) and Thomson-Reuters (WestLaw) are the “Big Two” main commercial databases used.

3.5.2 Netherlands Case Law

courts have an important role in shaping the law, especially with respect to open norms and any ‘*gap-filling’*. As elsewhere, to correctly understand statutory law also requires access to its interpretative case law. Case law publishing has traditionally been a commercial endeavour[64]. Since the 19th century, Kluwer, SDU but also smaller publishers, have published a variety of case law periodicals, catering to the judiciary, public administrations, law firms, to universities, etc. They had the workforce and financial means to support the process of production and distribution of such products, as well as a network of contacts within the court system.

The website *www.rechstpraak.nl*, launched in 1999, was the result of the different projects undertaken by the government to create a nationwide intranet and make judicial cases available across courts and the government in a consistent manner under a single interface[65]. The public website was also triggered by the 1997 Cabinet document that identified the need to develop the internal *Justex* database into an electronic database freely accessible to all citizens. As part of this process, a universal case law identifier named ‘LJN’was introduced. It has since been replaced by ECLI, described below.

Today, the database is the official source for Dutch case law, and is maintained by the Council for the Judiciary[66]. Rechtspraak.nl is a portal with metadata on about 1.7 million decisions and full text for about 300,000 cases. The database continues to grow by some 30,000 cases annually[67]. Open data is a web service available for both retrieval of the documents themselves (court decisions) and / or (ECLI) metadata in XML format. In the Netherlands, the ECLI identifier has beenimplemented

[63] Thomas Falstoff was the Cambridge educated law reporter credited with the invention of formalized case judgment publication. See Baker, J. H. (1986) Dr Thomas Fastolfe and the history of law reporting, Cambridge Law Journal, vol. 45 pp. 84–96

[64] The principles laid out by article 121 of the Dutch Constitution (that courts sit in public and decisions are given in public) and article 6 of the European Convention of Human Right (on due process) were not considered to mandate active publication of all court decisions by government or courtsystem.

[65] The unit tasked with the mission was a division of the Council for the Judiciary (*Raad van de Rechtspraak*) called BISTRO (*Bureau voor Internet applicaties en toepassingen voer rechterlijke organisatie*), BISTRO merged in 2011 with the IT organisation of the Judicial Organisation (ICTRO) to become Spir-it, the ICT company for the Judiciary. See also Prof.mr. H. Franken et al, Recht en Computer (5th Ed, 2004, Kluwer, Deventer) 602.

[66] The Council was established in 2002, as part of a policy aimed at improving the independent management of the court system (limiting the powers of the Minister of Justice).

[67] 2010, Mommers and Zwenne. See also *Jaarverslag 2014 De Rechtspraak*. In 2014, there were almost 1.8m court cases in the Netherlands.

throughout the judiciary, from the Hoge Raad (Supreme Court) to district courts. The Council for the Judiciary coordinates ECLI. It was introduced in June 2013 and replaces the former country case number (LJN). ECLI should make it easier for distributed commentary and content integration services to develop over the coming years: legal information and improved search capabilities are likely to play a key role[68].

Only a selection of decisions is published. Dutch constitutional law dictates that court hearings are conducted and decisions given in public. There is however no general law that mandates publication of the text of (every and all) court decisions. The Council has developed objective criteria to aid decision making on publication (legal or societal relevance outside the boundaries of the dispute decided being one key factor)[69] and meet the requirements of data protection law (i.e. anonymization policy). Of the decisions published, almost 50% come from the criminal court/court of appeal and around 35% from civil law courts (family law excluded).

3.5.3 Austrian Case Law

The Legal Information System of the Republic of Austria (Rechtsinformationssystem, RIS) is the central platform and data base providing information on Austrian law.[70] Its main contents are legislation in its current and historical version (federal and state), law gazettes (federal and state) and case law. The Legal Information System also serves as the framework for the authentic electronic publication of the Federal Law Gazette and of the State Law Gazettes (This means the electronic format is the binding version). However, consolidated versions in the RIS are no authentic versions, even though the general public and legal experts trust in the system.

The RIS also publishes a few English translations of highly relevant legislation for informational purposes, e.g. the Federal Constitutional Law, the Consumers Protection Act, the Data Protection Act 2000, the Federal Act Against Unfair Competition and others (not necessarily always in the latest version).[71]

The interfaces to the RIS have been updated in winter 2015. The new REST API (connector version 2.0) now provides much more data and metadata as open data, including case law from Austrian high courts.[72] In the Global Open Data Index, the RIS scores 90% in the area of legislation (NL: 90%, UK: 100%).[73]

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[68] E.g. the MARC model (Model for Automated Rating of Case Law), makes it possible to rate the importance of a particular statement on the basis of 'legal authority'. In the words of its author (Marc van Opijnen, a KOOP employee): "MARC does not try to establish the uniqueness of single decisions by trying to understand the legal reasoning, but instead uses the wisdom and opinion of the legal crowd to establish whether a decision will play a role in future legal practice and debate".

[69] The 2012 Selection criteria of the Council for the Judiciary are based on the Recommendation of the Committee of Ministers of the Council of Europe from 1995. See https://www.rechtspraak.nl/Uitspraken-en-nieuws/Uitspraken/Paginas/Selectiecriteria.aspx for full criteria. Most important criteria are: 1st: All the case law of the highest courts (4) and some other specific chambers has to be published unless they very obviously are irrelevant (e.g. cases having been rejected for formal reasons); 2nd: Cases with specific legal features. E.g. those involving preliminary questions to Court of Justice or some other specific procedures; 3rd: All Criminal cases where the defendant has been convicted to prison of four or more years; 4th: Those cases that have drawn media attention or have been discussed in legal literature; 5th: All other cases, as much as possible.

[70] RIS, Austrian Laws in English, https://www.ris.bka.gv.at/defaultEn.aspx (19.2.2016).

[71] RIS, full list of Austrian Laws in English, https://www.ris.bka.gv.at/RisInfo/LawList.pdf (19.2.2016).

[72] Data.gv.at, Offene Daten, https://www.data.gv.at/ (19.2.2016).

[73] Open Knowledge, Global Open Data Index, Legislation, http://index.okfn.org/dataset/legislation/; However, the data from Austria is complete and up-to-date in contrast to UK legislation (which still has

An interesting conflict arose at the end of the 1990s, when the RIS was opened up to the public. Publisher Manz and the RDB claimed that the free online service of the government would lead to unfair competition on the legal information market. In a settlement Manz and the Austrian government agreed, that the government has the right (actually the duty) to provide citizens free of charge with (primary) legal information, while the publishing of premium content (such as literature) should remain in the domain of the legal publishers.

to work on its back-log), which should theoretically lead to a better ranking of Austria compared to the UK.

4 Actors in Comparator Countries

The second category, Actors, is the most heterogeneous of categories, given the national diversity expected of the case studies (indeed, were actors homogenous the case studies would have been poorly selected). We divide actors into producers, examined in this chapter, and users (who may also author) examined in Practices below.

Table 4.1 CAMPO actors

EU	UK	Netherlands	Austria
Office of Official Publications; EurLEX unit DG Justice	Office of Public Sector Information (OPSI); Legislation.gov.uk unit Her Majesty's Courts and Tribunals Service (HMCTS) Ministry of Justice	Ministry of Interior (Executive) -Knowledge Centre for Official Government Publications (KOOP), part of the Ministry of Interior, as centre of expertise for the publication of (official) legal information and open legal data. -Parliament (Legislative) -Judiciary (Council for the Judiciary) -Ministry of Justice (pays for legal system)	Parliament Ministry of Justice Ministry of Finance Austrian Federal Chancellery Judiciary Public authorities
Multinational legal publishers (member state analysis in country case studies)	Multinational legal publishers (member state based – e.g. Reed Elsevier)	Legal Publishers: *Commercial* incl. SDU (historically close to the public sector) and SMEs, Kluwer and Boom, eminently oriented at the private sector. Content Integrators (Legal Intelligence, Rechtsorde)	Legal publishers: Lexis Nexis, Manz (Wolters Kluwer), Linde, Verlag Österreich (Springer was acquired by …) Chamber of Commerce
No Legal Information Institute for EU, Italian start-up (EuroLII) in process. Commentary provided by Brussels affiliates of international law firms + European law academics based in national universities	British and Irish Legal Information Institute (BAILII) Incorporated Council of Law Reporters (ICLR) Commentary provided by London affiliates of international law firms + law academics based in national universities	*Non-commercial*: Ars Aequi (ties with academia, non-profit) - Learned societies, legal communities: journals: Commentary (law firms, practicing lawyers, law students, legal academics)	Literature/commentary: law firms, practicing lawyers, law students, legal academics Businesses (end users) Citizens (end users)

4.1 Producers of Legal Information

4.1.1 Private Sector Led Development of Legal Information

The British government has been oriented towards supporting the private sector throughout its industrial and pre-industrial history, most notably since the Napoleonic Wars. This is in contrast to the strong statist principles inculcated by absolute monar-

chy followed by Napoleonic strong public administration (followed by post-1815 hybrid) in most European states[74]. The idea that the “small state” supports both personal freedom and private entrepreneurs was most forcibly argued in colonies including the post-independence United States, but was a cause supported by most nineteenth century British governments. It is not coincidental that legal publication in this period was formalized in non-state hands through the not-for-profit ICLR founded in 1865, which only attained charitable status in 1971. The Crown (government) maintained copyright in government documents, including legislation, delegated laws and preparatory documents, via Crown Copyright, and Her Majesty’s Stationary Office (HMSO) sold legal acts and other documents, including consultation documents prior to legislation, until the twenty-first century.

4.2 Commercial Publishers

Commercial publishers remain the largest resource for legal professionals wishing to access the widest range of law materials. They provide integrated legal information services, combining legislation, case law, academic and professional commentary into services tailored for certain domains (e.g. labour law, tax law). Their funding model can be a mixture of pay per download/pay per view/pay per institutional by size, etc. These include Lexis-Nexis (Reed Elsevier), Westlaw (Thomson Reuters), CCH/Kluwer Law (Wolters Kluwer) and others. Their model dominates the legal professional use of information resources, and is a €multi-billion business. As detailed earlier, they divide their business sectors of users into large, small, public and private, as well as academic libraries.

Government policies towards selling primary legal materials and allowing court reports to be distributed privately – though ostensibly not for profit – led to a cottage industry in publishing to emerge in the twentieth century in all our case study countries. This cottage history in legal services became highly profitable, and by the mid-twentieth century firms began to merge with financial services firms – not least because both occupied printing businesses serving banks and attendant law firms. By the late twentieth century, the mergers had become multinational, resulting in the “Big Two” publishers of legal information (and financial): Thomson-Reuters and Reed-Elsevier. Thomson, originally a Canadian corporation, bought UK legal publisher Sweet & Maxwell in 1989. Thomson merged with Reuters in 2008. Reed and Elsevier merged in 1992. These two firms in turn swallowed the largest online legal information providers Westlaw (acquired by Thomson in 1996) and Lexis-Nexis (then-named Mead Data was acquired by Reed Elsevier in 1994 for $1.5billion)[75].

Lexis Nexis estimates that its market share is 14%, with leader Thomson-Reuters at 19%, Wolters-Kluwer at 11% and no other firm with more than 2%, showing the market to be fragmented outside the United States[76]. Lexis Nexis classifies five major customers for legal data:

[74] Lesaffer, Randall (2007) European Legal History: A Cultural and Political Perspective, Cambridge University Press, at pp.387-419.

[75] See Munroe, Mary H. (2004) "Thomson Corporation Timeline". The Academic Publishing Industry: A Story of Merger and Acquisition at http://www.ulib.niu.edu/publishers/ReedElsevier.htm

[76] For accusations of commercial duopoly threatened by open access, see Hall, David (2012) ‘Google, Westlaw, LexisNexis and Open Access: How the Demand for Free Legal Research will Change the Legal Profession’ 26 Syracuse Sci. & Tech. L. Rep. 53.

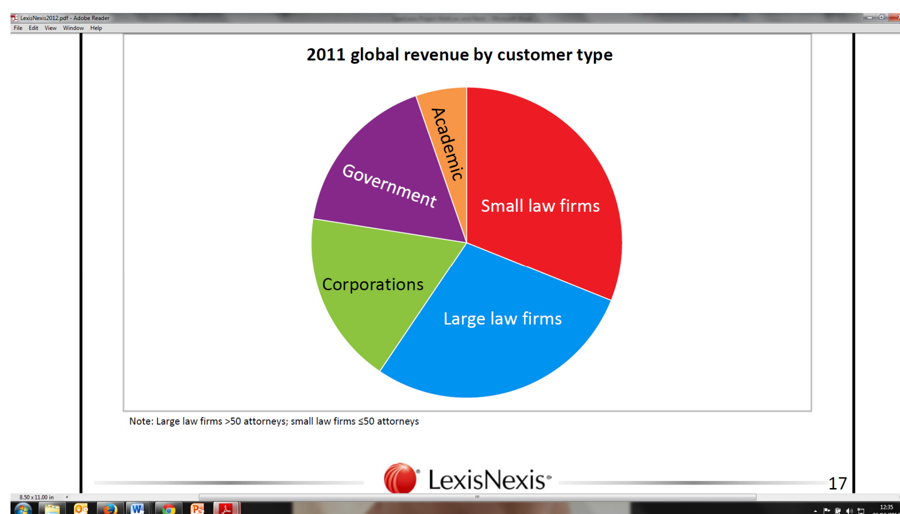

Figure 4.1: Slide 17, supra n.33 figure.1. Lexis Nexis customer base

These five key markets are assessed in the Actors chapter: large and small firms, in-house counsel, government officials of all types (from policemen to bailiffs via judges) and academia. Lexis Nexis draws about 70% of its revenues from subscription rather than one-off payments, consultancy or advertising, in a similar manner to news journals, where print subscription is gradually being replaced by digital[77].

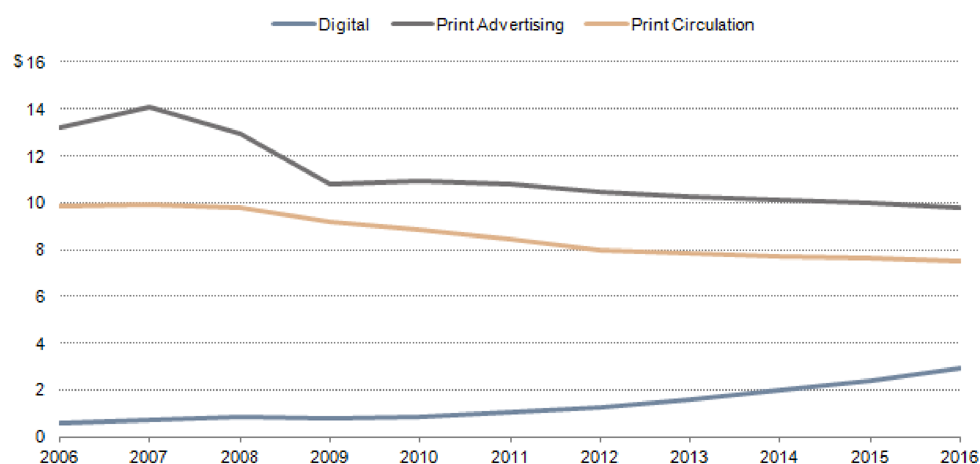

Figure 4.1: Pew 'State of the News Media' citing Verona Suhler Stevenson estimates to 2016

Note also that Lexis launched in 1973, Nexis (news) in 1980, but that the web-based platform was launched in 1997 (US) and 2004 (rest of world). The provision of legal data via the Internet is only a decade old, though electronic databases are almost 50 years old.

[77] Pew Research Center (2013) State of the News Media 2013, graph at http://stateofthemedia.org/2013/news-magazines-embracing-their-digital-future/9-magazines-digital-revenues-continue-to-grow/

A side-effect of larger law firms choosing to subscribe to services such as Lexis, is that they have run down or entirely removed their own librarian services, instead adopting an entirely online model supplemented by partners' own private publishing stock. As a result, many medium sized law firms have no expert information professional, instead relying on whatever tutoring they have to use the Lexis database. As university libraries increase training of students in Lexis use, this very large training gap may reduce over time.

It has been strongly argued that commercial publishers have no business model for the general public to access legal information, with a 'Spotify-type' service needed that would enable the public to access legal information as part of a wider 'freemium' type of service.

4.3 Third Sector Publishers: Not-for-Profit Legal Institutes

If access to the legislation and case law was primarily via commercial outlets until the twenty-first century, that also applied to commentary – both journals and books were commercially available at high prices more suited to highly paid advocates and law firms than the general citizen or student. That began to change in the year 1999, when the successful Australian project AustLII, and its founder Professor Graham Greenleaf, helped establish what became BAILII (originally known as the UK Legal Information Institute prior to the Republic of Ireland joining the same scheme). Despite the early promise of free access to law, BAILII failed to attract sufficient funding to provide a real alternative to commercial services in its foundation period, while the controversy regarding judicial copyright had to be settled one court clerk at a time. Indeed, BAILII's launch was controversial amongst some of the senior judiciary as it took many judgments to form a database, a few of which were not cleared for publication. Senior judges became BAILII's greatest supporters over time, and we consider BAILII as a database, then as a user case study, in the Methods and Practices sections below.

Note the development of online case law by Legal Information Institutes as part of the Free Access to Law movement (FALM)[78], such as BAILII in the UK[79]. BAILII is particularly well documented over its history, including in its foundation, establishment, reform and funding difficulties. This was examined in the United Kingdom case study (D1.2.d3). BAILII remains highly motivated but poorly resourced, and is an unusual LII model in co-existence with ICLR online provision. LIIs exist in most common law jurisdictions, but whereas the CANLII model in Canada is very well resourced

[78] See Greenleaf, Graham , Mowbray, Andrew and Chung, Philip, The Meaning of 'Free Access to Legal Information': A Twenty Year Evolution (2012). Law via Internet Conference, 2012. Available at SSRN: http://ssrn.com/abstract=2158868 or http://dx.doi.org/10.2139/ssrn.2158868 See further Greenleaf, Graham , Free Access to Legal Information, LIIs, and the Free Access to Law Movement (2011). *Iall International Handbook Of Legal Information Management*, R. Danner and J. Winterton, eds., Ashgate, 2011; UNSW Law Research Paper No. 2011-40. Available at SSRN: http://ssrn.com/abstract=1960867

[79] The British and Irish Legal Information Institute (BAILII) provides access to the most comprehensive set of British and Irish primary legal materials that are available for free and in one place on the internet. In August 2012, BAILII included 90 databases covering 7 jurisdictions. The system contains around 36 gigabytes of legal materials and around 297,513 searchable documents. BAILII is legally constituted in the UK as a company limited by guarantee (No 4131252) and as a charitable trust (registered charity no 1084803): http://www.bailii.org/bailii/ See Brooke, Sir Henry and Nick Holmes (2011) *Judgment Day for BAILII*, interview with retiring chairman of the BAILII trust, at http://www.scl.org/site.aspx?i=ed22972

and expanding into commentary with CANLII Connects, and AustLII in Australia continues to go from strength to strength, BAILII has struggled to establish a foothold in the UK legal information market. To what extent this is a result of the lack of a social entrepreneur leader within the academic system in the 1990s (for instance, Daniel Poulin of LEXUM[80] in Canada and Graham Greenleaf in Australia) as compared with the stranglehold of Big Two publishing and ICLR over a highly conservative and private-sector oriented judiciary and legal profession, would be a fascinating research question to answer[81].

4.4 Literature: Legal Journals and Commercial Analyses of Law

The primary source of legal analysis is the law journal or review. Commercial legal newspapers have much larger circulations than academic reviews, and may provide a hybrid of tertiary legal commentary and secondary case reports. The oldest US journal is a prime example. The *New York Law Journal*, founded in 1888, has a daily circulation of approximately 11,500 print and 3500 Internet subscriptions[82]. Its reports on the New York City Civil Court are reported only in the *Law Journal*, and often cited as case law authority. It is also regularly used to serve process by publication, as official gazettes so do in many countries. *The Legal Observer* was founded in 1830, became the English *Solicitors Journal* in 1856 and continues to the present time, which makes it the longest continuously published law journal. German journals are of an earlier period, dating to at least 1815 (pre-Napoleonic invasion records are patchy) and the *Zeitschift fur geschichtliche Rechtswsenschaft*. Most European states had a law journal of record which often combined case reports with the status of a gazette by the mid-nineteenth century. The oldest law journal in Netherlands was *'De regtsleerde in spectatoriale vertogen'* (1767-1772), and the longest continuously published is *RM Themis* since 1839[83]. These remain very authoritative, with the London *Times Law Reports* reporting cases since 1785, along with commentary[84].

The oldest European academic examples pre-date the first United States review of 1852, the *American Law Register*[85]. In common with many reviews beginning with the *Albany Law Review* in 1875, this journal became a student-run university-based non-profit journal in the late 1800s. There is an unusual position in that the most-cited and highest impact law reviews[86] in the world are thus non-profit student-run journals, including *Harvard Law Review* and *Yale Law Journal*[87]. This model has not been reproduced in Europe, where university law journals are run by staff and of much later vintage, for instance *Cambridge Law Journal* is the longest published UK university

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[80] See https://lexum.com/en/authors/daniel-poulin and Poulin, D. (2012), "Free Access to Law in Canada", Legal Information Management, 12 pp.165-172

[81] See further D1.1.d1 State of the Art Report.

[82] http://www.newyorklawjournal.com/?slreturn=20141012135009

[83] See http://repository.ubn.ru.nl/bitstream/handle/2066/77780/Rechtsgeleerd%20Magazijn%20Themis.pdf?sequence=1

[84] https://www.justis.com/data-coverage/times-law-reports.aspx

[85] See http://www.jstor.org/stable/3307146

[86] On impact factor (largely a measure of citation to articles in particular journals, which tends to be self-referential) see http://lawlib.wlu.edu/LJ/index.aspx

[87] See 'official' rankings, such as Thomson-Reuters Science Direct http://archive.sciencewatch.com/dr/sci/08/sep28-08_2/ and by Google at http://scholar.google.com/citations?view_op=top_venues&hl=en&vq=soc_law. See critique in for instance http://witnesseth.typepad.com/blog/2013/02/thats-right-yet-another-post-on-law-review-rankings.html

journal dating to 1921 and the highest impact is the *Modern Law Review* dating to 1937[88]. This is in part due to the United States law schools' greater size, wealth and postgraduate student body seeking prestigious varsity experience compared to European law schools. Note that while citation can be measured, readership cannot. The difficulty in gauging overall readership for online law review journals readership is insurmountable, considering each access point keeps different statistics[89].

The largest database of Anglo-American journals accessed via HeinOnline, a subscription service founded in 2000 that provides access to 2,000 law journals and 100,000,000 pages of 'legal history'[90]. Most electronic databases, for example WestLaw, contain only online versions of articles from 1986 onwards. Electronic journals date to the 1980s. Free access to content in such journals has been pursued since 1995, with First Monday an early pioneer in social sciences[91], and the Web Journal of Current Legal Studies a legal pioneer in university-led peer reviewed journal publishing, together with the Electronic Law Journals project at Warwick University[92]. New York Law School's Mendik Law Library maintains an online database of 150 law journals freely accessible in whole or part, though not all offer the body of all articles freely ("at minimum their current article" is freely available)[93].

Traditional European law journals have either adopted a mixed model with commercial legal publisher and university-based staff, or an expert niche approach with commercial publisher and editor. *Law Quarterly Review* has been published since 1887 using this model[94]. Very few journals pay a fee for any contribution, which means they almost all rely on the voluntary advertising plus 'freemium' approach whereby authors provide content free of charge in order to advertise their services and thereby further their commercial or academic or both careers[95]. The academic promotion system has been output driven with focus on publishing in peer reviewed journal articles whatever their access conditions. Nonetheless, the mix of commercial and student-run journals appears to sustain competition in terms of impact, at least for international law journals (a lesser preoccupation of US academia and legal business)[96]. Siems suggests that raw ranking simply reproduces the massive readership and citation by

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[88] See http://www.modernlawreview.co.uk/about.asp

[89] To take examples from publicly available statistics: SSRN stats are based on downloads – not even opening the PDF; Hein stats are based on accessing documents, not downloads. Proprietary stats: Lexis and Westlaw collect, but do not share, access/download stats. Repository manager-based stats: Many, but not all repository collections, use the bePress platform, which allows the owning school to get detailed stats on downloads per journal, per article, or landing page stats. Journal-based stats: Each online journal with a website can also collect granular stats if they use Google Analytics or a similar data analysis tool to see time on page (for full text articles) or downloads. This is not even touching other access points, like JSTOR and other databases used by those outside of law to access law review articles. Information courtesy of US law professors, notably Raizel Liebler and Ted Sichelman, via email.

[90] See HeinOnline (2014 undated) What is Hein Online? At http://home.heinonline.org.ezproxy.sussex.ac.uk/about/what-is-hein-online/ (pay-walled)

[91] See http://firstmonday.org/ojs/index.php/fm/about/editorialPolicies#custom-0

[92] See http://webjcli.org/ and http://www2.warwick.ac.uk/fac/soc/law/elj/about/ respectively.

[93] See http://www.nyls.edu/library/research_tools_and_sources/law_reviews_with_online_content/

[94] See http://www.sweetandmaxwell.co.uk/Catalogue/ProductDetails.aspx?recordid=473&productid=7116

[95] See Shaw, T. (2007) "Free v free: drivers and barriers to the use of free and paid-for legal information resources." Legal Information Management. 7(1), 23-30. Shea, A. (2011) "No-cost and low-cost US legal research." Legal Information Management. 11(4), 241-246

[96] See http://opiniojuris.org/2013/03/20/google-rankings-of-the-most-cited-international-law-journals/

US law schools and therefore offers a grading rather than ranking[97].

4.4.1 Literature: Academic and other Non-Profit Analyses of Law

Academic publishing in England (there is separate funding/registration for higher education in the other three nations of the UK[98]) became highly profitable with the emergence of the 20 new 'Robbins' (or plate glass) universities in the 1960s. Many publishers grew to prominence due to profitable academic library sales of books and particularly journals, notably in the UK Pergamon (part of Reed-Elsevier since 1991).

Lawyers, both academic and professional, produce blogs and other materials, as do law firms on their own websites. Justia lists and categorises 5,500 law blogs (or 'blawgs') maintained to provide legal information, and a list of law Twitter users[99]. Different publication styles and their characteristics exist, from sole to group to team blogs, and entries can vary from reposting of relevant items found online, to full essays of several thousand words, while frequencies can vary from hourly to monthly and any point in between. Blogs may be edited, reviewed or authored and published by a single individual, and are examined in depth in D1.3.d1.

Lawyers in academia were instrumental in the creation of Creative Commons licensing in 2002, also known as copy-left licensing, which typically permits reuse on non-commercial terms and has had some headway in changing the terms of commercial legal publishing of academic articles[100]. The use of Creative Commons is detailed in the recent *CreatE* paper by Frosio which provides a voluminous overview of open access publishing[101].

Books remain an important part of academic output, but a minority product. Most academic legal books continue to be published in hardback format, with prices often in excess of €100. Practitioner books can be even more expensive. The use of e-books is only slowly emerging alongside hardback physical products. Creative Commons types of book output do exist, but the only academic publishers using this method at scale have been MIT books (in the early 2000s) and Bloomsbury Academic (from 2009), both supported by more commercial streams of output. Lessig noted that: "People who decide not to buy a book because it's free online represent the cannibalization rate. The conversion rate reflects the number of people who hear about a book because it's online, but decide to buy the hardcover because it's easier to read than the downloaded version. If the conversion rate is greater than the cannibalization rate, then you sell more books"[102]. Most academic publishers appear to fear the cannibal more than expecting the convert.

Cannibalisation of hardback revenues is also claimed by traditional publishers and other critics of the Google Books project, notably through its combination with Google Scholar. While Google Books originally claimed to scan entire copies only of books out of copyright, in fact this practice appears to have been more widespread,

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[97] See http://siemslegal.blogspot.co.uk/2011/03/world-law-journal-ranking-2011.html and Siems, M. (2012) The Problem with Law Journal Rankings, Siemslegal at http://siemslegal.blogspot.co.uk/2012/06/problems-with-law-journal-rankings.html

[98] See for England http://www.hefce.ac.uk/workprovide/unicoll/heis/

[99] http://blawgsearch.justia.com/blogs

[100] Lessig, Lawrence, The Future of Ideas: the fate of the commons in a connected world, Random House (2001) also in Creative Commons download at http://www.the-future-of-ideas.com/download/

[101] See Frosio, Giancarlo F. (2014) *Open Access Publishing: A Literature Review*, CREATe-Working-Paper-2014-01, at http://www.create.ac.uk/publications/000011 particularly at pp70-75.

[102] Stanford Alumni Magazine (2004) *Give It Away and They'll Buy It*, at http://alumni.stanford.edu/get/page/magazine/article/?article_id=35425

including academic and other books out of print but not out of copyright[103]. Google claims fair use in this practice, and previews exclude certain copyrighted material. Some of the European limits to distribution of books via computing in academic libraries were recently examined by the European Court in *Eugen Ulmer* (2014)[104].

It is important to note that academic lawyers typically publish in journals, with books a much smaller output. This reflected in citation indices, which show that journal articles account for almost 60% of all academic citation in law, with all book 'products' (sole authored, edited and chapters in others' books) accounting for only 24% of citations. Journals remain the pre-dominant method of distribution, though 'gold' and 'green' open access now operate in the United Kingdom, requiring all high-ranked academic research to be available freely in a university repository even if also published in a copyrighted journal[105].

Open access journals (for members, academics and students, and in certain cases to anyone), blogs, the magnificent pioneer Outlaw.com, law firms' own sites, are now proliferating. Even the venerable subscription law journals increasingly offer open access on some terms, as part of a 'freemium' offer to tempt readers – and authors.

The problem is not insufficient information, even for specialists, but insufficient indexing. A generic search engine cannot provide a tailored answer. The solutions in the recent past such as syndication, Twitter and 'blawgs of blawgs' have been all but overwhelmed. What might work is a platform that offers the chance to self-publish for lawyers to their legal community. For that, one needs a legal community, not a LinkedIn group, however well motivated. The next section which considers library services in part explains what services citizens can access without electronic resources from commercial publishers, expanded on in Workstream 2 deliverables.

4.4.2 Public Repositories Including Libraries

Libraries are the basic source of legal information, for lawyers, law students, and the general public. Public libraries provide for the latter, university and college libraries for students, and both bar association and law firm libraries for professional lawyers. Public libraries have the widest readership of all law libraries, and in many countries the government provides a legal analysis resource for the general public.

Dutch public libraries have joint online catalogues, and university libraries also list their collection there. Finding is relatively easy, but access depends on whether the reader has membership of right group (e.g. a university student can access materials through interlibrary lending from all university libraries nationally; public libraries have similar systems). Online access to materials depends on contracts libraries have with Elsevier, Wolters Kluwer etc. This is usually only paid access for registered university students and staff, plus through on-site terminals.

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[103] See for instance http://books.google.com/books?id=tn9IuHhiFb4C&printsec=frontcover&dq=inauthor:%22Christopher+T.+Marsden%22&hl=en&sa=X&ei=ppBXVJqGIMTbsAT0xIKQDA&ved=0CB8Q6AEwAA#v=onepage&q&f=false

[104] Case C‑117/13, *Technische Universität Darmstadt v. Eugen Ulmer KG*: REQUEST for a preliminary ruling under Article 267 TFEU from the Bundesgerichtshof (Germany) of 11 September 2014, at http://curia.europa.eu/juris/document/document.jsf?text=&docid=157511&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=269343

[105] See Research Councils UK (2011) RCUK announces block grants for universities to aid drives to open access to research outputs, and Research Councils UK (2014, undated) Open Access Policy, at http://www.rcuk.ac.uk/research/openaccess/policy/

Law libraries in universities are facing significant resource challenges in tertiary publication purchasing, notably journals, even while legislation and much secondary material is becoming available online in open data format. Zittrain, director of the world's most complete academic law library at Harvard, argues that:

> "Law will be a particularly interesting area in which to experiment, if the public domain cases on which much scholarship is based can themselves be digitally freed for all to study. That's because [US] legal journals are not only non-profit, but also run by law students….And we can re-imagine textbooks starting with legal casebooks, which cost hundreds of dollars each today, even though they comprise mostly public domain material: judicial opinions. Libraries can not only help produce standard course texts at low or no cost, but more important, make them remixable, so that the courses themselves can evolve as students and professors adopt and adapt others' syllabi."[106]

The list of digital resources available to well-resourced libraries is very extensive, though expensive to maintain alongside traditional printed literature. As one would expect, librarians have been well organised in explaining the resource and budget squeeze associated with maintaining a digital library alongside the print analog, and challenges are growing in attempting to provide both types of service to users[107]. Legal Information Institutes are a partial answer to the challenge as they provide a free access repository that can supplement – if not replace- commercial databases.

Libraries also extend to both court buildings and Bar Associations. These may be prodigiously well equipped, with for instance four libraries attached to the Supreme Court of Alberta and a total of 51 libraries in its various regional courts. London has libraries attached to each 'Inn of Court' for barristers, with the Inner Temple Library dating to before 1500, though many ancient legal texts were lost as "security was a constant problem, which even chaining the books apparently did not solve"[108]. These libraries provide services to local lawyers, and visiting specialists, and remain a vital part of the legal research needs of the English law profession, though they are generally closed to non-qualified lawyers. Unsurprisingly legal professionals are nervous about citizen access to formal (i.e. peer/professional reviewed) and informal (blogs etc.) information – as is the medical profession given the number of erroneous self-diagnoses using online resources.

Finally note that many professional non-legal associations do provide legal education to members, for instance the UK Federation of Small Businesses and others have

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[106] Zittrain, J. (2014) Why Libraries [Still] Matter, at https://medium.com/biblio/why-libraries-still-matter-3df27e7522cb

[107] There is a very extensive English-language literature, notably through the journal *Legal Information Management*. See Whittle, S. (2012) "Amicus curiae pro bono publico: open access online publication at the Institute of Advanced Legal Studies." Legal Information Management. 12(3), 189-197. Whittle, S. (2010) "Filling the frame: the role of practical metadata in online resources at the IALS." Legal Information Management. 10,(3), 191-20. Browne, G. (2010) "Indexing of free, web-based electronic resources." Legal Information Management. 10(1), 28-33. Bonello, C. (2012) "Discovering the digitised law library of heritage collections: a collaborative achievement between French libraries" Legal Information Management. 12(4), pp297-304. Norman, P. (2006) "Gateways, portals and zugange: a survey of some European national legal resources on the internet." Legal Information Management. 6(1), 34-37. Widdinson, R. (2002) "New Perspectives in Legal Information Retrieval" International Journal of Law and IT. 10(1), 41. Jackson, C. (2002) "SPTL/BIALL academic law library survey 2000/2001." Legal Information Management. 2(2), 38-49.
Jannetta, V. (2003) "What's new in legal information" Legal Information Management. 3(1), 6-9

[108] See http://www.innertemplelibrary.org.uk/library-history/library-history.htm

membership models with legal information publishing as a bonus of membership. The Charities Commission also provides a legal education model with an online library of charity law sources[109]. The UK television regulator ran a library that opened to the public, especially students and researchers into mass media law and regulation, now housed by the British Film Institute[110]. There are therefore many less formal legal libraries and repositories in operation in addition to institutions that formally meet the definition of a 'law library'.

There is therefore a patchwork of library services for both professionals and citizens, though coordination is somewhat limited within national legal systems, as well as across jurisdictions.

4.5 Actors Comparisons

[109] See in part https://www.gov.uk/running-charity
[110] See http://bufvc.ac.uk/archives/index.php/collection/246

Similarities

- Distinct elements
  - Privacy of plaintiffs
    - judgments
  - Copyright in judgments and legislation
    - Reforms/PSI Directive/Crown Copyright
  - Copyright in authorship
    - Sharing of copyright etc./ FALM/CC licences
  - Copyright in databases
    - Issues arising from open access + reform

5 Methods in Comparator Countries

Table 5.1 CAMPO methods

EU	UK	Netherlands	Austria
Significant methodology challenges to researching this 'community', if European law can be said to have created a single community, as opposed to enabling several communities at national level with European coordination or at least input. Relatively little academic empirical study of European legal informatics, until recently. Ethical implications similar problems as national legal communities.	Access to legislation good Case law uncertain – reforms to ICLR & BAILII ongoing Commentary mixed: information available but not collated User community strong, risks of disintermediation.	Public sector publishing: *overheid.nl* as central access point to government information incl. (consolidated) legislation and government regulation (*wetten.nl*) and official publications (*officiële bekendmakingen.nl*) running consolidated legislation on basis of public tender. Parliamentary reports: zoek.officielebekendmakingen.nl. Case law database *rechtspraak.nl* CC0 public domain dedication as default copyright licensing policy where applicable. Private Sector publishing: Open Access is increasingly offered as an add-on by commercial publishers, slow uptake, though, as the value proposition remains unclear. Commentary/Literature remains with the private sector/academia. Increasingly tiered content (free/premium)	Public sector publishing Legislation and case law via the "Rechtsinformationssystem des Bundes (RIS)" (www.ris.bka.gv.at Federal Chancellery), stored in different databases. Case law on finance-related cases is reported in Findok (Ministry of Finance findok.bmf.gv.at). Database opening can be observed (https://www.data.gv.at 3rd party applications can be developed. Private sector publishing: Open access is increasingly offered as an add-on by commercial publishers, slow uptake, though, as the value proposition remains unclear.

5.1.1 Unique Legal Identifiers in the Netherlands.

ECLI

The case law of the EU courts is of great significance to the legal professions in EU member states. It is also commonly accepted that case law of other EU member states is important. In that sense, it stands to reason that there is a market for pan-European case law services, but these have not fully developed because of accessibility and language barriers. The EU is active in the promotion of cross-border initiatives in the field of uniform identifiers. The flow of legal information can be aided adopting the European Case Law Identifier (ECLI) as well as a minimum set of uniform metadata. In the Netherlands, the ECLI identifier has been implemented throughout the judiciary, from the *Hoge Raad* (Supreme Court) to districts courts. The Council for the Judiciary coordinates ECLI. It was introduced in June 2013 and replaces the former

country case number (LJN)[111]. ECLI should make it easier for distributed commentary and content integration services to develop over the coming years: legal information and improved search capabilities are likely to play a key role in this respect.

JuDoReg

JuDoReg is a work in progress. It is, essentially, a digital object identifier (DOI), alike to the ISBN. It is being developed by the so-called Juriconnect group, and an off shoot of an standardization effort by the tax authorities. The group serves as a platform for the exchange and standardisation in the legal field. Its members includes sources, providers and users of legal information from government, industry and academia.[112] The JuDoReg DOI would uniquely identify all legal articles published in the Netherlands, whether authored by academics or professionals. This can help organise and structure the content available in the various university repositories, e.g. facilitating cross-repository search and strengtening open acces.

5.1.2 LIDO

The institutionalisation of KOOP as the office responsible for (digital) access to legal databases and for the Open Data Portal of the government seems to have prompted a more active role of government in publishing (raw) legal information.

KOOP, as our interviewee explains, recognizes that there are different steps to be taken to arrive at maximal accessibility. First, the legal data has to be available (preferably in an open format with no re-use restriction). This has, arguably, proved to be a success in the Netherlands, at least regarding legislation, official publications and case law. Secondly, the data needs to be structured. For this purpose, several initiatives are underway in the Netherlands. One is the implementation of the ECLI identifier described above. Third, the structured data needs to be linked.

LIDO is a linked open data project aiming to combine the existing legal open data (legislation and case law) and literature[113]. Literature would be delivered under the POC initiative (*freely accessible*) or as links to commercial literature (*paid for*). The government is currently in talks for commercial publishers and law firms to reach an agreement.

5.2 UK Reforms of Legal Information

A radical UK development occurred in 2014. The Society for Computers and Law Annual Lecture was given by Lord Chief Justice Thomas[114], who explained that the Treasury would provide £75m per annum through the Ministry of Justice for the judiciary to finally use a common modern document handling and casework system. This was detailed in a 2014 Ministry of Justice letter to Parliament[115], though further de-

[111] For reasons of continuity and consistency, the LJN number is now part of ECLI. Rechstpraak.nl publishes all Dutch ECLIs, together with at a minimum decision characteristics: rendering court, date, case number. Where known, publication references are also given for any reports of the decision in journals or databases.

[112] Juriconnect member are i.a. Ministry of Interior, the Ministry of Justice, SDU, Kluwer, the University of Amsterdam, Stipp (a consultant and provider of information processing services) and Reed Business Information. See www.juriconnect.nl.

[113] This initiative would be done in a manner consistent with the framework of the EU Directive 2013/37/EU amending Directive 2003/98/EC on the re-use of public sector information.

[114] Thomas of Cwmgiedd, Right Honourable Lord Chief Justice (2014) IT for the Courts: Creating a Digital Future, 20 May 2014, Clyde & Co, SCL Annual Lecture http://www.judiciary.gov.uk/announcements/it-for-the-courts-creating-a-digital-future/

[115] Public Accounts Committee (2014) Letter to the Chair, dated 2 October 2014, from Dame Ursula Brennan, Permanent Secretary, Ministry of Justice, at

tails will reveal the progress of the scheme beyond Online Dispute Resolution recommendations[116]. One of the many advantages of developing a common judicial IT system is that every judgment can then in theory use the same metadata and be stored in the same format, ready for release to the public as open data[117]. This intriguing possibility gives a sense of the potential for opening access to law – and the extraordinary delays that mean this remains a pipe dream in the UK in 2015. Former head of the National Archives, Natalie Ceeney CBE is head of HM Courts and Tribunals Service from 5 January 2015[118], which augurs well together with LCJ Thomas' IT reforms to producing a potential for a case law database to be provided in open data format. The combination and recombination of case law with legislation has been possible for many years via the various commercial databases available, notably using the services of Lexis-Nexis and WestLaw.

5.3 Austrian Reforms of Legal Information

The Legal Information System of the Republic of Austria (Rechtsinformationssystem, RIS) is the central platform and data base providing information on Austrian law. Its main contents are legislation in its current and historical version (federal and state), law gazettes (federal and state) and case law. The Legal Information System also serves as the framework for the authentic electronic publication of the Federal Law Gazette and of the State Law Gazettes (This means the electronic format is the binding version). However, consolidated versions in the RIS are no authentic versions, even though the general public and legal experts trust in the system.

The RIS also publishes a few English translations of highly relevant legislation for informational purposes, e.g. the Federal Constitutional Law, the Consumers Protection Act, the Data Protection Act 2000, the Federal Act Against Unfair Competition and others (not necessarily always in the latest version). The interfaces to the RIS have been updated in winter 2015. The new REST API (connector version 2.0) now provides much more data and metadata as open data, including case law from Austrian high courts. In the Global Open Data Index, the RIS scores 90% in the area of legislation (NL: 90%, UK: 100%).

An interesting conflict arose at the end of the 1990s, when the RIS was opened up to the public. Publisher Manz and the RDB claimed that the free online service of the government would lead to unfair competition on the legal information market. In a settlement Manz and the Austrian government agreed, that the government has the right (actually the duty) to provide citizens free of charge with (primary) legal infor-

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http://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accounts-committee/publications/?type=37&session=26&sort=true&inquiry=all

[116] Chaired by Richard Susskind, the report was published in February 2015 and recommended a pilot using ODR for claims under £25,000 https://www.judiciary.gov.uk/reviews/online-dispute-resolution/ and http://www.theguardian.com/law/2015/feb/16/online-court-proposed-to-resolve-claims-of-up-to-25000

[117] Radboud Winkels, Alexander Boer, Bart Vredebregt and Alexander van Someren (2015) Towards a Legal Recommender System, DOI: 10.3233/978-1-61499-468-8-169 Conference: 27th International Conference on Legal knowledge and information systems (JURIX 2014), Krakow, Poland, explaining "ongoing research [is] aimed at a legal recommender system where users of a legislative portal receive suggestions of other relevant sources of law, given a focus document. We describe how we make references in case law to legislation explicit and machine readable, and how we use this information to adapt the suggestions of other relevant sources of law. We also describe an experiment in categorizing the references in case law, both by human experts and unsupervised machine learning."

[118] See http://www.civilserviceworld.com/articles/news/natalie-ceeney-appointed-chief-executive-hm-courts-tribunals-service

mation, while the publishing of premium content (such as literature) should remain in the domain of the legal publishers. The question that remains is: What is premium and how does premium content and functionality change over time? For example, would it be legal for the RIS to link to open access publications?

The availability of Austrian legislation as open data has directly led to the development of the RIS:App. The RIS:App enables users to access the contents of the official governmental RIS system via mobile devices (iOS and Android devices). The RIS:App was initiated by the author of this deliverable and its company BY WASS GmbH, participant of the OpenLaws.eu project. Given the importance of the RIS:App as a starting point of the OpenLaws.eu project, the project is explained in more detail in the Austrian case study D1.2.d4.

Financial Documents are published by the Austrian Ministry of Finance in the FinDok . Even though related, the contents of RIS and FinDok are not combined in one central database. A combined search can only be done via the services of com-mercial publishers, such as for example Manz. An interesting technology fact is that the FinDok is using a semantic search in the background, provided by the Semantic Web Company (PoolParty).

Help.gv.at and Unternehmensserviceportal (USP, usp.gv.at) provide useful legal information to citizens and businesses, often in a “digested” form. The pages provide introductions to many topics and link to RIS and FinDok for further detailed background. Most of the contents are in German, but several topics of international interest and for foreign citizens have been translated to English.

Data.gv.at corresponds to the EU Open Data Portal and the European Data Portal. The aim is to build a central catalogue and contain meta data of the de-centralized governmental data repositories. Data.gv.at provides the RIS data in an open data format. The Open Data Portal is complementary to data.gv.at. Instead of providing govern-mental data, this platform aggregates metadata information of non-governmental or-ganizations, in the areas of enconomics, culture, NGO/NPO and research. Contents are made available under a Creative Commons license (CC-BY AT 3.0), meaning that the data can also be used for commercial purposes. The project is operated by Wiki-media Austria, Open Knowledge Austria and the Cooperation Open Government Data (OGD) Austria.

Austria started the introduction of ECLI in the beginning of 2014. Currently the ECLI is assigned to judgments of the Federal administrative court, the Federal financial court, the administrative courts, the Constitutional court and the Data Protection Authority. The national ECLI co-ordinator in Austria is the Federal Chancellery.

6 Practices in Comparator Countries

Table 6.1 CAMPO practices

EU	UK	Netherlands	Austria
EurLex merger with CELEX very positive. EU lawyers use EurLex relatively infrequently- supplements their national databases which are largely commercial. Little evidence of dedicated online EU legal user community or 'hackathon culture as in US.	Access to legislation good Case law uncertain – reforms to ICLR & BAILII ongoing Commentary mixed: information available but not collated User community strong, risks of disintermediation.	Good access to legislation and case law Changing law firm landscape leading to a more savvy information management (pay per use, customization). Also, increasing distinction of low-value added from high value added, one-offs from trends, lawyer/non-lawyer. Lawyers in some areas of the law are more active than others, online, blogs etc. and more experienced in OA propositions (eg. IP). However, still committed to pay for value propositions. Except for some closed legal communities/networks, the legal professional remains wary of reputational issues, very cautious with the where and how to publish Universities: : tend to favour OA models, push for OA in joint negotiations with large commercial publishers. Ministry of Education, national science foundation a.o. academic funders progressive OA policies. Search and indexing in university repositories needs to improve	Free access to legislation (federal and state law). Free access to case law from high courts. Only few case law from the first instances published. Public bodies pressure to reduce expenses Legal professionals publish short summaries of cases and some general news on their websites Publishers remain the hub for the publication of commentary/literature Publishers sell printed books and access to databases While search in databases from publishers was traditional hidden behind a pay wall, the search functionality is now often available for free; access to the full text is only available with a subscription Publishers still apply traditional business models and avoid the sharing economy Universities face cost pressure just like public bodies; depend on the subscription services from commercial publishers, to get access to legal commentary. Initiatives to push open access publication though.

6.1 Practices by Users of Legal Information

There are many different user groups who have an interest in legal information. The

ultimate 'end users' are citizens and businesses, who have certain rights and obligations. Between such end users and the legal system, there are certain legal experts who serve as intermediaries or gatekeepers.[119] These intermediaries are necessary because access to law is often complicated. First, there is a huge amount of information and it is hard to find all legal information that potentially applies to a certain user or case. Second, it is usually hard to interpret the legal text in order to reveal the true meaning of the legal information (which is typically provided in text form). Therefore, legal professionals like lawyers or judges are not simply users. Internet surfers are not entirely passive consumers of material broadcast to them. It is inadequate to simply address experts as 'users' or 'consumers' or even the ugly 'netizens', though they are at various points all three, especially with the ubiquity of advertising-supported content online. Because legal professional use legal information and often also create legal information (such as journal papers, blogs, case summaries, etc.), legal professionals are often 'prosumers', producers as well as consumers. There is a community of legal professionals within the legal system, even though such community is currently mainly existing in the 'real world' and not so much online. Even though more technologically advanced experts have many freely developed applications to use and are already starting to use such systems for their daily work with legal information and with peers.

Social networking provides a powerful mechanism for sharing legal information and analysis. Lawyers were some of the critical early users of social media innovations such as the coffee house in the 17th Century. McKinsey Global Institute has indicated that 'knowledge workers' (which obviously includes lawyers) can increase productivity by 20-25% using social media[120]. By contrast, many US law firms continue to have only a single AOL.com email address for all communication and actively discourage the use of social media by their lawyers. This is in response to both fears of proprietary knowledge being shared, client confidentiality and Luddism – the fear that new technologies can disintermediate their low level work, as Susskind has discussed in his work[121].

While lawyers use horizontal (all-industry) professional social network LinkedIn in large numbers, the few vertical (lawyer-only) sites have not reached critical mass in any case study country. Lawyers are socialising enormously via LinkedIn but not lawyer-only social networking websites[122]. Note there are also over 1,000,000 people with 'police' in their job title and 1,300 'law enforcement' groups with well over 100,000 members. These professionals almost certainly also work within legal fields broadly drawn.

The English language survey conducted for Openlaws in the key European markets

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[119] See also Susskind (2013) introduction to Access to Justice; reference is made to Kafka, Franz: Der Prozess (the Trial)

[120] Chui, Michael with James Manyika, Jacques Bughin, Richard Dobbs, Charles Roxburgh, Hugo Sarrazin, Geoffrey Sands and Magdalena Westergren (July 2012) The social economy: Unlocking value and productivity through social technologies, Report: McKinsey Global Institute, at http://www.mckinsey.com/insights/high_tech_telecoms_internet/the_social_economy

[121] See variously Susskind, R. (OUP, 1987) Expert Systems in Law, Susskind, R. (OUP, 1996) The Future of Law; Susskind, R. (OUP, 2000) Transforming the Law, Susskind, R. (OUP, 2008) The End of Lawyers? Rethinking the Nature of Legal Services, Susskind, R. (2013) supra n.37, all Oxford University Press.

[122] Barrett Paul M. (2014) A New Social Network Entices Lawyers With Anonymity, Bloomberg Business Week Technology, 6 October at http://www.businessweek.com/articles/2014-10-06/do-lawyers-need-an-anonymous-social-network-this-startup-thinks-so

illustrates the broad range of law 'users' and their resources of choice (note that a further German language survey was produced with additional results). It produced results dominated by the United Kingdom (42% of responses), Austria (18%) and Netherlands (12%), our three case studies. The users identified themselves as legal professional 63%, non-legal professional 25%, Citizen (6%), other/publisher 6%[123]. The key usage of legal information sites are indicated below:

Table 6.2: European users of legal databases (n=163)

Databases used	Governmental	Commercial	EUR-Lex	Google
Never used	7%	12%	27%	5%
A few times per month	42%	21%	41%	22%
A few times per week	32%	28%	18%	30%
Daily	17%	34%	7%	41%

It is clear that non-subscription databases have a very high usage rate, at 95% for Google and 93% for government (which may include proprietary). Daily use is consistent between Google and commercial databases, which is unsurprising as 63% of survey respondents are legal professionals. This shows that the hybrid use thesis holds true – lawyers use lots of different databases. [The survey does not illustrate individual results across databases but that information is available and shows that lawyers are promiscuous in their use of databases].

Survey users were also able to input individual comments across categories, as well as exploring their wish to share and create content. Here, there are more interesting results, showing a high level of desire to share content with colleagues, with clients and with the wider audience.

Table 6.3 Which participation functions would be useful?

Desirable Innovation	**Integration**	**Technical suggestions**	**Concerns: Moderation**
Public commentary filtered by either commenter's job role or position.	Integration with social networking features	An evaluation system such as in reddit, should include status of a user being a lobbyist.	A closed network, with an editor checking. Peer reviewing to filter out nonsense.
Bills which amend existing legislation are hard to work through - being able to see what changes they make would be useful.	Social media functions .	Twitter hashtag for each section or hierarchical organization, Disqus comments, etc	Prefer the traditional articles approach - keeps the amount (and quality) in check
Ability to comment directly on new initiatives capacity- or community-building groups, topics and interests	Search features on concepts, keywords, etc	Share semantic annotations Permanent links (permalinks) to specific sections or articles of laws	Moderating comments.
Discuss potential legal reforms, Co-create new legislation as proposals,	Reviewing feedback - comments to proposal	Visualisation and design should be more important	Ways that practitioners may be involved
Discuss cases and legislation	Rated experts to comment on cases.	Altmetrics and bibliographic metrics	Rating legal content.

123 See full results updated in real time at Openlaws (2014, undated) Survey Results Collated n Google Document, https://docs.google.com/forms/d/1MVdScU8Unm0sdNBXsTgMM2A36TPvnlduMsjdIWo4DLE/viewanalytics Note that the vast majority of responses were received in May 2014. Survey was open, advertised largely via Twitter and email.

6.2 Users: Legal Professionals

With their high level of legal expertise, legal professionals are gatekeepers to the law. This expert knowledge is gained through a special legal education in combination with practical experience. There are several different groups of legal professionals and practitioners. For the purpose of this the Handbook, legal professionals are categorized in the following groups: Lawyers, notaries, judges, general counsels, legal scholars, law students, and the group that should be referred to as 'semi-professionals'.[124] In this work, we group into small firms/sole practitioners, large firms, government, corporate counsel, and academic users. We also add categories not explored in depth by commercial publishers, that of non-legal professionals such as policemen and users of law in the general citizenry.

UK law firms have cut back on e-publishing provision except for the Big Two (WestLaw and Lexis-Nexis) in the Great Recession from 2008. Moreover, the end of the Great Recession was accompanied by cuts in UK legal aid which compounded the Legal Process Outsourcing (LPO) pressure on small firms and non-specialist lawyers which had been building since the start of the century[125]. To paraphrase Susskind, it became a case of commodify via LPO or specialize. In the former case, there is little need for continuing education; in the latter use of the Big Two and the many disaggregated commentary sources became the default. Leith and Fellows state:

> "in 2000 the primary target user group for BAILII was the lawyer in private practice, this can no longer be the case: the need for an effective and low cost method to access up to date law for all sectors of society has risen with the current economic climate."[126]

Note that LPO is not a new phenomenon for law firms or corporate clients, with Practical Law Company founded in 1990 and Justis founded in 1986 examples of lawyers creating legal publishing and LPO services in the pre-Internet period of adoption of legal IT. Practical Law uses a network of largely outsourced consultants with about 500 staff in total. It was sold to Thomson Reuters by its founders in 2013 for an undisclosed fee thought to be in the region of €400m[127]. Justis was a spin-out from ICLR which experimented in putting case law information on Compact Discs (CDs) in the late 1980s[128], then became a web-based publisher of legal information in the 1990s using ICLR's database. ICLR has since discontinued the very advantageous contract that Justis had established, and only licences on commercial terms - which the Big Two pay as the only clients.

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[124] See Deliverable 4.1.d3, Handbook for Stakeholders.

[125] UK law shares both a common language and some legal system similarities with India, for instance, which means many standard tasks can be outsourced: see generally https://en.wikipedia.org/wiki/Legal_outsourcing

[126] Leith, P., Fellows, C. (2013) 'BAILII, Legal Education and Open Access to Law', European Journal of Law and Technology, Vol. 4, No. 1 at http://ejlt.org/article/view/209

[127] See Telegraph (2013) Thomson Reuters buys Practical Law Company http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/media/9779041/Thomson-Reuters-buys-Practical-Law-Company.html

[128] Justis began as Context, a venture which digitised ICLR's legacy content from 1986, begun as partnership. Justis went digital after CD-ROMs, as ICLR had not thought of the Internet market (nor had anyone else): see http://www.justcite.com/current/news/2011/01/justis-silver-jubilee/ Justis has boutique commercial approach: see https://www.justis.com/about/what-is-justis.aspx and https://www.justis.com/about/technology.aspx

It is possible to estimate the number of lawyers in England and Wales[129]. There are approximately 160,000 solicitors, of whom about 128,000 are certified to practice, the others having retired, moved to other professions or otherwise ceased to practice. There are about 27,000 law students and about 11,000 trainee (junior) lawyers. There are 15,915 licensed barristers in 2016[130]. There are thus about 182,000 people who view the law as their occupation, either by profession or education. Of these, about 15% are current law students in universities.

Table 6.4 Law Students and Solicitors in England and Wales

Type of Legal User	2010-11	2012-13
Entrants to Law Undergraduate courses	19,882 (2009)	20,070 (2012)
Postgraduate Students enrolling in Law Practice Course	7,064 (2010-11)	5,302 new traineeships (2013)
Admitted to the Roll	8,402 (year to 31 July 2011)	6,758 (year to 31 July 2013)
Solicitors on the Roll	159,524 (7/ 2011)	158,644 (7/ 2013)
Current practising certificates	121,933 (2010)	127,676 (2013)

The UK hosts many very large law firms, largely though not exclusively in the City of London, using the approach created for their benefit in the Limited Liability Partnerships Act 2000[131]. The once-largest law firm in the world, Clifford Chance LLP, claims in 2015 to have 570 partners and 3300 lawyers in 26 countries[132], with a third of these in its London headquarters[133]. There is also a well-known „Magic Circle“ of large ‚blue-chip‘ law firms which service major corporate clients, which includes Clifford Chance, Slaughter and May, Allen & Overy, Linklaters, Freshfields Deringer, with other second tier ‚Silver Circle‘ very large law firms including Herbert Smith and DLA Piper. Seven of the 14 largest law firms in the world are based in the City of London, with only 3 other European firms in the top 100 (one each from Spain [Garrigues 69th], France [Fidal 78th], Netherlands [Loyens & Loeff 83rd]).

This domination of the largest law firms in itself makes London highly unusual, but it is all the more so because the other seven of the global giant law firms with more than £1billion revenues are also all active in the London market[134]. These are all United States law firms active in London and Brussels. Given the enormous size of these firms, with the 10 largest UK-based firms having combined revenues of £11.21billion (circa €15b) in 2013, and approximately 25,000 lawyers, it is no surprise that their 10,000 or so UK lawyers dominate the higher end of the legal market. These firms have no difficulty in financing their offices with the suite of legal information services

[129] Law Society (2014) Entry Trends, at http://www.lawsociety.org.uk/careers/becoming-a-solicitor/entry-trends/#sthash.b0VuPXVV.dpuf

[130] Bar Standards Board (2016) core database.

[131] For PLC's view of the Act, see http://uk.practicallaw.com/9-505-5083?pit=

[132] See for a breakdown by location http://www.cliffordchance.com/content/cliffordchance/home.html#/content/cliffordchance/people_and_places.html

[133] See http://www.legal500.com/firms/679-clifford-chance/offices/104-london-e14-england/profile and http://www.chambersandpartners.com/uk/firm/83/clifford-chance

[134] They are in order (from largest to least massive) Baker & McKenzie, Skadden, Arps, Slate, Meagher & Flom, Latham & Watkins, Jones Day, Kirkland & Ellis, Sidley Austin, White & Case. See for a highly unofficial version http://www.ranker.com/list/100-largest-law-firms-in-the-world/business-and-company-info

provided by the Big Two legal publishers. While this also has meant that smaller legal publishers can act quickly to provide niche products, it also means that low-cost or free community-provided products will be a very low priority for such extremely highly paid partners for whom time rather than money is the scarce resource.

This makes the UK legal marketplace a fundamentally different environment than other European member states, a distortion even more apparent because all these UK firms have both Brussels offices and other European partners/subsidiary units in for instance Paris and Frankfurt, driven by relentless global financial logic identified by Lexpert in 2000: „there will be a small tier of international law firms and perhaps multi-disciplinary practices which will dominate the delivery of high-end corporate and financial legal services to the most active international clients.“[135] Fifteen years, later that prediction has come true.

6.2.1 Lawyers: Small Law Firms and Sole Practitioners

According to Eurostat there are approximately 500 million legal enterprises within the European Union. [136] Most of these are solo practitioners or small law firms with only a few employees. They are either working as generalists who have a broad overview on various legal areas or they are very specialized in a particular field. Over the past years and decades they have are built and maintained – usually very good – relations to their clients, i.e. citizens and/or businesses. Hourly rates of legal experts are high, the workload is high as well, leading to constant revenue streams. Usually the problem is that they do not have enough time and that their clients want “more for less”, leading to declining margins, a trend that can be observed in other industries as well. Still, many of these small law firms and sole practitioners believe that their consulting business will continue in the same way as it has always been.

The community is fragmented, partly because busy lawyers multi-task – a LinkedIn profile enables contact with clients as well as fellow professionals. Dual use also proliferates in some of the databases described earlier – BAILII has about 60% non-lawyer use. The enormous number of law students means that many free legal resources are accessed by students as well as litigants, lawyers and academic researchers.

Critics argue that small law firms and sole practitioners do not have a bright future, in particular in liberalized regimes that do not protect the legal industry anymore.[137] Small legal enterprises cannot use economies of scale like larger legal enterprises. For example, purchasing access to commercial legal databases is relatively more expensive for a small legal enterprise than for a large one. Other examples are internal IT systems, advanced CRM systems, document management systems, collaboration and communication systems, all of which will be more and more expected by the ‘end user’. Parallels may be drawn to the accountancy business, where there is a concentration of the ‘Big Four’ players. However, there are many IT solutions available, that may be used by small legal players often at very affordable prices. Cloud computing theoretically enables sole practitioners to use economies of scale, namely the benefit from the community sharing one central IT system online. The providers of these solutions do not necessarily emerge from legal IT providers. Legal enterprises may use

[135] Lexpert (2000) UK Law Firms Invade Europe March 1, 2000 at http://stg.lexpert.ca/article/uk-law-firms-invade-europe/

[136] Eurostat, Annual detailed enterprise statistics for services (NACE Rev. 2 H-N and S95) [sbs_na_1a_se_r2], M691, http://epp.eurostat.ec.europa.eu

[137] See Susskind (2013) supra n.120.

these solutions like any other small business. Furthermore, with the commoditization of online information services, access to legal information may also become easier. Reference is made to the providers of free legal information, like Legal Information Institutes (LIIs), the Free Access to Law Movement, the more and more powerful governmental legal databases, and free resources from large stakeholders like Google (see Google Scholar for Case Law).

Notaries are legal practitioners specialised and authorised to act in certain legal matters. By virtue of their tasks and responsibilities, notaries play an important role in the State legislature in the 21 Member States where the legal order is based on Latin civil law. Common Law Jurisdictions of the European Union also have a notarial profession whose practice extends across a wide range of legal services and whose functions and authority are principally exercised in relation to legal acts and instruments to be used in overseas jurisdictions. There are approximately 35,000 notaries, throughout Latin civil law Member States, represented by the Council of the Notariats of the European Union (CNUE), and over 1,000 notaries in the Common Law member States of the United Kingdom and Ireland, represented by the UK and Ireland Notarial Forum. It is possible to consult the European Directory of Notaries to find a notary in a Member State.

A few of these small law firms team-up with other small law firms in other countries of the EU in order to form networks or alliances. So maybe in the future we will see more networks in terms of collaboration, rather than only a concentration of market player in terms of traditional mergers and acquisitions. Legal information providers will certainly adapt their solutions to the needs of this user group. Note the declining margins and commoditization of small law firm work, and that some repetitive work that is commoditized needs little research – for instance conveyancing, wills and probate.

Smaller firms may lack physical access to law libraries to supplement online resources. They also operate in an often very conservative IT culture – the use of a AOL joint email address remains common in US law firms. The firms are less likely to spend their budget on Lexis-Nexis, which may create a vicious circle of lack of market information, commodization and reliance on free services via Google. This is a classic audience for Legal Information Institute services, and has bene widely supported by the profession, especially in Canada.

Small law firms and magistrates may have things in common when 'consuming' legal information, but their motivation to keep information private rather than sharing is also common. Lawyers run a consulting business and their proprietary knowledge, experience and personal connections are their comparative advantage for clients. For salaried magistrates, legal information is a tool to share ('creation' of legal information by stakeholders), though considerations of privacy may hinder their early adoption of an open data platform. This suggests a completely different motivation for these stakeholders with an effect on the BOLD2020 community model.

6.2.2 Lawyers: Large Law Firms

Large law firms enjoy economies of scale and therefore they may dominate the future of commercial legal information services. Big law firms often cover all legal fields, so the ‘end user’ will always find an answer there. The people working in a large law firm are a closed community and typically they do not know each other anymore. Certain large law firms employ more experts than a whole country. In particular Openlaws field research revealed that some US based law firms have more experts

than there are lawyers in Austria (i.e. approx. 6,000). Companies in these dimensions can afford an IT department and many productivity tools. Furthermore, it is also easier and more attractive for commercial legal information providers to address one large law firm at once, rather than several hundred sole practitioners individually. Accordingly, such providers may adapt their IT solutions towards the needs of these big players. For IT providers, large law firms are key accounts and 'A' customers, while small law firms are 'B' customers.

The sheer size of large firms creates a greater need for information sharing to prevent isolation of individuals and teams within the firm. Directories are the solution to at least find a colleague. The knowledge within such a huge organization is extremely high on an aggregated level, but the question is how this knowledge can and should be managed and maintained. Openlaws research discovered cases where expert advocates have left a big law firm, in order to work in a flatter hierarchy, to start their own career as a sole practitioner in a network with independent colleagues or within a small law firm.

Large law firms often have offices across the EU, sometimes even worldwide. Here again, the difference to small law firms collaborating in networks may not be too big (apart from the finance and accounting aspects in the background; administrative issues that do not increase legal competence). Marketing of large law firms can be quite different compared to small law firms. While the big ones may have a well-known name and even registered trademarks and marketing budgets, smaller law firms will rather prosper on the personal reputation of one single expert and his/her achievements in the past. In his respect, large law firms are more anonymous. This aspect is important, because in times of social networks and transparency, the competence of an individual is becoming again increasingly important again. (e.g. "endorse functionality" in LinkedIn or other networks). So already today in our network society, the advantages of a large law firm may not be so enormous as it might have looked in the past.

6.2.3 Legal Scholars

There are nearly as many law students and professors as there are practising lawyers in Europe. Many students take law as part of a wider course or study law at pre-university or postgraduate level. Approximately 2 out of 5 who start as undergraduate law students are finally admitted as a solicitor in practice, though many go into other areas of law than private practice. The actual total of all students who study law at some stage in their university or pre-university career cannot be known. Similarly, the total of specialist law professors is relatively low[138], but the number of professors who need some access to the law will be far higher[139].

All of these academics need access to law, whether through similar commercial databases as practising lawyer, or by some combination of free, open and commercial databases. Academic research interests will vary from the highly resource-intensive (original research) to the more mundane (textbooks, legislation and case reports) to the relatively trivial (single queries from compendia). While the market cannot be accurately sized, it is very substantial. Interviews for Openlaws.eu confirm anecdotal reports that many junior lawyers in practice use their alma mater's law library to ac-

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[138] 4895 total in the UK: see Higher Education Statistics Agency, email to Prof. Marsden, 14 November 2014, kept on file. For definitions see https://www.hesa.ac.uk/content/view/2881

[139] 186,000 academic staff in the entire UK (including Scotland, Northern Ireland) in 2012, estimated proportion of lawyers 5.5% or 10,000.

cess materials, while many academics also practice or advise professional lawyers and others, and thus one could refer to academic use of legal information as somewhat 'dual use'.

It is difficult to access proprietary information about working lawyers' access to legal information, but there are three alternative sources. They are:

- BIALL annual surveys of academic law libraries in the UK
- 2012 BAILII survey of 3,274 users
- Openlaws 2014 survey of 200 users including 100 UK users largely in practice.

Using students as a proxy will not provide a perfect picture of the profession's use of legal information as a whole, but is a proxy. BAILII prides itself on user privacy and does not track users to its site, unlike the Big Two and other commercial providers. Gee provides data for BIALL above[140]:

- The three most popular law databases in terms of number of subscriptions continued to be Westlaw UK, Lexis®Library and HeinOnline;
- "JSTOR was again the most widely used general database in law libraries";
- "The most popular free website was BAILII";
- Mean expenditure on law materials per student was c.£230;
- The proportion of expenditure on monographs remained steady at 21%, serials were down to 46% and databases were up again at 33%.

Note that even in universities, the Big Two are dominant. Free databases formed part of the BIALL survey in 2013, with the following 8 most popular sites cited.

Table 6.5 Usage of Law Websites by BIALL Survey Respondents 2013

1. www.BAILII.org	70%
2. www.legislation.gov.uk/	33%
3. Cardiff Index to Legal Abbreviations[141]	23%
4. EUR-Lex at www.eur-lex.europa.eu/	19%
5. World Legal Information Institute at www.worldlii.org/	13%
6. EUROPA – EU website at www.europa.eu/	10%
7. UK Parliament at www.parliament.uk	9%
8. HUDOC – European Court of Human Rights at www.hudoc.echr.coe.int	6%

Importance of free sites can be tracked over time, with the annual survey published each autumn. Note that BAILII in 2013 discovered a variety of non-lawyer users of their site: "a 'new generation' of users of legal information whose need for access to UK legal information was largely invisible and unmet prior to BAILII's inception. A short extract from the survey responses illustrates the wide range of BAILII users who are not primarily or directly involved in the legal profession"[142].

[140] Gee, David (2013) BIALL Survey 2013 for Society of Legal Scholars and British and Irish Association of Law Librarians (BIALL).
[141] http://www.legalabbrevs.cardiff.ac.uk/about
[142] Leith and Fellows 2013 ibid.

Law student are 'digital natives', meaning that they adopt new technologies more easily. They use different kinds of apps, they are online, they are connected with each other in social networks, they share information, more so than professors. For example, many users of the RIS:App, the Austrian mobile legal information app, are law students.

6.3 Government Users: Judges and Public Sector Experts

There are many legal experts employed in the public sector. Combined, they have an enormous legal knowledge. Unfortunately, this knowledge cannot be shared adequately today. Judges in general have access to law libraries in courts, or in Inns, but their sharing of legal information relies on proprietary solutions in many jurisdictions, to increase perceived security and confidentiality of the legal decision-making process. These are considered in more depth in country reports. Moreover, superior court judges are very few in number[143], and though tribunal chairs and magistrates make up a far larger proportion of practising legal professionals, that is still less than 1 in 2000 citizens[144]. It would be expected that superior court judges require more legal research on individual cases than criminal law magistrates, and thus superior access to legal resources.

Other categories of public servants who require access to law, largely without localised access to law libraries, are civil servants, policemen, prison and probation officials, immigration and enforcement officials, local council officers, and private enforcement agents who enact civil court repossession orders (known in the UK as bailiffs). While all can access information on legal changes via the national and specialist press, trades associations, briefings from government and using local libraries, their knowledge of law must to some extent depend on use of generic legal information online. More research is needed into their access to legal information[145].

6.3.1 Business users: Corporate Counsels

As Openlaws field research reveals, Corporate and General Counsels have greater interests in exchanging legal information with other lawyers, because they do not always lose revenue if they share knowledge, say with another general counsel. While legal knowledge is the marketable expertise for a lawyer in general practice, a general counsel has different interests, namely to reduce the risk of the company. Sometimes contract templates or best practices processes may be exchanged between general counsels free of charge.

Legal compliance and risk management are essential to corporate counsel, which makes sharing of information on diverse subjects important. These include labour law,

[143] In 2014, there were 107 High Court judges in England and Wales for instance.

[144] Council of Europe (2012) Judicial Evaluation Report at http://www.coe.int/t/dghl/cooperation/cepej/evaluation/2012/Rapport_en.pdf England and Wales have only 3.6 professional judges per 100,000 people - a reflection of the UK's extensive reliance on lay magistrates. In central Europe, there are nearly 50 members of the judiciary per 100,000 people. The UK has 22,000 lay magistrates: http://www.bbc.co.uk/news/uk-26359326

[145] The criminology literature provides some evidence regarding in-service legal training for those in law enforcement, for instance Wyatt-Nichol, H. & Franks, G. (2009) Ethics Training in Law Enforcement Agencies, Public Integrity 12:1 pp39-50, also at http://www.academia.edu/1400696/Wyatt-Nichol_H._and_Franks_G._2009_._Ethics_Training_in_Law_Enforcement_Agencies, and Criminal Justice Review (2003) Litigation Views among Jail Staff: An Exploratory and Descriptive Study, 28: 70-87. Governments also review police legal training, see for instance http://www.justiceinspectorates.gov.uk/hmic/publication/consultation-on-hmics-programme-for-regular-force-inspections/

corporate governance, but also competition law, tax law and many other aspects of regulation. This means corporate counsel need broader, and arguably shallower, knowledge than experts in law firms, though with significantly advanced knowledge within specific sectors of industry or subject domains such as pharmaceutical patent. Often they enjoy no access to legal databases, which means they make use of alternative sources – academic and Law Society libraries for instance.

Together with citizens, businesses are the ultimate consumers of legal information. They receive the information either directly via governmental institutions, in particular via governmental legal databases, or via legal professionals. Receiving legal information from legal experts is costly, nonetheless each and every business has to comply with the law.

Businesses are using free online resources for receiving legal information (see sources above). The most common 'free legal resource' is of course Google. There are also information systems operated by the government or the chambers of commerce, that includes 'digested' legal information so that it can be used more easily by companies[146]. Where advice has been given by an external legal consultant, the company cannot simply use and exploit the work. For example, if the company has received a contract from a lawyer, such contract cannot simply be re-used and shared with other companies as a standard template, because it is copyright protected. Unless the company is a legal consultant or a publisher, the core purpose of a company is rarely to sell legal information, though in a sharing economy it may make sense to exchange such information with peers and to create a pool of free legal information. There are many arguments against such a practice, such as the level of quality and whether this fits the purpose. It may be a starting point for standardization in the legal area. Take for example a purchase agreement for a used car: the standardized template that is provided by the automobile association is often used.

6.4 Users: Micro-Businesses

Outsourcing and self-employment have created an extremely large overlap of micro-businesses (with less than 10 staff, typically only a single individual) and citizens, with for example self-employment growing 130% in the United Kingdom in the past forty years[147]. Most small companies do not have a dedicated legal department or staff with formal legal training. There are 43,454 large companies and 222,628 medium companies in the EU (see Openlaws Stakeholder Handbook). Small enterprises (1,349,730) and micro enterprises (18,783,480) vastly outnumber medium and large companies. The vast majority have less than 10 employees, for example the UK has 4.6 million entirely self-employed people, in addition to 6million whose self-employment is a supplement to their main employment[148]. The majority are service workers including consultants, taxi drivers, hair dressers, private landlords.

Such companies will hardly ever afford an internal legal professional and have to consult external experts. Dealing with legal questions and risks is highly important for small enterprises even if it is cumbersome. A lawsuit or violation of public law (e.g. environmental or safety regulation) can threaten the whole business. Their need for

[146] For example in Austria: help.gv.at, usp.gv.at

[147] Office of National Statistics (2014) Self-employed workers in the UK, 20 August at http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-371749

[148] See Fuller, Calum (2014) Record self-assessment returns as HMRC unmoved on deadline, 3 February, Accountancy Age at http://www.accountancyage.com/aa/news/2326507/record-self-assessment-returns-as-hmrc-unmoved-on-deadline

professional legal advice is minimal compared to their citizen need for legal help, and their most usual encounter with the law is in the filing of annual tax returns and sales tax returns, and incorporation of the business. Thus, their default professional advisor is an accountant, though the amount of self-filing of income tax also suggests the online advice given by the taxation authorities is a more common encounter with legal information. These people are thus full-time prosumers, both citizens and producers, and their access to law is critical but often overlooked. They are as likely to contract with a lawyer or notary when letting, buying and selling property, a making a will, getting divorced, as in the course of their professional self-employment.

Businesses are 'end-users' of legal information like citizens, but their behaviour and their needs are quite different. These different legal roles are explicitly recognized by the EU and its member states, by differentiating between them in many legal acts and even by enacting dedicated laws (e.g. consumer protection laws or trade acts). Generally speaking, a company is less protected than a citizen, because it is assumed that a company is better educated than a citizen. If a citizen starts a micro business), such person has to comply with legal obligations just as any large company.

The easiest and fastest way to access legal information for them is via the Internet (as also shown by our survey). Depending on the EU member state, there are free governmental platforms. In addition they will find information in law blogs, in wikis and in different forums. However, they will face three issues with such a search. First, is the information complete and up-to-date? Second, is it quality controlled? Third: Does the information fit the specific situation the company encounters? If the business person decides that the legal question cannot be answered sufficiently internally, they have two options: they can consult a legal professional - or not. However, acting with due care may require that the director contact an external expert, if he/she does not want to risk personal liability. What is actually done (explicitly or in a more tacit manner) is a kind of legal risk assessment. In this particular case, is it worth hiring an expert (with an extremely high hourly rate) or do we simply take the risk? If the risk is considered higher than the legal expenditures that will occur, the expert/intermediary/gatekeeper will be consulted. The company will pay for the advice and receive legal information that is 'catered' to the specific issue.

“Non-lawyer” is not one category. There is also a category of 'semi-professionals’, employment law experts in human resources, accountants on tax law. A citizen might need legal information less than annually (e.g. employment law issues, divorce). A larger business needs legal information from the day of its incorporation, new regulations, labour law (therefore a SLEPT analysis in business, where 'legal' is a category of its own). Compliance is a major burden for SMEs, including financial regulations, privacy or competition law. Business would be much more willing to pool knowledge and legal information (standard contract templates included). This use of law by non-lawyers is a major consideration in open information sharing.

In summary, businesses without a corporate counsel face legal questions on a regular basis with greater liability than consumers. They have to act with due care and have to consult legal professionals, if the risk of solving the legal issue themselves is considered too high. Businesses are always interested in reducing and optimizing costs, so the Internet and free sources of legal information are an opportunity for them.

6.4.1 Users: Citizens

Citizens are a very under-resourced group in accessing law. Where there is great demand for access to social welfare law for non-specialists, government has in some

cases provided basic access to landlord-tenant law, for example. CANS service in the United Kingdom has provided wide access to social legislation summaries since 1939[149]. This is intended to help members of the general public to understand the law in areas such as welfare, property and so on. CANS is a very comprehensive database, also available on CD-ROM. It is aimed at "public libraries and the general public that visit them; universities and colleges along with the students in attendance; and solicitors, accountants, advice centres, charities and any other body that dispenses advisory information." It also reaches law clinics that would otherwise not have access to resources available at low price to the general public who form their clientele.

Citizens are of course the ultimate arbiters of legislation as the electorate. The potential for citizen-inspired laws is of great interest. In Hamburg, Germany citizens have created a draft Transparency Act, which was later enacted in a formal legislative process. The users wrote a new law in a wiki-like environment, at first even without the support of a legal expert. In a second stage, a former judge reviewed the draft before it was finally presented to the governmental authorities. The group could engage 'the crowd' so that a sufficient number of supporting signatures could be collected. Finally, the Transparency Act was accepted and enacted by the city of Hamburg. This is one of the first 'co-created' laws, a first signal for what collaboration and participation could do to inform legislative processes.[150]

In the Openlaws survey, users were also asked for their views on public collaboration on law. This also produced a range of positive, technical, sceptical and negative responses. These responses reflect the wide range of opinion regarding the usefulness of participation. They do reveal an interest in why and how users can participate in the 'social layer' of legal information, explored in Workstream 2 deliverables.

[149] CANS: 1939 launched alongside Citizens Advice Bureaus. See e.g. bomb shelter advice: http://www.cans.org.uk/libraries-public/archive
[150] http://de.hamburgertransparenzgesetz.wikia.com/wiki/Transparenzgesetz_selber_machen

7 Outcomes in Comparator Countries

Table 7.1 shows a summary of the CAMPO analysis outcomes.

Table 7.1 CAMPO outcomes

EU	UK	Netherlands	Austria
Multilingual economic/political, four original languages (French, German, Dutch, Italian) and precedent setting highest Court.	Stronger legal information institutes, more government commitment to publishing state and case law databases in open formats, greater willingness by commercial publishers to experiment, and more law firms investing in open publishing of expert commentary, all lead to greater open access to law.	Search intelligence software, reduced time-to-market and standardization/ indexing are key issues, both public and private sectors are working in the area.	Commercial publishers in Austria have paired off: content of one publisher is now searchable within the portal of one other. In the future, all legal commentary may be searched in all systems of the four publishers. While this collaboration of publishers may be beneficial in terms of finding all relevant commentary, it raises anti-trust questions if the oligopoly works together.
Role of EU law in creating the 'acquis communitaire': political decision to make law as widely available at far below marginal cost as possible. Access to documentation freely available at production and then no charge in the context of no developed market actors to challenge the decision to 'super-nationalize' the state provision of legal information and case law reportage.	Boom-bust cycle in IT provision for courts, with new IT spend in 2015 first attempt since failed 2002 attempt. Consequent loss of e-publishing of court decisions.	The public sector developing ambitious linked open data initiatives (LIDO project) where it blurs the boundaries with the traditional role of private sector (editing functions, commentary). Bulk (open) data work-in progress.	Federal open data portal (including legal data set) to implement PSI Directive https://www.data.gv.at. The nine federal states publish state datasets.
EU law expansion occurred at the same time as a massive expansion in EU institutional competences and budget, compared to domestic budgets. The boom-bust cycle of many national legal reporting environments with far longer and more crisis-ridden history was not an EU feature of resistance to wider access to law.	Boom-bust cycle also in private and not-for-profit provision of legal information to non-subscribers and to commercial publishers.	Legal professional: selective consumer, cautious author, paying for value propositions.	Open data portal for economy, cultural organizations, research and NGOs is currently emerging https://www.opendataportal.at
EU law expanded rapidly concurrently with the introduction of computer databases for legal informatics.	BAILII highly motivated but poorly resourced – unusual model in co-existence with ICLR online provision.	Policy and legislative measures in place to promote OA initiatives. Promotion of OA and opening up government legal data for free use dates to 1990s.	Legal professionals continue their work with public databases and offerings from commercial publishers. Trend away from print products towards database access.
EU law is pre-eminent over national law, leading to recognition of its power to influence national legislation not only in its legal effect but also in the salutary example of free access to the over-arching law in so many national legal fields.	Government recent commitment to open data since 2009 – reflected in ODI interest in legislation.gov.uk and UK ranking for legislative open data.		Austrian commercial publisher: approximately 50% of their revenues from database products.
EU court decisions and legislative reforms affect 28 nations, communication of precedent essential.			

Brussels/Luxembourg law firms are enormously well resourced. Case commentary is frequently rapidly and comprehensively supplied freely, despite small turnover of EU legal information markets compared to national markets.

7.1. EU Outcomes

European legal data was born open as a result of the 1958 Official Journal policy and the resources devoted to multi-lingual and multi-national publication. This has been helped by the development – and now redevelopment – of EUR-Lex and efforts to integrate with national databases via N-Lex and now EUCases. This has been boosted by the stronger political commitment to open data in Commissioner Kroes' Digital Agenda and the European Council October 2013 conclusions which contain a strong endorsement of open data, linked to the revised Public Sector Information (PSI) Directive. This is shared by other major legal systems and governments' wider commitments to open data, for instance the June 2013 G8 Open Data Charter. The European legal informatics space is unique in at least seven respects, leading to comparisons to our three country case studies.

1. There was no precedent for a multilingual economic and political area such as this[151], with four original languages (French, German, Dutch, Italian) and a precedent setting 'Supreme Court' that worked in French and translated into the other three official languages. The decision to make access to documentation freely available at production and then no charge was made in the context of no developed market actors to challenge the decision to 'super-nationalise' the state provision of legal information and case law reportage[152].
2. The essential role of European law in creating the 'acquis communitaire' led to a political decision to make law as widely available at far below marginal cost as possible. The benefits in creating an essential knowledge of European law amongst a critical mass of advocates at national levels was considered so important from the 1950s onwards that there was no serious resistance beyond basic budgetary questions. The direct point of comparison might therefore be the bi-lingual European Court of Human Rights and its presentation of case law, rather than national court systems. Note in this regard the linguistic diversity of the EU and the severe budgetary constraints of the ECHR system.

The mixed market for case law publication is officially recognised.

3. European law was pushing on an open policy door, in that its expansion occurred at the same time as a massive expansion in European institutional competences and budget, compared to domestic budgets. The boom-bust cycle of many national legal reporting environments with far longer and more crisis-ridden history was not an EU feature of resistance to wider access to law.

[151] At least not with 24 languages, Switzerland has had 4 for many years.
[152] Note that the United Kingdom has two official minority languages – Welsh and Gaelic Scots – while Austria and Netherlands have smaller language minorities without official status.

4. European law expanded rapidly concurrently with the introduction of computer databases for legal informatics. Throughout the 1980s and onwards, the development of both EU law and legal databases has been a largely happy marriage – though with various standards-based and institutional strains (e.g. ELI/ECLI) that would be inevitable in any such system growing at such a rapid rate.
5. European law is pre-eminent over national law, leading to recognition of its power to influence national legislation not only in its legal effect but also in the salutary example of free access to the over-arching law in so many national legal fields. European law is an example to national legislatures, courts and commentators. The use of judgments as precedent setting has parallels with the ECHR system and also national common law systems with Supreme Courts, such as England and the United States.
6. European court decisions and legislative reforms now affect 28 nations, and the importance of effective communication of these changes is evident in the same way (but arguably more powerfully) that United States Supreme Court decisions have 'ripple' effects at state, municipal and regional levels in the United States.
7. The law firms in Brussels and Luxembourg are enormously well resourced compared to many at national level in all but the largest jurisdictions. Therefore, case commentary is frequently rapidly and comprehensively supplied freely as a 'loss leader' to attract both national and non-European clients to use the services of these highly competent and highly marketed law firms. Similar analysis may prove the same for European law journals, outranking national journals despite the very small turnover of EU legal information markets compared to national markets.

As a result, it may be argued that European legal data is so open to reuse and access that it is the 'exception that proves the rule' – in that the national systems under examination may have less a virtuous circle and more a system hampered by legacies of closed and restrictively licensed underfunded systems.[153] This was a major research theme in national case studies. We conclude that though European legal information may not be as widely reused and repurposed as US federal law, it is nevertheless a best of breed example for the Member States to emulate where possible.

7.2. UK Outcomes

The UK context is a developed legal market, with a strong user base of local and multinational firms, advanced university libraries and researchers[154], and law reports published by both commercial publishers and two legal charities: British and Irish Legal Information Institute (BAILII) and Incorporated Council of Law Reporters (ICLR). Stronger legal information institutes, more government commitment to publishing state and case law databases in open formats, greater willingness by commercial publishers to experiment, and more law firms investing in open publishing of expert commentary, all lead to greater open access to law. What is still needed is to bring

[153] Participants at the LAPSI2-Openlaws joint workshop 4/5 September 2014 in Amsterdam http://www.lapsi-project.eu/amsterdam-meeting-4-and-5-september-2014-amsterdam-netherlands and to participants at the 30th Annual BILETA conference, Bristol, 9-10 April 2015, https://twitter.com/hashtag/BILETA15?src=hash as well as to individual interviewees, provided feedback and constructive critique of these points.

[154] Brabazon Tara (2014) The disintermediated librarian and a reintermediated future, Australian Library Journal Vol. 63, Iss. 3, http://www.tandfonline.com/doi/pdf/10.1080/00049670.2014.932681

these together with a social layer, to create a community which sees collaboration as more than simply checking LinkedIn every month.

The overall UK context remains a very conservative, elite, centralized, wealthy and globalized legal profession supporting an advanced commercial legal information system but little free access to law, in a period when legal practice, education and the wealth of the legal profession grew enormously. Government focus on sale and privatization of legal information, and private provision of case law, were to change in the last decade, and we will revisit the changing context in the conclusion. The UK interviews were supported by the literature review, and the insights of workshops following which the version was edited.

The value of open access is in creating a better educated legal community and general public. It is not clear how much value that will unlock, but as we start from near zero it is hardly surprising that the prospect is enticing. The 'Big data for law' project led by John Sheridan's team at the National Archives, funded by the Arts and Humanities Research Council and supported by the major commercial publishers and ICLR's resources[155], can begin to unlock some of the potential for us to use open access to law to create exciting insights and discoveries, which may transform[156] the profession's relationship to society[157]. Stronger legal information institutes (such as BAILII), more government commitment to publishing state and case law databases in open formats (by ICLR for instance), greater willingness by commercial publishers to experiment, and more law firms investing in open publishing of expert commentary, all lead to greater open access to law.

In conclusion, it may be argued that UK legal data is generally open to reuse and access with the exception of case law restrictions – where a virtuous open data circle has been hampered by legacies of closed copyright in the gift of individual judges and in practice their clerks, which remains unreformed. This led to restrictively licensed underfunded systems belonging to legal educational charities BAILII and ICLR. Reforms to case law release and funding would enable the UK to be seen as a 'best of breed' open legal data example.

7.3. Netherlands Outcomes

It is clear that there are forces challenging the *status quo* of the current legal information market. Netherlands is a pioneer in the open (legal) data movement, enjoys a solid network of universities for a country its size, has a long-standing history of embracing professional publishing houses (e.g. Kluwer, Elsevier) who have

[155] Sheridan, John (2014) "Big Data for Law", Internet Newsletter for Lawyers, March 2014 at http://www.infolaw.co.uk/newsletter/2014/03/big-data-for-law/

[156] Katz, Daniel Martin, The MIT School of Law? A Perspective on Legal Education in the 21st Century (October 22, 2014). University of Illinois Law Review, No. 5, 2014. Available at SSRN: http://ssrn.com/abstract=2513397

[157] See Eysenbach G. (2007) From intermediation to disintermediation and apomediation: new models for consumers to access and assess the credibility of health information in the age of Web2.0 Studies in Health Technology Information;129(Pt 1):162-6. For a cautionary retrospective see Leith P. (2010) "The rise and fall of the legal expert system", in European Journal of Law and Technology, Vol 1, Issue 1. Explored in the presentation of Openlaws by Marsden to ODIFridays in March 2015. For legal examples see https://legalinformatics.wordpress.com/2011/12/22/slides-from-2011-ittig-cnr-workshop-from-information-to-knowledge-on-line-access-to-legal-information/ and Lawyering in the Digital Age Clinic: Collateral Consequences initiative project in the Clinic since 2005https://blog.law.cornell.edu/lvi2012/presentation/lawyering-in-the-digital-age-technology-collaborations-for-access-to-justice/

started developing new business models, and has generally sophisticated users who are keen to experiment with new models (e.g. digital library licensing etc). Cable broadband and uptake of 4G mobile technology has vastly contributed to the digitalisation of legal information. Dutch government has played a fundamental role opening up legal resources in the early days of the internet and is today committed to the implementation of Open Access policies, especially for publicly-funded research. Further, it also supports Open Data policies for legal information.

Given the Dutch government's prominent role, it should be interesting to see how the public and private sector continue to run in parallel. The public sector understands that its open data policy, which includes accessibility as well as publication, is certainly not incompatible with the business model of commercial publishers, at least not as long as their commercial proposition includes value-added products instead of mere duplication of freely available datasets. If we agree to assume that publishing is a complex, and often expensive, endeavour, we can safely conclude that commercial publishers, in order to compete with the public sector, needs to adapt their corporate structure. Many professionals certainly rejoice at the exciting prospect of raising the bar in legal publishing as regards innovation, prompted by the public sector. Further, this trend is not new and long-standing publishers such as SDU remember the distortion created in the market when some years ago the public sector decided to start publishing [border/customs information], previously under the exclusive grip of SDU. However, an ambitious public sector might also impact the willingness of the private sector to develop new products.

In turn, the more the public sector behaves (an even competes) like a private player, the higher the chances that private commercial activity will be scrutinised under public eyes. Could this lead to private parties holding substantial datasets or search intelligence eventually being analysed under the '*essential facility*' criteria?

On the '*production*' side, traditional publishers have largely moved online but paid content, rather than OA or advertising funded models are still dominant, even if the pricing structures are slowly changing (to e.g. pay per article etc.) and new entrants with a lower cost base and a quick '*time to market*' (e.g. community oriented, '*born-digital*' services etc.) are trying to disrupt the traditional legal publishing market in the hands of Kluwer and SDU. The slow-paced changes paint the legal professional as someone reluctant to change acquired habits (fear of missing out, wariness in the provision of advice, competition…). In an increasingly competitive environment, where the internet eases the flow of information, lawyers seem very conscious of how the old adagio that *information is power* holds up more than ever. On the one hand, they experiment with new business methods, at a time when artificial intelligence and big data are offering *El Dorado*, hoping to benefit from a first mover advantage (better adjusted client tariffs, more flexible outsourcing, efficient search etc.). On the other hand, moving too fast, especially in a traditionally conservative industry, might be financially and reputationally counterproductive (contributing to underfunded and 'untested' OA journals etc.). The Dutch legislature introduced in July 2015 a revision to the Copyright Act, which gives authors of short academic works a right to publish open access. The Dutch Ministry of Education and the National Science Foundation – together the largest public funders of research in the Netherlands—have enacted open access and open research data policies as the default for research funded (largely) with Dutch public money.

To date, OA initiatives adopted by commercial publishers still lack mainstream adop-

tion by legal authors and readers alike and we can only venture some of the reasons. Arguably, lack of visibility and user-friendliness might be the main cause OA publications have slow uptake. It might also bear relation to the nature of the legal profession and, perhaps, to potentially underestimated costs of OA (i.e. the Gold model requires author pays funding whereas the Green model is only an intermediate step in which the subscription model still prevails). An added difficulty is the delicate process of quantifying the socio-economic benefits of Open Data policies in the public sector, which complicates any 'cost and benefit' analysis.[158]

Of course, the mainstream adoption of OA initiatives could just simply be a matter of time. If we consider how the internet, a system essentially built to disintermediate communications and which was mass-adopted over 15 years ago, has indeed made a dent in legal publishers but not (yet) disqualified their business model, it could well be that the Netherlands needs at least another decade before it witnesses OA policies establishing a firm foothold in the country. Developments in scientific publishing are slower-than-expected.

7.4. Austria Outcomes

The border line in Austria between legal information provided by public bodies and information provided by commercial publishers is "added-value". Primary sources and basic functionality are offered by the government, access to secondary sources (literature, commentary) and premium functionality is offered by the publishers. RIS is an award-winning centralized expert systems, containing legislation and case law in one platform. Despite financial limitations of the government, the platform continuous to make information accessible for free in accordance with the PSI Directive, also via a new REST interface. These open data interfaces made it possible that third parties have developed new applications based on the RIS datasets. The RIS is well established and experts users are satisfied. Non-experts can receive legal information through the citizen portal help.gv.at or the business portal usp.gv.at. Primary sources of the law are well covered, with the exception of preparatory works of the parliament, which are not very accessible. The four dominant legal publishers in Austria generate half of their revenues with online products and database access. The publishers are an intermediary and an information broker, ensuring high quality standards for legal information. Open access publication is a topic of interest, especially pushed by NGOs and research institutions, like the OANA, Open Knowledge and the ODI. Netherlands remains a role-model.
Both government and commercial publishers are opening up their content (the government via open data portals, the publishers in a first step via opening their search to users and the search engine indices of Google and Microsoft), making Austrian law more accessible. Austrian legislation and case law is only partly connected to EU legislation and case law. The introduction of ELI and ECLI will certainly help to build a more interconnected network.

7.5. Towards Open European Union

As part of the Digital Agenda[159] towards Europe2020[160], alongside reform of e-

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[158] See D2.3.d1 for a more in-depth discussion.
[159] A Digital Agenda for Europe, COM(2010) 245 final, 28.8.2010.
[160] COM(2010) 2020 final 'Europe 2020: A strategy for smart, sustainable and inclusive growth', , 3.3.2010.

government services[161] and research into better e-government in Horizon2020[162], the ISA2 programme aims to create a fully automated legislative process in the EU[163], to ensure effective, open and transparent access to legislation and facilitates the active and collaborative participation of citizens, companies and other stakeholders. It includes a number of actions to steps in the overall lifecycle of the legislative process, designed for increased regulatory process efficiency, reduced administrative and financial burden, improved quality of legislation, and accessibility to and the re-use and preservation of legislation[164]. The relevant actions for Openlaws are especially:

- Action 2016.01 – application of EU law: provision of cross-sector communication and problem solving tools (THEMIS): This action aims to manage the full life cycle of EU law processes and to have one single, usable and coherent point of access, both for the Commission and the Member States. It will improve Member States' efficiency, transparency and openness of reporting on and monitoring of the implementation and application of EU law.
- Action 2016.04 – participatory knowledge for supporting decision making: This action responds to the demand for more open, transparent, collaborative and participatory prelegislative consultations, internal decisions and policy-making processes, by consolidating reusable tools that allow the electronic participation of stakeholders, the analysis of collected opinions, and the discovery and generation of knowledge.
- Action 2016.08 – European Legislation Identifier (ELI): the ELI is a flexible, consistent and reliable way of uniquely identifying legislative documents from different jurisdictions. It makes the documents readable and understandable by both humans and computers, and makes it easier to reference and share them at European level, while respecting the specific requirements of national legal systems.
- Action 2016.17 – inter-institutional framework for digital ordinary legislative procedure OLP management: To rationalise the EU legislative process and the underlying IT environment, a study was launched under the ISA programme to get a comprehensive view of the overall life cycle of the inter-institutional legislative process (AS IS). This included business processes and roles, the technologies, tools and systems used in each major legislative step by each of the institutions, and the specifications used to structure and exchange information. This action builds on the results of other actions and initiatives, such as the Interinstitutional Metadata Maintenance Committee (IMMC), and addresses the identification, definition and development of data standards and semantic building blocks

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[161] SEC(2012) 492 final, e-Commission 2012-15: Delivering user-centric digital services, 1.8.2012.

[162] Regulation (EU) No 1291/2013 of 11 December 2013 establishing Horizon 2020 — the Framework Programme for Research and Innovation 2014-2020 and repealing Decision No 1982/2006/EC (OJ L 347, 20.12.2013, p. 104)

[163] Europa (2016) ISA2 Work Programme 2016: Summary, at 3.6 Decision Making and Legislation-Supporting Instruments

[164] COM(2010) 744 final, Towards interoperability for European public services, 16.12.2010 at http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0744:FIN:EN:PDF

required for a seamless, interconnected, end-to-end, fully interoperable IT workflow that supports the production of EU law across institutions.

- Action 2016.23 – ICT implications of EU legislation: This action ensures that ICT implications are identified and assessed when EU legislation is prepared or evaluated, and that they are properly taken into account in due course. This ensures that legislation is implemented in a way that is effective, timely, and at a reasonable cost.
- Action 2016.38 – legislation interoperability tools (LEGIT): This action proposes a set of reusable, fundamental, web-based building blocks that support and improve the electronic exchange of documents and metadata in the context of the legislative process and their conversion into different formats.

8 Conclusions and Outlook for BOLD

Law publishing is not in a vacuum – there are six outstanding challenges which emerged from the country case studies and associated Workstream 1 analysis. These are explored to conclude the chapter and report.

8.1 Summary of Country Case Studies

First we recap what individual country reports summarized.

The UK context is a developed legal market, with a strong user base of local and multinational firms, advanced university libraries and researchers, and law reports published by both commercial publishers and two legal charities: British and Irish Legal Information Institute (BAILII) and Incorporated Council of Law Reporters (ICLR). UK legal data is generally open to reuse and access with the exception of case law restrictions – where a virtuous open data circle has been hampered by legacies of closed copyright in the gift of individual judges and in practice their clerks, which remains unreformed. This led to restrictively licensed underfunded systems belonging to legal educational charities BAILII and ICLR. Reforms to case law release and funding would enable the UK to be seen as a 'best of breed' open legal data example.

The Netherlands has a mature, well-developed service industry, with a long-standing history of powerful professional publishers, and a particularly innovative public sector. The Dutch government was already keen in the mid-1990s to improve public availability of government information online and continues to work today on making this data truly accessible and manageable to the public at large. It pursues open access and open data policies. Primary legal information is among the many types of government information that is increasingly released as open data (legislation, court decisions, parliamentary records). As a result uptake of open access in legal publishing is gaining pace, albeit that the effect is most notable in academic publishing. The two largest legal publishers, Wolters Kluwer and SDU, have traditionally enjoyed a competitive advantage over their peers, given their historical ties to the public sector. Several smaller specialized publishers cater to specific target groups: students, legal specialists in a particular field, etc. Fairly new market actors in the Netherlands are legal content integrators, which offer search, access and information management services to the private and public sectors.

Austria is one of the leading EU Member States with respect to legal information systems and access to justice. The RIS is an award-winning centralized expert systems, containing legislation and case law in one platform. Despite financial limitations of the government, the platform continuous to make information accessible for free in accordance with the PSI Directive, also via a new REST interface. There are four dominant legal publishers in Austria, having a long history in the book-printing industry. The publishers are an intermediary and an information broker, ensuring high quality standards for legal information. Open access publication is a topic of interest, especially pushed by NGOs and research institutions. It is still a rather long way to general OA publication in the legal domain in Austria, the Netherland remain a role-model. New technology like Google as well as mobile devices are changing the legal land-scape in Austria. Government and commercial publishers are more and more opening up their content (the government via open data portals, the publishers in a first step via opening their search to users and the search engine indices of Google and Microsoft), making Austrian law more accessible. From a European perspective, there is still a lot to do. Austrian legislation and case law is only partly connected to EU

legislation and case law. The introduction of ELI and ECLI will certainly help to build a more interconnected network. OpenLaws could provide the necessary legal infrastructure, to connect Austrian and EU primary sources – and potentially legal data sources from other EU Member States as well.

European legal data is so open to reuse and access that it is the 'exception that proves the rule' – in that the national systems under examination may have less a virtuous circle and more a system hampered by legacies of closed and restrictively licensed underfunded systems. This will be a major research theme in national case studies. We can conclude that though European legal information may not be as widely reused and repurposed as US federal law, it is nevertheless a best of breed example for the Member States to emulate where possible.

8.2 Digital Era Government 2.0 and Access to Law

Margetts and Dunleavy have explained in a series of ground-breaking articles that we are living in the new millennium through a digital transformation in governance, which has supplanted the New Public Management (NPM), itself dominant in reforms of the 1980s-1990s[165]. NPM was characterized by privatization, competition and managerialism, and I give examples taken from government database provision. Privatization included licensing off datasets at cost-plus profit. Competition permitted the private sector into provisioning, including even government legal publishing (for instance the official Stationary Office). Managerialism and consultancy were designed to introduce private sector practices into government. This included agencies in place of ministries e.g. Meteorological Office and Ordnance Survey (mapping, geospatial information) as profit centres.

Digital Era Governance (DEG) from 1998 onwards reflected a new approach, characterized by mass adoption of Internet by the public in Western Europe in 1998-2002. It included self-employment taxation filing to managing/filing online, through which the UK HMRC achieved remarkable savings. The social security base moved online, despite problems of the poor accessing the Internet, in the issue set known as the Digital Divide. Mobile Internet ensures most poor are connected, but illiteracy remains an issue. This general move towards DEG has not been without problems. Government's track record of mismanagement of massive IT projects include the disastrous. National Health IT Spine in the UK, which cost over £30billion.

More radical moves towards DEG 2.0 emerged as broadband became ubiquitous and entire government systems could move online from 2005. DEG2.0 from 2006/10 moved ahead rapidly, with broadband enabled 'consumers' ubiquitous by 2006, and 'superfast' (sic) by 2014. This refers to speeds in excess of 24Mbps – achieved much earlier in the Netherlands than UK. Sponsored flagship projects included Data.gov.uk launched in January 2010 and the Open Data Institute 2011[166]. The Open Government Licence was created; the vehicle licence agency moved to paperless tax discs in 2015; tax authorities completed the move to online-only self assessment.

DEG3.0 may still arrive. From 2010, the austerity coalition used open data to create cost savings, transparency and champion digital evangelists in central government,

[165] Margetts, Helen and Dunleavy, Patrick (2013) The second wave of digital-era governance: a quasi-paradigm for government on the Web, Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences VL - 371 at http://rsta.royalsocietypublishing.org/content/371/1987/20120382.abstract

[166] http://data.gov.uk/

Minister in charge Francis Maude MP was an old-time Thatcherite NPM-er from the 1990s transformed into an open data evangelist. Note that NPM is not dead, even if it is approaching the end of its life span as a motivating reformist principle. The Ministry of Justice has no open access proposals in its radical IT for the courts programme, though Treasury proposals to transform courts' IT will be funded for a total of £738m (largely paid through sale of 'unsuitable for upgrade' old court real estate in prime city centre locations)[167]. It is a very critical issue for BOLD whether courts remember to include open access reforms in their wider IT programme[168].

Legal profession reform is unsurprisingly at the rear of government reform of public service, given the strength of the various countervailing forces to any change. NPM barely touched the legal profession, though UK legal aid (to pay for legal representation for the poor, especially in criminal defences) has been slashed in the period since 2010 in a sign of the last tide of NPM lapping at the legal profession's feet. DEG has been seen in two areas in particular: legislation.gov.uk and wider access to legal publishing.

Legislation.gov.uk is the flagship programme for National Archives/OPSI. It is the best open legislation API in the world (Rated No.1 by OKFN) with 6.5m web pages and 160,000 documents. all now fully annotated (ie all the effects have been captured and are visible), and 77.2% of the primary legislation content fully consolidated. It was esigned from the start to be open, much better than EurLEX API but not as comprehensive as Legifrance, as the latter includes case law[169].

I explore in the first of six grand challenges for legal data, how far those primary legislative reforms have driven the secondary and tertiary publishing markets.

8.3 Challenges and Recommended Solutions for Big Open Legal Data

Our recommendations lie in the six areas we identify as offering continued obstacles to Big Open Legal Data. These were presented in outline at the BILETA conference and Open Data Institute in spring 2015, LAPSI2.0 workshop in 2014, and in the final Openlaws conference in March 2016[170]. The six cross-cutting challenges are:

1. Legal publishing profession: socio-economics and path dependence
2. Court system: judicial independence & digitisation
3. Copyright
4. Government data
5. Human right to privacy and access to law
6. Austerity economics.

First is the challenge to **legal professional publishing**. It is not the first profession to be digitized, and medical publishing has a similar structure of two giant multinational

[167] Lord Chief Justice (2015) The Lord Chief Justice's Report 2015, at pp5-6.
[168] Marsden, C. (2015) Open Access to Law – How Soon? Computers and Law, Issue 2. http://www.scl.org/site.aspx?i=ed41009.
[169] http://leibniz-internship-report.herokuapp.com/eu-legal-data-survey/eu
[170] Marsden, C. [2015] 9 April: Access to EU law compared to UK, 30th BILETA conference, University of West of England, at http://www.slideshare.net/EXCCELessex/open-laws-bileta15; Marsden, C. [2015] 20 March, Hacking the Law, Open Data Institute, London http://www.slideshare.net/EXCCELessex/hackingthe-law-ridays; [2014] Sept 4: Openlaws LAPSI2 meeting, University of Amsterdam Library at http://www.slideshare.net/EXCCELessex/openlaws-lasi2-meeting-amsterdam-4914

publishers resulting. Both professions are wary of disintermediation, with doctors and lawyers largely self-regulatory with fierce independence of government regulation. In an age of infinite information but difficulties in verifying, analysing and using that information, trusted intermediaries have become apomediaries. The term was originally used in 2007 to describe the continued role of doctors' advice in an era of online medical self-help fora[171], but equally applies to other professionals such as lawyers – whether practising, in-house, academic[172] or librarians[173].

Prices paid for academic/professional comment reflect that leading experts in both fields give their information to publishers freely, which are then repackaged and resold with interest. This is an amazing business model for publishers, which we explore in Methods. Examples of innovation by not-for-profit publishers abound, using free legal material that needs syndicating to an audience. McGrath states

> "ICLR is a classic example of a re-user of open legal data, and our platform is also an example of legislation being presented alongside case law, though it is early days and there is a lot more we plan to do in that regard, using the fruits of our participation in the Big Data for Law project with the National Archives."[174]

A London-based SME provides a syndication service for law firm expert advice (typically case reports and short articles of less than 1000 words), including subject guides by jurisdiction created by partner law firms[175]: "With an archive of over 450,000 articles in more than 20 languages covering 50 work areas worldwide, Lexology is a powerful research platform"[176]. This service provides both syndication with search, and customisation, using freely available content from law firms whose own incentive is to find a relevant potential client audience without remuneration for the research snippets provided.

Academic attempts to deliver free access to law have suffered from sustainability issues, as with for instance Openlaw, "an experiment in crafting legal argument in an open forum"[177] which wound down after the Eldred v. Ashcroft case[178], with its promise also unfulfilled at that early stage in crowd-sourcing legal argument[179]. More broadly, legal academics have explained the failure of the 'Academic Spring' (sic), including boycotting Elsevier journals since 2012[180], due to the power of Journal

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[171] Eysenbach G. (2007) From intermediation to disintermediation and apomediation: new models for consumers to access and assess the credibility of health information in the age of Web2.0, Stud Health Technol Inform.;129(Pt 1) pp162-6 at http://www.ncbi.nlm.nih.gov/pubmed/17911699?dopt=Abstract

[172] Maharg, P., Nicol, E. (2014) Simulation and technology in legal education: a systematic review and future research programme, in Grimes, R., Phillips, E., Strevens, C. (eds), Legal Education: Simulation in Theory and Practice, Ashgate Publishing, Emerging Legal Education series, 17-42

[173] Kwanye, T., C. Stilwell and P.G. Underwood (2013) Intelligent libraries and apomediators: Distinguishing between Library 3.0 and Library 2.0, Journal of Librarianship and Information Science Issue 45: 187-197, first published on March 5, 2012, at http://lis.sagepub.com/content/45/3/187.long

[174] Magrath, Paul (2016) Access to and reuse of EU legal information, Report of a one-day conference organised by the Publications Office of the European Union, Brussels, 21 March 2016, http://www.iclr.co.uk/access-reuse-eu-legal-information/

[175] http://www.lexology.com/navigator/

[176] http://www.lexology.com/about

[177] http://cyber.law.harvard.edu/openlaw/

[178] Eldred v. Ashcroft, 537 U.S. 186 (2003)

[179] The article "Legal Research 2.0: the Power of a Million Attorneys" which explained the experiment has itself disappeared.

[180] Gowers, Tim (2012) Elsevier — my part in its downfall, Gower's Blog, 21 January, at https://gowers.wordpress.com/2012/01/21/elsevier-my-part-in-its-downfall/

Impact Factor creating entry barriers for open access journals. Moriarty suggests that "Journal 'branding', and, worse, journal impact factor, remain exceptionally important in (falsely) establishing the perceived quality of a piece of research, despite many efforts to counter this perception"[181]. This an experience repeated in law in Europe though not the US. (The latter jurisdiction is dominated academically by law school journal publishing, many using the Scholastica platform[182], financed by universities and staffed by students with faculty support.) The Cambridge mathematician who helped create the Elsevier boycott helped found an open access journal in 2015[183] using the Scholastica platform[184], but change is glacially slow. In law, even in Internet law, European open access journals are rare[185]. The academic spring seems a further false dawn, the first of which was in 1996[186].

Recommendation 1: Open Access to Legal Information is as fundamental as that to medical information. Professionals, especially funded by public sector investment such as civil servants, judges and academics should be encouraged to publish using open access by default.

Second is the challenge to the **court system**. While legislation is a success story for BOLD, IT for courts is antiquated: judgments are only now commonly word processed. The move to a paperless court rooms mean IT on tablets. The impetus is the sixth challenge: austerity economics. Court systems are looking to reduce costs/delays, with Online Dispute Resolution (ODR) as well as online intermediation and adjudication. The use of video/audio/digital forensic evidence is increasing. What is needed is extension of IT reforms to prescribe or at least urge open access to law. Note for instance the UK court system e-judiciary plan for investment worth £780m, yet with no commitment to open access.

Similar problems occur with reports and other documents generated by, or commissioned by, government both federal and regional/local, to aid policy making. This grey literature should also be published on an open access basis and placed in a government repository using open standards. The European Commission has recently declared that:

> "Greater access to court files for third persons is not only recommended, it is necessary in view of the above mentioned problems ranging from some inconveniences to infringements of procedural rights, acknowledged as a fundamental human rights (i.e. right to fair trial and equality of arms)… Certain aspects of (in)accessibility of Court files cause serious legal problems, and may, arguably, even violate internationally recognised fundamental human rights, such

[181] Moriarty, Philip (2016) Addicted to the brand: The hypocrisy of a publishing academic, LSE Impact Blog, 14 March, at http://blogs.lse.ac.uk/impactofsocialsciences/2016/03/14/addicted-to-the-brand-the-hypocrisy-of-a-publishing-academic/

[182] https://scholasticahq.com/law-reviews

[183] Gowers, Tim (2016) Discrete Analysis Launched, 1 March, at https://gowers.wordpress.com/2016/03/01/discrete-analysis-launched/#more-6123

[184] Scholastica is a start-up founded in 2011 providing a software platform for peer-reviewed open access journals, see https://scholasticahq.com/about

[185] Some university-funded and/or hosted journals exist, as do some based on specific research centres. Examples are the Italian Law Journal (https://italian-law-journal.scholasticahq.com/) , SCRIPT-Ed Journal of Law, Technology & Society (http://script-ed.org/ founded 2005), European Journal Of Current Legal Issues (http://webjcli.org/ founded 1995, renamed 2015), European Journal of Law and Technology (http://ejlt.org/about/editorialPolicies#custom-1 founded 1992, renamed 1996 and 2011).

[186] Paliwala, Abdul (1996) From academic tombstones to living bazaars: The changing shape of Law Reviews JILT 1996 (1) http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/1996_1/paliwala

> as equality of arms….It can be argued that, in a case where one party has access to a certain document to which she also refers, but to which the adversary party does not have access, the right to a fair trial is violated."[187]

There are particular issues with CJEU files[188]. Governance issues include those for standard setting processes, in terms of both their development and implementation (a la carte issues). For instance, ECLI is a well known standard but its adoption across the EU has been uneven, if not in some cases laggardly. A further more medium term issue is automation of processes, and big data for law. The Law of Unintended Consequences can apply, as when all judgments are made public resulting in privacy and data protection issues. Standard Generalized Markup Language may need to be subjected to algorithmic regulation, in order for law to finally fulfill Jeremy Bentham's utilitarian dream of 1792 that law be made more certain and accessible to users in "one great book (it need not be a very great one)."[189]

Recommendation 2: Open Access to Court Decisions (especially those that set precedents) is also fundamental. Reforms to create IT for judges should mandate publishing of decisions using open access and open standards (such as ECLI) by default. The same open standards should be used for government-funded 'grey literature' (policy making aids) using SGML[190].

The third challenge is to **copyright** in legal publication. Judges' copyrights are a historic legacy of the independent judiciary, defended under the Bill of Rights 1689. Government copyright on its 'own' legislation dates to the Statute of Monopolies 1603. However, opening access to citizens of this fundamental knowledge is vital – dating to Martin Luther's 1517 'Ninety-five theses'. Note the previous printing revolution relied on open access to Bible publishing, the natural law of the Middle Ages. Now in the digital era, the copyleft movement very strong in Europe, and prosumers are innovating in areas where governments and markets are not, such as with Legal Information Institutes and the RIS app.

Recommendation 3: Copyleft for Legal Information should be encouraged where it creates value that government and market fail to provide. Publishing of primary legal material in open access formats using open access by default should be pursued wherever possible.

The fourth challenge is to **open government data** more generally, and the creation of metrics for government success in opening legal data. The Open Data revolution since mid-2000s has been characterized as Digital Era Governance 2.0[191]. The Open

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[187] EC (2013) PE 474.406 National practices with regard to the accessibility of court documents, Directorate General For Internal Policies Policy Department C: Citizens' Rights And Constitutional Affairs Legal Affairs, authored by Vesna Naglič, 19 April 2013 Cited in European Parliament http://www.europarl.europa.eu/RegData/etudes/etudes/join/2013/474406/IPOL-JURI_ET(2013)474406_EN.pdf

[188188] Decision of the Court of Justice of the European Union of 11 December 2012 concerning public access to documents held by the Court of Justice of the European Union in the exercise of its administrative functions (OJ C38, 9.2.2013, p. 2-4)

[189] Heaton Richard (2014) Making the law easier for users: the role of statutes, Cabinet Office, Office of the Parliamentary Counsel and Delivered on:14 October 2013 (Transcript of the speech, exactly as it was delivered) published:15 January 2014

[190] See https://en.wikipedia.org/wiki/System_for_Information_on_Grey_Literature_in_Europe

[191] Margetts, Helen and Dunleavy, Patrick (2013) The second wave of digital-era governance: a quasi-paradigm for government on the Web, Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences VL - 371 at http://rsta.royalsocietypublishing.org/content/371/1987/20120382.abstract

Knowledge Foundation and Open Data Institute very active in this area. Open access to legislation is now on the OKFN scoreboard[192]. Netherlands and UK lead the high scorers, and Austria's RIS:app highly successful. The next step is to include case law, where the example is set by EU law using EurLEX. The problem is not confined to Europe: Adam Ziegler of Harvard University's Library Innovation Lab remarked, "We are in an era of amazing progress in access to government data, but where are we with the law? Almost nowhere, unfortunately."[193]

Recommendation 4: Metrics for Open Legal Data should be published, including legislation, case law in appeal courts, and eventually commentary and grey literature.

The fifth challenge is to basic human rights in the digital era. Fundamental knowledge of European law is vital to enforcing Article 6, European Convention on Human Rights and the Charter of Fundamental Rights[194]. While Aristotle first declared that "Ignorance of the law is no excuse", the digital era gives the basis for the practical application of this moniker, as recognized by the Council of Europe Committee of Ministers in 2014[195]. Provision of legal education to general public has been substituted by that of the legal profession as a proxy for public.

Automation of legal processes may help legal professionals at the margins (submitting basic wills, guardianship of court, even simple conveyancing), but also hold a danger for those amateurs[196]. More legal automation may become inevitable, because human lawyers are too expensive, but this cannot be at the price of justice. Equality of arms may be aided by digital law, for instance in ODR only where governments provide access to legal information as well as knowledgeable apomediaries to help citizens[197]. A recent Council of Europe report wanred that human rights must not be overlooked in any rush to ODR[198]. A continued need for experts to help plaintiffs will prevail, even if wills, property, basic contract can be automated[199].

Pasquale points out that:

Dunleavy and Margetts (2010) The Second Wave of Digital Era Governance, APSA 2010 Annual Meeting Paper, Available a http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1643850

[192] http://index.okfn.org/dataset/legislation/UK ranked equal No.1 in 2014, Netherlands/Austria joint 7th.

[193] Laird, L. (2016) "As Governments Open Access to Data, Law Lags Far Behind" available at http://www.abajournal.com/news/article/as_governments_open_access_to_data_law_lags_far_behind

[194] Pretto and others v. Italy, no 7984/77, § 26; Werner v. Austria, no. 21835/93, §41-51; Szucs and others v. Austria 20602/92, 21835/93, 28389/95, 28923/95, 33730/96, 38549/97, 35437/97.

[195] CM/Rec(2014)6 16/04/2014, Recommendation of the Committee of Ministers to member states on a guide on human rights for Internet users, (Adopted by the Committee of Ministers on 16 April 2014 at the 1197th meeting of the Ministers' Deputies).

[196] Brooke, Henry (2016) The new Access to Justice Commission: Update 4 (Professor Susskind) on March 29, 2016, at https://sirhenrybrooke.me/2016/03/29/the-new-access-to-justice-commission-update-4-professor-susskind/ This acts as a retrospective on the two decades since Susskind, Richard (1996) The Future of Law, Oxford University Press.

[197] Civil Justice Council (2015) Online Dispute Resolution For Low Value Civil Claims, Online Dispute Resolution Advisory Group.

[198] Committee on Legal Affairs and Human Rights (2016) Access to justice and the Internet: potential and challenges, Report: Rapporteur: Mr Jordi Xuclà, at http://website-pace.net/documents/19838/1085720/20151026-InternetAccess-EN.pdf/8d3c44d4-da6c-4dac-ab15-94dc1fcc5d48

[199] Pasquale, Frank (2016) Automating the professions: utopian pipe dream or dystopian nightmare, LA Review of Books at https://lareviewofbooks.org/review/automating-the-professions-utopian-pipe-dream-or-dystopian-nightmare

> "Our legal system exacerbates inequality because of uneven access to resources for advocacy, not lack of automation[200]. Digital projects to "democratize the law" rarely include the more sophisticated predictive analytics the Susskinds trumpet; instead, they remain the exclusive preserve of wealthy corporations. The Susskinds give us little reason to believe that automation will impede — rather than accelerate — inequalities in legal resources." [201]

Furthermore, standard process automation will fast-track losses for citizen-advocates:

> "I would worry about any person who decides to file a tort or contract case against a major corporation using an app. If the claim is frivolous, they could be sanctioned. If the claim is serious, it will probably be outmaneuvered by a (human) defense lawyer. And if corporations don't even need to deploy attorneys to deflect such interventions, but can even automate their own defense, then there's little reason to believe this will constitute some great triumph for justice.".

Trachimovsky argues that automation of the profesion is highly unlikely however impressive Artifical Intelligence becomes:

> "There is always another party whose interest is opposed, whether the subject is a contract, a will or, it goes without saying, litigation. Law is not practiced in a vacuum. It is not merely a profession devoted to preparing standard forms or completing blanks in precedents."[202]

He also suggests auto-updates of relevant case law to your mobile would lead to so many alerts that "the average practitioner would be vibrating like Shakira performing Hips Don't Lie"!

Recommendation 5: Human Rights Impact Assessments for Implementation of Open Legal Data should be published, including a survey of their affect on non-professional plaintiffs using both traditional court and ODR systems.

The final challenge relates to the costs associated with digital transformation of BOLD, and the challenge to austerity: economics. Costs of public IT provision are almost always under- estimated, yet in this case, crowd-sourcing has bene very effective for social entrepreneurs such as BAILII and latterly RIS:app and Openlaws. Openlaws builds on the success and very significant achievements by LIIs. Opening access to law arguably can cost-effectively help to transform citizen access to law in areas such as Challenge 2 and Challenge 5.

Recommendation 6: Progress towards Open Legal Data should be assessed in the same way as that in other crowd-sourced areas of the sharing economy, and should be a Horizon2020 and Digital Agenda 2020 priority challenge.

BOLD solutions must meet six challenges with a holistic method comprising:

- Interdisciplinary approach: challenges are legal, technical, social, economic

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[200] Citing https://bol.bna.com/why-digitizing-harvards-law-library-may-not-improve-access-to-justice/

[201] Pasquale, Frank (2016) Automating the professions: utopian pipe dream or dystopian nightmare, LA Review of Books at https://lareviewofbooks.org/review/automating-the-professions-utopian-pipe-dream-or-dystopian-nightmare

[202] Trachimovsky, Seymour (2011) The End of Lawyers? (That'll be the day), Ethics centree Canada, at http://www.ethicscentre.ca/EN/resources/End%20of%20Lawyers%20Book%20Review.pdf

- International approach: lawyers' work increasingly is across jurisdictions;
- Interdependent approach: The solution is not step change in each challenge but across all six areas.

We can represent best practices in these six areas, shown in the following table.

Table 8: Six Bold Challenges and Better Practices

BOLD Challenge	**Examples of Better Practice**
Legal Professional Publishing	Forms of open access: ICLR and BAILII
Court system Judicial independence & digitisation	Legislation.gov.uk API No plans in MoJ IT for courts
Copyright; Reuse cases	Open access journals; EurLEX copyright policy
Government data PSI & Open Data reforms	ODI, OKFN, hackathons, code camps
Human rights: Access to justice	Citizen use of BAILII, RIS:App
Austerity economics: Cost of databases	Ars Acqui; BAILII; RIS:App

We noted a particular legal challenge that is explored further in the BOLD2020 Vision document: the licensing & copyright regulatory environment in the EU. We further argue that continued study is needed of data protection issues and Linked Open Data (LOD).

How quickly might these Recommendations be achieved?

In the short term (1-2 years), we argue governments should promote release of legislation and case law as open data.

In the medium term (3-7 years), we might hope for harmonized copyright & database rights in official documents across EU.

Governments also need to strengthen the PSI Directive to oblige public access to case law, and the legislative record, as recognized by the LAPSI2 final report[203].

Only then might we partially approach the Aristotlean ideal of expunging the access issue in ignorance of law, and producing Bentham's one (not very great) book in digital form.

[203] See LAPSI 2.0 Thematic Network (2013-14) CIP-ICT PSP-2012-6 Grant agreement No 325171 https://ec.europa.eu/digital-single-market/news/legal-aspects-public-sector-information-lapsi-thematic-network-outputs and specifically LAPSI2 (2014) LAPSI Position paper on Access to Data, at http://ec.europa.eu/newsroom/dae/document.cfm?action=display&doc_id=8341

9 References

Baker, J. H. (1986) Dr Thomas Fastolfe and the history of law reporting, Cambridge Law Journal, 45 pp.84–96

Baker, Sarah Elsie and Edwards, Rosalind (2012) How many qualitative interviews is enough. Discussion Paper, UK Economic and Social Research Council National Centre for Research Methods at http://eprints.ncrm.ac.uk/2273/

Barrett Paul M. (2014) A New Social Network Entices Lawyers With Anonymity, Bloomberg Business Week Technology, 6 October at http://www.businessweek.com/articles/2014-10-06/do-lawyers-need-an-anonymous-social-network-this-startup-thinks-so

Bartelings, P., M van der Kaaij en J Soeters (2013) Open Access in de juridische praktijk, 16 December 2013.

Bing, J. (2010) ‘Let there be LITE: a brief history of legal information retrieval’, European Journal of Law and Technology, Vol. 1, Issue 1.

Bonello, C. (2012) "Discovering the digitised law library of heritage collections: a collaborative achievement between French libraries" Legal Information Management. 12(4), pp297-304.

Brabazon Tara (2014) The disintermediated librarian and a reintermediated future, Australian Library Journal Vol. 63, Iss. 3, http://www.tandfonline.com/doi/pdf/10.1080/00049670.2014.932681

Brand, P. (1996) The Earliest English Law Reports, Voumes I and II, London: Selden Society.

Brooke, Henry (2016) The new Access to Justice Commission: Update 4 (Professor Susskind) on March 29, 2016, at https://sirhenrybrooke.me/2016/03/29/the-new-access-to-justice-commission-update-4-professor-susskind/

Brooke, Sir Henry and Nick Holmes (2011) Judgment Day for BAILII, interview with retiring chairman of the BAILII trust, at http://www.scl.org/site.aspx?i=ed22972

Browne, G. (2010) Indexing of free, web-based electronic resources, Legal Information Management 10(1), 28-33.

Checkland, Peter B. (1981, 1998) Systems Thinking, Systems Practice, John Wiley & Sons Ltd.

Checkland, Peter B. (2000) Soft Systems Methodology: A thirty year retrospective. Systems Research and Behavioral Science, 17, 11–58.

Checkland, Peter B. and Scholes, J. (1990) Soft Systems Methodology in Action, John Wiley & Sons Ltd.;

Chui, Michael with James Manyika, Jacques Bughin, Richard Dobbs, Charles Roxburgh, Hugo Sarrazin, Geoffrey Sands and Magdalena Westergren (2012) The social economy: Unlocking value and productivity through social technologies, Report: McKinsey Global Institute, at http://www.mckinsey.com/insights/high_tech_telecoms_internet/the_social_economy

Civil Justice Council (2015) Online Dispute Resolution For Low Value Civil Claims, Online Dispute Resolution Advisory Group.

CM/Rec(2014)6 16/04/2014, Recommendation of the Committee of Ministers to member states on a guide on human rights for Internet users, Adopted by the Committee of Ministers on 16 April 2014 at the 1197th meeting of the Ministers' Deputies.

COM(2010) 2020 final ‘Europe 2020: A strategy for smart, sustainable and inclusive growth’, 3.3.2010.

COM(2010) 245 final, A Digital Agenda for Europe, 28.8.2010.

COM(2010) 744 final, Towards interoperability for European public services, 16.12.2010 at http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0744:FIN:EN:PDF

Committee on Legal Affairs and Human Rights (2016) Access to justice and the Internet: potential and challenges, Report: Rapporteur: Mr Jordi Xuclà, at http://website-pace.net/documents/19838/1085720/20151026-InternetAccess-EN.pdf/8d3c44d4-da6c-4dac-ab15-94dc1fcc5d48

Council of Europe (2012) Judicial Evaluation Report at http://www.coe.int/t/dghl/cooperation/cepej/evaluation/2012/Rapport_en.pdf

Cox, N. (2006) Copyright in Statutes, Regulations, and Judicial Decisions in Common Law Jurisdictions: Public Ownership or Commercial Enterprise? Statute Law Review. 27(3), 185

Criminal Justice Review (2003) Litigation Views among Jail Staff: An Exploratory and Descriptive Study, 28: 70-87.

Danner, R. A. (2012) "Open Access to Legal Scholarship: Dropping the Barriers to Discourse and Dialogue" Journal of International Commercial Law and Technology. 7(1), 65-79

Data.gv.at, Offene Daten, https://www.data.gv.at/ (19.2.2016).

Decision of the Court of Justice of the European Union of 11 December 2012 concerning public access to documents held by the Court of Justice of the European Union in the exercise of its administrative functions (OJ C38, 9.2.2013, p. 2-4)

Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE), OJ L 108, 25.4.2007, p. 1–14, entered into force 15 May 2007

Donelan, E. (2009) "European Approaches to Improve Access to and Managing the Stock of Legislation" Statute Law Review. 30(3), 147

D'spremont, J. and Van den Herik, L. (2013) "The public good of academic publishing in international law." Leiden Journal of International Law. 26(1), 1-6

Dunleavy and Margetts (2010) The Second Wave of Digital Era Governance, APSA 2010 Annual Meeting Paper, Available a http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1643850

EC (2013) PE 474.406 National practices with regard to the accessibility of court documents, Directorate General For Internal Policies Policy Department C: Citizens' Rights And Constitutional Affairs Legal Affairs, authored by Vesna Naglič, 19 April 2013 Cited in European Parliament http://www.europarl.europa.eu/RegData/etudes/etudes/join/2013/474406/IPOL-JURI_ET(2013)474406_EN.pdf

Edwards, Rosalind and Janet Holland (2013) What is Qualitative Interviewing? Bloomsbury Academic at: http://www.bloomsbury.com/uk/what-is-qualitative-interviewing-9781849668095/#sthash.upoeZB2W.dpuf

Eldred v. Ashcroft, 537 U.S. 186 (2003)

EU Directive 2013/37/EU amending Directive 2003/98/EC on the re-use of public sector information.

EUCases (2014) Deliverable 1.1: Report on state-of-the-art and user needs at : http://eucases.eu/d1_1/ summarised at http://eucases.eu/fileadmin/EUCases/documents/Presentations/Torino2014/APIS_LOD_State-of-the-art.pdf

Europa (2016) ISA2 Work Programme 2016: Summary, at 3.6 Decision Making and

Legislation-Supporting Instruments

European Court of Justice, Annual Report 2014, http://curia.europa.eu/jcms/upload/docs/application/pdf/2015-04/en_ecj_annual_report_2014_pr1.pdf (19.2.2016).

European Parliament Research Service (2014, 25 March) Net neutrality in Europe, 140773REV2.

Eurostat, Annual detailed enterprise statistics for services (NACE Rev. 2 H-N and S95) [sbs_na_1a_se_r2], M691, http://epp.eurostat.ec.europa.eu

Eysenbach G. (2007) From intermediation to disintermediation and apomediation: new models for consumers to access and assess the credibility of health information in the age of Web2.0 Studies in Health Technology Information;129(Pt 1):162-6.

Franken Prof.mr. H. et al, Recht en Computer (5th Ed, 2004, Kluwer, Deventer) 602.

Frosio, Giancarlo F. (2014) Open Access Publishing: A Literature Review, CREATe-Working-Paper-2014-01, at http://www.create.ac.uk/publications/000011 pp70-75.

Fuller, Calum (2014) Record self-assessment returns as HMRC unmoved on deadline, 3 February, Accountancy Age at http://www.accountancyage.com/aa/news/2326507/record-self-assessment-returns-as-hmrc-unmoved-on-deadline

Gee, David (2013) BIALL Survey 2013 for Society of Legal Scholars and British and Irish Association of Law Librarians (BIALL).

Goodman, L.A. (1961) Snowball sampling, Annals of Mathematical Statistics 32 (1): 148–170. doi:10.1214/aoms/1177705148

Gowers, Tim (2012) Elsevier — my part in its downfall, Gower’s Blog, 21 January, at https://gowers.wordpress.com/2012/01/21/elsevier-my-part-in-its-downfall/

Gowers, Tim (2016) Discrete Analysis Launched, 1 March, at https://gowers.wordpress.com/2016/03/01/discrete-analysis-launched/#more-6123

Greenleaf, Graham , Free Access to Legal Information, LIIs, and the Free Access to Law Movement (2011). Iall International Handbook Of Legal Information Management, R. Danner and J. Winterton, eds., Ashgate, 2011; UNSW Law Research Paper No. 2011-40. Available at SSRN: http://ssrn.com/abstract=1960867

Greenleaf, Graham , Mowbray, Andrew and Chung, Philip, The Meaning of 'Free Access to Legal Information': A Twenty Year Evolution (2012). Law via Internet Conference, 2012. Available at SSRN: http://ssrn.com/abstract=2158868 or http://dx.doi.org/10.2139/ssrn.2158868

Hall, David (2012) ‘Google, Westlaw, LexisNexis and Open Access: How the Demand for Free Legal Research will Change the Legal Profession’ 26 Syracuse Sci. & Tech. L. Rep. 53.

Heaton Richard (2014) Making the law easier for users: the role of statutes, Cabinet Office, Office of the Parliamentary Counsel and Delivered on:14 October 2013 (Transcript of the speech, exactly as it was delivered) published:15 January 2014

HeinOnline (2014 undated) What is Hein Online? At http://home.heinonline.org.ezproxy.sussex.ac.uk/about/what-is-hein-online/ (pay-walled)

Heirbaut D. (2001) The Belgian legal tradition: does it exist?, in: H. Bocken and W. De Bond teds. Introduction to Belgian law. Mechelen pp 1-22.

Hetherington, Simon (2007) Halsbury's Laws of England: centenary essays, LexisNexis Butterworths.

Higher Education Statistics Agency, email to Prof. Marsden, 14 November 2014, kept on file

Holmes, N. (2010) “Free case law - an overview” Internet Newsletter for Lawyers. 2010 Jul/Aug, 1-3

Jackson, C. (2002) SPTL/BIALL academic law library survey 2000/2001, Legal Information Management. 2(2), 38-49.

Jannetta, V. (2003) What's new in legal information, Legal Information Management. 3(1), 6-9

Katz, Daniel Martin, (2014) The MIT School of Law? A Perspective on Legal Education in the 21st Century (October 22, 2014). University of Illinois Law Review, No. 5. Available at SSRN: http://ssrn.com/abstract=2513397

Kwanye, T., C. Stilwell and P.G. Underwood (2013) Intelligent libraries and apomediators: Distinguishing between Library 3.0 and Library 2.0, Journal of Librarianship and Information Science Issue 45: 187-197, first published on March 5, 2012, at http://lis.sagepub.com/content/45/3/187.long

Laird, L. (2016) “As Governments Open Access to Data, Law Lags Far Behind” available at http://www.abajournal.com/news/article/as_governments_open_access_to_data_law_lags_far_behind

LAPSI 2.0 Thematic Network (2013-14) CIP-ICT PSP-2012-6 Grant agreement No 325171 https://ec.europa.eu/digital-single-market/news/legal-aspects-public-sector-information-lapsi-thematic-network-outputs

LAPSI2 (2014) LAPSI Position paper on Access to Data, at http://ec.europa.eu/newsroom/dae/document.cfm?action=display&doc_id=8341

LAPSI2-Openlaws joint workshop 4/5 September 2014 in Amsterdam http://www.lapsi-project.eu/amsterdam-meeting-4-and-5-september-2014-amsterdam-netherlands

Law Society (2014) Entry Trends, at http://www.lawsociety.org.uk/careers/becoming-a-solicitor/entry-trends/#sthash.b0VuPXVV.dpuf

Law Society (2016) A £25 billion legal sector supports a healthy economy, 22 March, at http://www.lawsociety.org.uk/news/press-releases/a-25-billion-legal-sector-supports-a-healthy-economy/

Lawyering in the Digital Age Clinic: Collateral Consequences initiative project in the Clinic since 2005 https://blog.law.cornell.edu/lvi2012/presentation/lawyering-in-the-digital-age-technology-collaborations-for-access-to-justice/

Leith P. (2010) The rise and fall of the legal expert system, in European Journal of Law and Technology, Vol 1, Issue 1.

Leith, P., Fellows, C. (2013) BAILII, Legal Education and Open Access to Law, European Journal of Law and Technology, Vol. 4, No. 1 at http://ejlt.org/article/view/209

Lesaffer, Randall (2007) European Legal History: A Cultural and Political Perspective, Cambridge University Press, at pp.387-419.

Lessig, Lawrence (2001) The Future of Ideas: the fate of the commons in a connected world, Random House also in Creative Commons download at http://www.the-future-of-ideas.com/download/

Leveson LJ (2012) An Inquiry Into The Culture, Practices And Ethics Of The Press.

Lexpert (2000) UK Law Firms Invade Europe March 1, 2000 at http://stg.lexpert.ca/article/uk-law-firms-invade-europe/

Lord Chief Justice (2015) The Lord Chief Justice’s Report 2015, at pp5-6.

Magrath, Paul (2016) Access to and reuse of EU legal information, Report of a one-day conference organised by the Publications Office of the European Union, Brussels, 21 March

2016, http://www.iclr.co.uk/access-reuse-eu-legal-information/

Maharg, P., Nicol, E. (2014) Simulation and technology in legal education: a systematic review and future research programme, in Grimes, R., Phillips, E., Strevens, C. (eds), Legal Education: Simulation in Theory and Practice, Ashgate Publishing, Emerging Legal Education series, 17-42

Margetts, Helen and Dunleavy, Patrick (2013) The second wave of digital-era governance: a quasi-paradigm for government on the Web, Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences VL - 371 at http://rsta.royalsocietypublishing.org/content/371/1987/20120382.abstract

Marsden, C. (2015) Open Access to Law – How Soon? Computers and Law, Issue 2. http://www.scl.org/site.aspx?i=ed41009.

Marsden, C. [2014] Openlaws D 1.2.d1 Template for country case studies

Marsden, C. [2014] Openlaws D 1.2.d2 Case study 1: European institutions report for legal, social and business aspects of re-use of legal information

Marsden, C. [2014] Openlaws D1.1.d1 State-of-the-art report for legal, social and business aspects of re-use of legal information

Marsden, C. [2014] Sept 4: Openlaws LAPSI2 meeting, University of Amsterdam Library at http://www.slideshare.net/EXCCELessex/openlaws-lasi2-meeting-amsterdam-4914

Marsden, C. [2015] 20 March, Hacking the Law, Open Data Institute, London http://www.slideshare.net/EXCCELessex/hackingthe-law-ridays

Marsden, C. [2015] 9 April: Access to EU law compared to UK, 30th BILETA conference, University of West of England, at http://www.slideshare.net/EXCCELessex/open-laws-bileta15

Marsden, C. [2015] Openlaws D 1.2.d3 Case study 2: United Kingdom report for legal, social and business aspects of re-use of legal information

Marsden, C., Pavan E. et al (2013) Deliverable 6.1: Overview of user needs analysis, plus draft catalogue of design responses to needs analysis, Internet Science Consortium at http://www.internet-science.eu/biblio/reports

Marsden, Cave, Hoorens (2006) “Better Re-Use of Public Sector Information: Evaluating the Proposal for a Government Data Mashing Lab” October 27 at: http://dx.doi.org/10.2139/ssrn.2142023 (19.2.2016).

Memorandum presented to the Lower Chamber of the Dutch Parliament by the Minister for Urban Policy and Integration of Ethnic Minorities, ‘Towards optimum availability of public sector information’ (The Hague, April 2000, Lower Chamber, session year 1999-2000, 26 387, nr 7).

Moriarty, Philip (2016) Addicted to the brand: The hypocrisy of a publishing academic, LSE Impact Blog, 14 March, at http://blogs.lse.ac.uk/impactofsocialsciences/2016/03/14/addicted-to-the-brand-the-hypocrisy-of-a-publishing-academic/

Munroe, Mary H. (2004) "Thomson Corporation Timeline". The Academic Publishing Industry: A Story of Merger and Acquisition at http://www.ulib.niu.edu/publishers/ReedElsevier.htm

Musson, Anthony and Chantal Stebbings Eds. (2012) Making Legal History: Approaches and Methodologies, Cambridge University Press.

Norman, P. (2006) "Gateways, portals and zugange: a survey of some European national legal resources on the internet." Legal Information Management. 6(1), 34-37.

Oehlboeck J., Gerstner I., updated by Barotanyi B. (19.2.2016) The Austrian Legal System

and Laws: a Brief Overview, http://www.nyulawglobal.org/globalex/Austria1.html

Office of National Statistics (2014) Self-employed workers in the UK, 20 August at http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-371749

Open Knowledge, Global Open Data Index, Legislation, http://index.okfn.org/dataset/legislation/

Paliwala, Abdul (1996) From academic tombstones to living bazaars: The changing shape of Law Reviews JILT 1996 (1) http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/1996_1/paliwala

Pasquale, Frank (2016) Automating the professions: utopian pipe dream or dystopian nightmare, LA Review of Books at https://lareviewofbooks.org/review/automating-the-professions-utopian-pipe-dream-or-dystopian-nightmare

Pew Research Center (2013) State of the News Media 2013, graph at http://stateofthemedia.org/2013/news-magazines-embracing-their-digital-future/9-magazines-digital-revenues-continue-to-grow/

Poulin, D. (2012), “Free Access to Law in Canada”, Legal Information Management, 12 pp.165-172

Poulin, Daniel (2014) Meaningful public access to legislation, presentation to Nudging Regulations conference, Canadian Institute for the Administration of Justice in Ottawa, September 9th, at https://lexum.com/en/publications/meaningful-public-access-legislation

Pretto and others v. Italy, no 7984/77, § 26

Public Accounts Committee (2014) Letter to the Chair, dated 2 October 2014, from Dame Ursula Brennan, Permanent Secretary, Ministry of Justice, at http://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accounts-committee/publications/?type=37&session=26&sort=true&inquiry=all

Radboud Winkels, Alexander Boer, Bart Vredebregt and Alexander van Someren (2015) Towards a Legal Recommender System, DOI: 10.3233/978-1-61499-468-8-169 Conference: 27th International Conference on Legal knowledge and information systems (JURIX 2014), Krakow, Poland,

Regulation (EU) No 1291/2013 of 11 December 2013 establishing Horizon 2020 — the Framework Programme for Research and Innovation 2014-2020 and repealing Decision No 1982/2006/EC (OJ L 347, 20.12.2013, p. 104)

Regulation (EU) No. 211/2011 of 16 February 2011 on the citizens' initiative

Research Councils UK (2011) RCUK announces block grants for universities to aid drives to open access to research outputs, and Research Councils UK (2014, undated) Open Access Policy, at http://www.rcuk.ac.uk/research/openaccess/policy/

RIS, Austrian Laws in English, https://www.ris.bka.gv.at/defaultEn.aspx (19.2.2016).

Rubacki Michael (2013) Free access online legislation in a federation: Achievements of Australian Governments and issues remaining, Presented at the AustLII Research Seminar, 7 May 2013, Australasian Legal Information Institute (AustLII), Sydney, reproduced in 2 Journal of Open Access to Law 1 (2014) at http://ojs.law.cornell.edu/index.php/joal/article/view/9

Salamanca, Olivia and Mireille van Eechoud (2015) Openlaws D1.2.d5 – The Netherlands, Case Study, Openlaws.eu

SEC (2012) 492 final, e-Commission 2012-15: Delivering user-centric digital services, 1.8.2012.

Shaw, T. (2007) Free v free: drivers and barriers to the use of free and paid-for legal information resources, Legal Information Management. 7(1), 23-30.

Shea, A. (2011) No-cost and low-cost US legal research, Legal Information Management. 11(4), 241-246

Sheridan, John (2014) Big Data for Law, Internet Newsletter for Lawyers, March 2014 at http://www.infolaw.co.uk/newsletter/2014/03/big-data-for-law/

Siems, Matthias (2012) The Problem with Law Journal Rankings, Siemslegal at http://siemslegal.blogspot.co.uk/2012/06/problems-with-law-journal-rankings.html

Siems, Matthias (2016) Postmodern and Socio-Legal Comparative Law https://drive.google.com/file/d/0B-rh5ZtSRYAeaWNCRS1GbDI5YW8/view

Snow, C.P. with Introduction by Stefan Collini (1993) The Two Cultures & A Second Look: An Expanded Version of The Two Cultures and the Scientific Revolution, Cambridge University Press

Stanford Alumi Magazine (2004) Give It Away and They'll Buy It, at http://alumni.stanford.edu/get/page/magazine/article/?article_id=35425

Susskind, R. (2013) Access to Justice, Oxford University Press

Susskind, R. (1987) Expert Systems in Law, Oxford University Press

Susskind, R. (1996) The Future of Law, Oxford University Press

Susskind, R. (2000) Transforming the Law, Oxford University Press

Susskind, R. (2008) The End of Lawyers? Rethinking the Nature of Legal Services, Oxford University Press

SWD (2013) 332 summary of a Commission proposal for a Regulation of the European Parliament and of the Council laying down measures concerning the European single market for electronic communications and to achieve a Connected Continent, and amending Directives 2002/20/EC, 2002/21/EC and 2002/22/EC and Regulations (EC)

Szucs and others v. Austria 20602/92, 21835/93, 28389/95, 28923/95, 33730/96, 38549/97, 35437/97.

Technische Universität Darmstadt v. Eugen Ulmer KG Case C‑117/13: REQUEST for a preliminary ruling under Article 267 TFEU from the Bundesgerichtshof (Germany) of 11 September 2014, at http://curia.europa.eu/juris/document/document.jsf?text=&docid=157511&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=269343

Telegraph (2013) Thomson Reuters buys Practical Law Company http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/media/9779041/Thomson-Reuters-buys-Practical-Law-Company.html

Thomas of Cwmgiedd, Right Honourable Lord Chief Justice (2014) IT for the Courts: Creating a Digital Future, 20 May 2014, Clyde & Co, SCL Annual Lecture http://www.judiciary.gov.uk/announcements/it-for-the-courts-creating-a-digital-future/

Trachimovsky, Seymour (2011) The End of Lawyers? (That'll be the day), Ethics centree Canada, at http://www.ethicscentre.ca/EN/resources/End%20of%20Lawyers%20Book%20Review.pdf

van Eechoud, M (1998) Openbaarheid, exclusiviteit en markt: commercialisering van overheidsinformatie, Mediaforum 1998-6, p 177-184.

Wass, Clemens (2016) Openlaws D1.2.d4 – Austrian Case Study, Openlaws.eu

Wasserman, Todd (2011) Iceland Unveils Crowdsourced Constitution, Mashable, 29 July at http://mashable.com/2011/07/29/iceland-crowdsourced-constitution/

Werner v. Austria, no. 21835/93, §41-51

Whittle, S. (2010) "Filling the frame: the role of practical metadata in online resources at the IALS." Legal Information Management. 10,(3), 191-20.

Whittle, S. (2012) "Amicus curiae pro bono publico: open access online publication at the Institute of Advanced Legal Studies." Legal Information Management. 12(3), 189-197.

Widdinson, R. (2002) "New Perspectives in Legal Information Retrieval" International Journal of Law and IT. 10(1), 41.

Wyatt-Nichol, H. & Franks, G. (2009) Ethics Training in Law Enforcement Agencies, Public Integrity 12:1 pp39-50, also at http://www.academia.edu/1400696/Wyatt-Nichol_H._and_Franks_G._2009_._Ethics_Training_in_Law_Enforcement_Agencies

Zittrain, J. (2014) Why Libraries [Still] Matter, at https://medium.com/biblio/why-libraries-still-matter-3df27e7522cb