

International Free and Open Source Software Law Review

Volume 05 }

Issue 02 } December 2013

Editorials

- Editorial 51
Alex Newson

Articles

- Red Flag Way: Exploring Copyright Protection, TRIPS and Open Source Software
Licensing in the People's Republic of China 55
Jim Saxton
- Expendable 'Written' ICT Policies in a Digital Era, No Broken Promise 79
Hüseyin Tolu
- Who Owns the Project Name? 105
Pamela S Chestek
- The European Union Public Licence (EUPL) 121
Patrice-Emmanuel Schmitz

Book Reviews

- Book Review: 'Thoughts on Open Innovation', edited by Shane Coughlan 137
Kari Kärkkäinen

Tech Watch

- Advancing the Software Package Data Exchange: An Update on SPDX 145
Jilayne Lovejoy, Phil Odence, Scott Lamons

Platform

- Free and Open Source Software across the EU 153
Gijs Hillenius



Editorial Committee

This publication is managed by a rotating Editorial Committee. The membership of the Committee for this issue is as follows:

Malcolm Bain

Malcolm is partner at id law partners, a Barcelona based law firm specialising in IT law, with a focus on FOSS projects. As well as his private practice, Malcolm participates pro bono in a number of FOSS related initiatives and teaches the legal aspects of FOSS at university.

Amanda Brock

Amanda Brock is Director at the international technology law firm, Origin, www.origin.co.uk. Prior to joining Origin, she was General Counsel of Canonical, the commercial sponsor of the Ubuntu project for 5 years leading their international legal team. Having graduated with Honours from Glasgow University, Amanda went on to obtain a Masters in Comparative Jurisprudence from New York University Law School and a LLM in IT and IP law from Queen Mary and Westfield, University of London. She has spent the last 15 years working in house in a variety of industries, was the first lawyer employed to work on the Freeserve ISP and was an editor of the Butterworth's publication Electronic Business Law. She is author of E:Business; The Practical Guide to the Laws now in its second edition and has contributed a chapter on commercial agreements in open source to Walden and Shentov, Free and Open Source Software: Policy, Law and Practise, published by Oxford University Press in 2013. Amanda has lectured extensively on IT and commercial law internationally.

Andrew Katz

Andrew Katz studied Natural Sciences and Law at Cambridge University where he graduated with honours in 1989. In 1991 he was called to the Bar, and in 1993 requalified as a solicitor. He moonlighted as a programmer during his studies at Bar School, programming in Turbo Pascal. He has released software under the GPL. He is currently a partner at Moorcrofts LLP, a boutique law firm in England's Thames Valley and advises a wide range of businesses on free and open source related issues. He has lectured and published widely on the subject.

Iain G. Mitchell QC

Chairman, Scottish Society for Computers and Law; Chairman, Scottish Lawyers' European Group; Chairman, Faculty of Advocates IT Group; Lecturer, Honorary Board of Lecturers, Institut für Informations, Telekommunikations- und Medienrecht, Westfälische Wilhelms-Universität, Münster; Freeman, Worshipful Company of Information Technologists.

Carlo Piana

Independent lawyer specialising in Information Technology and Telecommunication Law and Free Software Advocate. Started by using GNU/Linux and became intrigued by the legal and philosophical implications of it. Serves as Counsel to the Free Software Foundation Europe and advises projects and companies active in Free and Open Source Software.

Tomasz Rychlicki

Tomasz Rychlicki is a Polish patent and trade mark attorney and an European Trade mark and Design Attorney. He graduated from the University of Gdańsk, the Faculty of Law, European Law Center. Tomasz also studied at Chicago-Kent College of Law in the LL.M. Program in International Intellectual Property Law. Tomasz is a frequent writer on various IP- and IT-related issues. He is a member of the Editorial Board at the Journal of Intellectual Property Law & Practice published by Oxford University Press and a country correspondent for the Computer and Telecommunications Law Review published by Sweet and Maxwell.

Brendan Scott

Brendan runs a legal practice based in Sydney, Australia. Brendan is a founding member and a director of Open Source Industry Australia Limited. He is a past president of the NSW Society for Computers and the Law and a past editor of its journal. He has over 15 years of experience in Technology and Telecommunications law and has a special interest in open source and the law related to it.

Issues (SENG401), Media Applications (SENG410) and more recently Intro to Software Engineering (SENG265).

Jilayne Lovejoy

Jilayne Lovejoy is corporate counsel at OpenLogic, a provider of open source software support, provisioning, and compliance solutions to enterprises. In addition to traditional corporate counsel responsibilities, Jilayne helps develop OpenLogic's repository of open source licenses and obligations and ensures that OpenLogic's scanning and compliance software meets the needs of legal users. Jilayne also works directly with enterprise customers, providing guidance on open source audits and compliance activities. Jilayne participates in open source industry groups that help drive adoption of open source software and speed compliance with open source licenses, including co-chairing the legal work group for SPDXTM under the Linux Foundation. Jilayne is also a frequent speaker at conferences and law schools on topics related to open source licensing and compliance.

Alex Newson

Alex Newson is a lawyer at Experian. His main areas of practice are information technology law, intellectual property and litigation. Alex wrote a number of articles on IT law and use of IT law in Computers & Law Magazine and the Internet Newsletter for Lawyers. He was also the lead editor and a contributor of a book that was published by Gower in 2008: "Blogging and Other Social Media: Exploiting the Technology and Protecting the Enterprise".

Editorial Coordinators

The editors wish to thank the Editorial Coordinators for their hard work and contribution to making the Review happen. This issue has been cured with great dedication and effort by

Kari Kärkkäinen

Kari is a Finnish software professional with 20 years of experience primarily in mobile and wireless telecommunications space in a wide variety of roles. Currently he works for PacketVideo Corporation as Director of Program Management. Besides being a Durham University MBA graduate and having a BSc in Computer Science from the US, he has more recently also obtained an LLM (in IT and Telecommunications Law) degree from University of Strathclyde as he has always been very interested in the legal matters related to IP, software, especially open source software, and IT in general.

Peer reviewers

The Editorial Committee wishes to thank the work of the many referees and peer reviewers whose professional expertise and dedication to high standards have made the publication of this issue possible.

Contact

All administrative, bibliographic and pre-publication enquiries should be directed to the Editorial Coordinators via email at:

admin@ifosslr.org

The Editorial Committee can be contacted via email at:

ed-com@ifosslr.org

Copyright and licensing statement

IFOSS L. Rev. is committed to the improvement of understanding of legal issues in digital society. A licensing statement is therefore attached to each article, clearly outlining the particular terms which apply to the article. Most use Creative Commons licences with special exceptions for translations.

Graphic design

The Editorial Committee wishes to thank Tomasz Politański Design for its logo and associated graphic design work.

<http://tomaszpolitanski.com>

Publisher & sponsorship

IFOSS L. Rev. is published by its Editorial Committee, with financial and administrative assistance from NLnet Foundation and Mozilla Foundation. Please note that neither NLnet Foundation nor Mozilla Foundation accept correspondence on behalf of this publication. All correspondence should be directed to the Editorial Committee via email (see below).

Editorial policies

IFOSS L. Rev. accepts articles for publication from qualified personnel based on the criteria available to view on its web

site (<http://www.ifosslr.org>). Submissions are welcome from all, and your business. Authors are strongly encouraged to read the style and content guidelines available on the web site. The review operates an anonymous peer review system for articles as appropriate, and expects all authors to meet the highest standards of scholarship and integrity.

Bibliographic information

The authors explicitly encourage libraries, archives and educational institutions to hold copies of IFOSS L. Rev. in their collections, in electronic and/or printed form. All users are advised that articles may occasionally be updated after publication. Linking back to original copies on the IFOSSL. Rev. web site, where authoritative versions are archived, is strongly recommended. Please contact the Editorial Coordinators for further information on best practices. It participates in the CrossRef system.

ISSN: 1877-6922

Publication schedule

IFOSS L. Rev. is published biannually. Submissions for publication are welcome at any time, but publication deadlines exist for each issue. For the latest information on papers sought and deadlines for submission, please consult the IFOSS L. Rev. website or contact the Editorial Coordinators at (admin@ifosslr.org)

Editorial

Alex Newson^a

(a) Solicitor, Experian, member of the Editorial Committee

DOI: [10.5033/ifosslr.v5i2.95](https://doi.org/10.5033/ifosslr.v5i2.95)

Abstract

Editorial for Issue 2, Volume 5

Keywords

Editorial

Welcome to Issue 2 Volume 5 of IFOSSLR.

As with previous issues of IFOSSLR, this issue covers variety of FOSS subjects, showing the diversity of the “open”/“free” paradigm and our collective desire to analyse and address the issues raised by our eclectic mix of activities. “Core” FOSS legal subjects such as licence terms are covered, but other articles here also illustrate that, whilst there has been an encouraging take-up of FOSS in many countries, significant barriers continue to hinder the adoption of FOSS – and the broader open/free “movement”. These articles demonstrate that there are a range of ways and means to overcome these barriers.

One of the world’s largest, most populous, countries, China is a place where organisations from across the world send the details of their closely guarded intellectual property rights, to be turned into products for worldwide sale. Despite this, the country is closely associated with IP rights infringement. Whilst continuing to thrive on developing products based upon licensed, “closed”, intellectual property rights, China’s policymakers are turning their attention to open source, for example with the Bureau of Culture installing Red Flag Linux in internet cafés. Given these factors, those of us interested in intellectual property and FOSS could do with understanding China better. We are therefore grateful to James Saxton for his informative article on the interaction between FOSS licenses and China’s developing stance on intellectual property laws and standards. Could FOSS and FOSS licensing present a powerful opportunity for China’s leaders to both show their respect for intellectual property laws and enhance their economy at the same time?

Another country getting to grips with FOSS at a policy-level is Turkey. Hüseyin Tolu’s article explores the FOSS issues faced by Turkey with great insight. Similar to Red Flag Linux in China, policymakers in Turkey supported the development of Pardus, a Linux distribution. Pardus Linux has now been in distribution for 10 years and there are two separate distros. One Turkish public body solely uses FOSS. As well as these developments, the Turkish government-backed E-Transformation Program has issued guidelines directing Turkish public bodies to favour the use of FOSS. Despite all

of this, Tolu makes it clear that FOSS remains a defiantly minority interest in Turkey. Why is this?

On a related note, readers may be aware of the adoption of FOSS in Europe by various public bodies. Gijs Hillenius delves into this in an article that sweeps across the EU, providing clarity about the level of FOSS adoption by public bodies in a range of countries, as well as considering central institutions such as the European Commission, and how FOSS-friendly their policies are. Like Tolu's article, Gijs Hillenius does not shy away from practicalities such as vendor lock-in and persuading users of the benefits of moving from familiar "closed" interfaces and formats to the open but unfamiliar. Hillenius' and Tolu's articles will be of significant interest to both policymakers and those seeking to influence organisations about FOSS, as well as those interested in public procurement laws.

The European Commission has gone several steps beyond being simply FOSS-friendly. In January 2007, it launched the European Union Public Licence (EURL), a licence drafted to not only give software freedoms, but also to address the needs of public bodies across the EU, such as having legal instruments that work in all official EU languages. Patrice-Emmanuel Schmitz' article discusses this licence, its origins, present and possible future. In a FOSS-world of continuing licence proliferation and compatibility issues, Schmitz observes that the EURL offers us a compromise between copyleft and licence interoperability. Schmitz' article gives us a greater understanding of this licence, and what the future may hold for it.

One barrier facing many (theoretically) FOSS-friendly organisations is identifying licences applicable to software components. If it takes a team of developers and lawyers to achieve this for each FOSS package, then the use of FOSS becomes a resource issue. The Software Package Data Exchange® (SPDX) project aims to reduce this barrier. The Linux Foundation announced the launch of SPDX to the legal community in IFOSSLR in 2010, and so many readers will be familiar with it. In this issue, we are brought up to date by Jilayne Lovejoy, Phil Odenec and Scott Lamons, all of whom have played significant roles in the development of SPDX. SPDX has much to offer for organisations looking to bring certainty, speed and clarity to their use and development of FOSS. We all have the opportunity to contribute to the on-going development of SPDX, to make it as effective as possible for all our communities and organisations. We hope that you will join the SPDX community and aid its development.

Whilst project names may at first seem to be a less weighty issue than those discussed above, the name of a FOSS project can have a major impact on its success. Many well-known FOSS projects are not known simply for the quality of their code, but also because they use strong, recognisable, names. "Firefox" is a good example, as is "Linux" itself; the Linux Foundation even has its own trade mark licensing and enforcement body. Whilst the FOSS world may have some strong trade marks, the structure of many FOSS projects can raise potential issues when those projects wish to protect or enforce "their" trade mark. In "Who owns the project name?", Pamela Chestek explores these issues as found under US law, and suggests various solutions. The article will be extremely useful to all those who run FOSS projects.

In previous issues of IFOSSLR, we have seen analysis and opinion on aspects of the broader "open" movement, such as open standards. In this issue, Kari Kärkkäinen reviews "Thoughts on Open Innovation", a book edited by Shane Coughlan, one of the founding coordinators of IFOSSLR, and launched at the Digital Agenda Summit earlier this year. In the book, a selection of experts explore a range of "open" subjects, including the open innovation concept, open standards and the commercialisation of FOSS, and discuss practical examples. We commend readers to this review and, of course, the book itself, which is available to view and download free-of-charge (under an

appropriately open licence!)

About the author

Alex Newson is a solicitor at Experian and a member of the Editorial Committee of this law review.

Licence and Attribution

This paper was published in the International Free and Open Source Software Law Review, Volume 5, Issue 2 (December 2013). It originally appeared online at <http://www.ifosslr.org>.

This article should be cited as follows:

Newson, Alex (2013) 'Editorial', *International Free and Open Source Software Law Review*, 5(2), pp 51 – 54
DOI: [10.5033/ifosslr.v5i2.95](https://doi.org/10.5033/ifosslr.v5i2.95)

Copyright © 2013 Alex Newson.

This article is licensed under a Creative Commons UK (England and Wales) 2.0 licence, no derivative works, attribution, CC-BY-ND available at <http://creativecommons.org/licenses/by-nd/2.0/uk/>

As a special exception, the author expressly permits faithful translations of the entire document into any language, provided that the resulting translation (which may include an attribution to the translator) is shared alike. This paragraph is part of the paper, and must be included when copying or translating the paper.



Red Flag Way: Exploring Copyright Protection, TRIPS and Open Source Software Licensing in the People's Republic of China

James Saxton^a

*(a)LLM Commercial Law student – University of Sheffield
2011-2012^s*

DOI: [10.5033/ifosslr.v5i2.80](https://doi.org/10.5033/ifosslr.v5i2.80)

Abstract

The focus of this paper is to explore the interaction between open source software licenses and China's developing stance on intellectual property laws and standards over the last three and a half decades. It is contended that open source software licensing alters the intended use of copyright protection in a manner which conforms to the cultural understandings of the People's Republic of China. It is also argued that a copyright policy that is preferential towards open source software licensing would advance the PRC's conformity to TRIPS' minimum protection requirements.

Keywords

Law; information technology; Free and Open Source Software, People's Republic of China, GPL, GNU General Public License, TRIPS

Introduction

Background

In modern times, international intellectual property (IP) law has been forced to develop and evolve on two fronts; on one hand, the law must ensure compliance from signatory states to ensure the proper function of the IP concept.¹ And on the other, IP laws and policies, where applicable, must

§ **ACKNOWLEDGEMENT** First of all, I am thankful to my supervisor, Dr. Chamu Kuppaswamy, for her advice and guidance at the beginning of this dissertation project. And also, Dr Lindsay Stirton, Senior Lecturer for his insightful and thought-provoking comments, which helped shape my research proposal as early as autumn 2011. I am also indebted to LPC Tutor Gareth Bramley, and fellow classmate Sagar Deva, for their invaluable comments during the writing up of this work, despite their own hectic schedules. For their constant support and encouragement, I thank Kerry Baker and my parents, Jack and Sharon. And finally I thank anybody who has directly or indirectly enabled the completion of this work.

1 World Trade Organization, 'Intellectual property: protection and enforcement', available at http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm7_e.htm accessed 21st August 2012

keep pace with the rate at which new technologies and inventions are being developed.²

The accession of the People's Republic of China (PRC) into the World Trade Organization (WTO) in December 2001 has proven to be an interesting subject in the context of these two "fronts". On joining the WTO, the PRC became obligated to comply with the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). This in turn compels China to improve standards for the protection of IP. China began recognising the importance of international trade, and intellectual property rights (IPR), towards the late 1970's through the adoption of the "Open Door Policy",³ a reform programme aimed at bringing the PRC out of economic isolation from the rest of the trading world.⁴ As a result of this, it is interesting to note that China's legal system for IP protection and its information technology sector are developing at the same time.

Despite being a signatory to TRIPS, which confers obligations to establish a minimum level of protection to IPR, China is no stranger to controversy with regards to the enforcement of IPR, and consistently appears on the United States Trade Representative's "Special 301 Report", under the "Priority Watch List".⁵ Infringement of software copyright has been of particular concern in China, so much so that the violation rate has been remarked as "so high as to make statistics virtually meaningless".⁶ In 2011, the PRC was ranked the second highest spenders on computer hardware in the world, but only the eighth highest spender on computer software.⁷ The implication of course is that Chinese software users are running easily acquirable, illegitimate software on legitimate hardware, compiling an "illegal software market" of nearly \$9 billion.⁸

The PRC's disparities in implementation of international IP standards are a widely discussed topic. Such ideas submitted include the incompatibility of the concept of IP in China, owing to a history rooted in Confucianism that lacks recognition of ownership over ideas or expressions;⁹ the decentralised government that allows infringers to act outside of the reach of control;¹⁰ the fact that the Chinese legal system follows the civil law tradition, which tends to allow judicial decisions to stray away from international set standards;¹¹ and strict political control prevented a system of IPR being developed in the same manner as it did in other parts of the world.¹²

However, in more recent years, it appears that the Chinese government is taking steps to embrace the "open source" licensing model in some of its own software.¹³ Conventional IPR generally incentivise innovation and creativity by conferring to the inventor an exclusive right over their creation, and restrict usage by any other parties. Open source software licenses, on the other hand, enable users to take previously created software, modify it, and then distribute the modification

2 Thurow, Lester, 'Needed: a new system of intellectual property rights' (1997) 75(5) Harv Bus Rev. 94-103

3 Symposium by Shanghai Foreign Investment Commission, Opportunities for Foreign Investment and the Process in Shanghai (Sept. 9, 1988)

4 Cheng, Julia, 'China's Copyright System: Rising to the Spirit of TRIPS Requires an Internal Focus and WTO Membership' (1999) Fordham Law Journal, 1941, at 1942

5 United States Trade Representative, 2012 Special 301 Report

6 Mitchell, S.J., 'The Software Wars: Organizations, Politics and Policy in Intellectual Property Protection in China' in Cohen, et al *Chinese Intellectual Property Law and Practice*, (Kluwer Law International, 1999) at 334

7 David Leonhardt "Software Piracy in China" New York Times Jan 19, 2011, available at <http://economix.blogs.nytimes.com/2011/01/19/software-piracy-in-china/> accessed 23rd May 2012

8 Business Software Alliance, "Shadow Market – 2011 BSA Global Software Piracy Study" 9th ed. May 2012, page 4, available at http://portal.bsa.org/globalpiracy2011/downloads/study_pdf/2011_BSA_Piracy_Study-Standard.pdf

9 Hesse, C, 'The Rise of Intellectual Property, 700 B.C.--A.D. 2000: an Idea in the Balance' (2002) Spring 2002, Doedalus 26, at 27

10 Shao, 'The global debates on intellectual property: what if China is not a born pirate?' (2010) IPQ 341

11 Zhang, 'Intellectual Property Law Enforcement in China: Trade Issues, Policies, Practices' (1997) 8 Fordham Intellectual Property Media & Entertainment Law Journal 63, at 81

12 Alford, *To Steal a Book is an Elegant Offense: Intellectual Property Law in Chinese Civilization* (California: Stanford University Press, 1995) 17

13 Searls, Doc, *Raising the Red Flag*, LinuxJournal.com, Jan 30, 2002 available at <http://www.linuxjournal.com/article/5784> accessed 24 Jun. 2012

under the same open source license.¹⁴ Here, the justification for open source innovators has been said to come in the form of a social consequence, through reputational capital that in the long term could provide greater returns in exchange for their work.¹⁵ The objective of open source licensing is not to take advantage of a monopoly over a work, but to invite others to improve and modify it, and then share it with other users.

Research Focus

The focus of this paper is to explore the interaction between open source software licenses and China's developing stance on IP laws and standards over the last three and a half decades.

In order to evaluate the impact of open source software licensing on Chinese copyright policy, this work will survey the legal landscape of Chinese copyright law since its promulgation by the state in the late 1970's. The work will then focus on the experience with open source software licensing, the versatility of the system, and finally its compatibility with China's young IP system and policy.

This work intends to establish that a preference towards open source software licences is the most logical method to circumventing the many issues that confront the enforcement of software copyright in the PRC.

Outline

Chapter II of this work will deal with the evolution of China's IP system since its inception, focusing on the problems the state has had to endure since its accession to the WTO in 2001. Chapter III will briefly outline the philosophy of open source software licensing, and explore the validity and enforceability of these licenses across different states. Chapter IV will explore the compatibility of open source licensing on China's current copyright system, focusing on the doctrinal concerns and the compatibility of the model in China's socio-economic attitudes to IP. Chapter V will conclude.

Copyright Law in the People's Republic of China

Background

IPR have been recognised and protected in the People's Republic of China since the Open Door Policy was implemented in the late 1970's. The PRC subsequently became a member of the World Intellectual Property Organization (WIPO) in 1980. In terms of doctrinal recognition of IPR, China enacted law on trademarks in 1983,¹⁶ patents in 1985¹⁷ and copyright in 1991.¹⁸ This somewhat unhurried implementation of the three main subjects on IP was commented by SIPO's (State Intellectual Property Office of China) Commissioner Tian Lipu, as a movement towards "comprehensively carrying out its obligations under international treaties and agreements."¹⁹

14 Ghosh, Rishab, 'Open source software: economics, innovation, law and policy' (2010) W.I.P.O.J 82

15 McGowan, 'Legal Implications of Open-Source Software' (2001) U. Ill. L. Rev. 241, at 286

16 Trademark Law of the People's Republic of China 1983

17 Patent Law of the People's Republic of China 1984

18 Copyright Law of the People's Republic of China [Hereinafter Copyright Law of the PRC] 1990

19 Lipu, Tian, 'China's IP Journey', WIPO News & Events, available at http://www.wipo.int/wipo_magazine/en/2010/06/article_0010.html accessed 24th June 2012

The competence of China's "comprehensive" system is the centre of much debate. However, Lipu is correct in remarking that China's IP system "has been established and at an unprecedented pace",²⁰ having over the past three decades taken steps towards recognising and implementing into domestic law, a system that has taken other countries centuries to inaugurate. Upon the PRC's entry into the WTO in 2001, China have been required to offer IP a minimum standard of protection, as required by their signatory status to the TRIPS Agreement.

Despite this optimistic perspective on China's IP implementation, the United States International Trade Commission (USITC) estimates that, as of 2009, infringements of all kinds led to a \$48.2 billion loss to the U.S. economy.²¹ This would suggest that not enough is being done to tackle IP infringements. This chapter will survey the landscape of copyright law in China focusing on the administrative and judicial implementation of the law in China, its compatibility with the TRIPS Agreement, the challenges the country faces in applying the law of copyright, and how infringement has become a norm in the socioeconomic sphere.

Copyright Law in the PRC

As a relative newcomer to copyright protection, the PRC enacted its first Copyright Law in 1991. Furthermore, in 1992, China enacted the Implementing Rules for the Copyright Law of the PRC ("Implementing Rules") to harmonize its laws with the Berne Convention.²² The Regulations on the Implementations of the International Copyright Treaties ("ICT Provisions") and the Protection of Computer Software ("Software Regulations") followed, bringing its copyright legislation into compliance with TRIPS by extending the area of protection to include computer programs and compilations of data.²³

Article 3 of the Copyright Law lists the types of works under protection, which include written,²⁴ oral, musical, dramatic and choreographic, art and photographic, cinematographic, engineering designs, maps and sketches and computer software.²⁵ This in essence matches the list of protected subject matter contained in Article 2 of the Berne Convention.²⁶ The Law does not apply to "laws [...] orders of State organs; other documents of a legislative, administrative or judicial nature [...] news on current affairs [...] calendars, numerical tables and forms [...] and formulas".²⁷

The International Copyright Treaties Implementing Rules also helped to clarify the scope of the PRC's Copyright Law²⁸ by including protection to published works of authors outside the territory of China if the work is published in China within thirty days.²⁹

Under the Copyright Law, rights holders have the right to publication,³⁰ attribution³¹, revision³²,

20 Lipu, Tian, 'China's IP Journey', WIPO News & Events, available at http://www.wipo.int/wipo_magazine/en/2010/06/article_0010.html accessed 24th June 2012

21 United States International Trade Commission, *China: Effects of Intellectual Property Infringement and Indigenous Innovation Policies on the U.S. Economy*, publication 42226, May 2011, section 3 page 9

22 Feaver, Reiko R., 'China's Copyright Law and the TRIPs Agreement' (1996) 5 J. Transnational Law. & Policy 431, at 434-38

23 Agreement on Trade-Related Aspects of Intellectual Property Rights 1994 [hereinafter TRIPS] Article 10(2)

24 Copyright Law of the People's Republic of China (adopted by Standing Comm., 7th Nat'l People's Cong., 15th Sess., Sept. 7, 1990, promulgated by Pres. Order No. 31, Sept. 7, 1990) (hereinafter Copyright Law of the PRC) Article 3 (1)

25 Copyright Law of the PRC Article 3

26 Berne Convention for the Protection of Literary and Artistic Works 1871 [hereinafter Berne Convention] Article 2

27 Copyright Law of the PRC Article 5

28 Feaver, Reiko R., 'China's Copyright Law and the TRIPs Agreement' (1996) 5 J. Transnational Law. & Policy 431, at 440

29 International Copyright Treaties Implementing Rules 1992 Article 5

30 Copyright Law of the PRC Article 10(1)

31 Copyright Law of the PRC Article 10(2)

32 Copyright Law of the PRC Article 10(3)

receive remuneration and use their own works.³³ The protection period for the copyright expires fifty years after the author's death.³⁴

Works that were created within the scope of its author's employment are considered to be professional works that the employer has a priority right to use.³⁵ The Copyright Law also contains fair use provisions that allow the use of a published work without remuneration or prior authorisation. Examples of fair use are listed in the text as translation,³⁶ personal enjoyment³⁷ and official state purposes.³⁸

Administrative Framework

Objectives

Article 1 of the PRC's Copyright Law sets the objective as;

"[...] encouraging the creation and dissemination of works which would contribute to the building of an advanced socialist culture and ideology and to socialist material development, and... promoting the development and flourishing of socialist culture and sciences."³⁹

Apart from the ideological manner in which it is expressed, the language of Article 1 of the Copyright Law is almost parallel to that used in the TRIPS Agreement. This means that, theoretically, the intentions of the PRC's policy makers are aligned with that of the other signatories to TRIPS.

Enforcement

The TRIPS Agreement sets a minimum standard of enforcement measures to effectively combat infringement of IPR under Article 41. The general obligations include: providing quick remedies in order to deter further infringement;⁴⁰ "fair and equitable" procedures that are efficient and diligently carried out;⁴¹ a preference for decisions on a case to be in writing and based on parties evidence;⁴² and the opportunity for a review of the decision.⁴³ Article 41 notes that there is no obligation to separate enforcement of IP Law and enforcement of the Law in general, by way of judicial system, resources, or otherwise.⁴⁴

In compliance with these obligations, Chapter V of the Copyright Law provides an exhaustive list of actions that result in infringement of IPR⁴⁵ and provides such remedies as "ceasing the infringing act, eliminating the effects of the act, making an apology or paying compensation for damages, depending on the circumstances."⁴⁶ Furthermore, the Copyright Law categorises

33 Copyright Law of the PRC Article 10(5)

34 Copyright Law of the PRC Article 21

35 Copyright Law of the PRC Article 16

36 Copyright Law of the PRC Article 22(6)

37 Copyright Law of the PRC Article 22(1)

38 Copyright Law of the PRC Article 22(7)

39 Copyright Law of the PRC Article 1

40 TRIPS Article 41 (1)

41 TRIPS Article 41 (2)

42 TRIPS Article 41 (3)

43 TRIPS Article 41 (4)

44 TRIPS Article 41 (5)

45 Copyright Law of the PRC Articles 46-55

46 Copyright Law of the PRC Article 46

offences into two lists: Article 46 lists civil offences,⁴⁷ while Article 47 lists criminal offences.⁴⁸ The Copyright Law provides an exhaustive list of remedies for each list of violating acts.⁴⁹

A situation where the production and distribution of infringing copies causes “injury to the social and public interest [...]” the Implementing Rules holds that any fines imposed do not exceed three times the amount of illegal business turnover, and do not exceed a total of ¥100,000.⁵⁰

TRIPS outlines that the fines to be issued shall be “sufficient to provide a deterrent”.⁵¹ It is difficult to surmise whether ¥500,000 in damages or ¥100,000 in fines is sufficient to deter would-be IP infringers, but bearing in mind that the counterfeiting industry is vast, accounting for 8% of the Chinese GDP,⁵² one can reasonably assume that some counterfeiting groups or organisations would not be deterred by such a fine. As of 2012, a redraft of the Copyright Law will raise the maximum fine for copyright infringement to a maximum of ¥1m.⁵³

Damages and the Judiciary

Article 45 of TRIPS requires that the relevant judicial authorities shall have the authority to order the infringer to pay damages to the rights holder to compensate for the loss suffered due to the infringement, including illegal profits and attorney fees.⁵⁴ Article 46 empowers the judicial authorities to dispose of the infringing goods “outside the channels of commerce in such a manner as to avoid any harm caused to the rights holder.”⁵⁵

Article 48 of the Copyright Law also stipulates that where unlawful income is problematic to calculate, damages to the defendant cannot exceed ¥500,000, once again “depending of the circumstances”.⁵⁶ This non-specific language used in the Copyright Law ultimately implies the manner in which the defendant is charged, and the remedy issued is a matter of the judge’s discretion. This is emphasised in Articles 46 and 47 where liability of infringement is “depending on the circumstances”.⁵⁷ This is inadequate in light of the TRIPS requirement for the damages ordered to be compensatory to the loss suffered.

Also, it is suggested that whilst a simple “compensation for loss” calculation is easy to implement, it fails to reflect any potential growth in the market that may have occurred in the absence of the infringement.⁵⁸

Despite this, it has been reported that the number of IP cases that undergo judicial treatment undergoes a near 50% annual increase, settling 931 civil IPR violation cases between the years 2002 and 2006.⁵⁹

47 Copyright Law of the PRC Article 46 (1) – (11)

48 Copyright Law of the PRC Article 47 (1) – (8)

49 Copyright Law of the PRC Articles 55-46

50 Implementing Regulations Article 36

51 TRIPS Article 61

52 Pei, Minxin, ‘Intellectual Property Rights: A Survey of the Major Issues’, (Sept 2005) Asia Business Council, page 2

53 Unknown, ‘Pirating Fine Doubles in Copyright Law Draft, China Daily Europe’ 29th May 2012, available at http://europe.chinadaily.com.cn/china/2012-05/29/content_15417762.htm accessed on 2nd August 2012

54 TRIPS Article 45

55 TRIPS Article 46

56 Copyright Law of the PRC Articles 48

57 Copyright Law of the PRC Articles 46 and 47

58 Kristina Sepetys and Alan Cox, ‘NERA Economic Consultime, Topics in Law and Economics in China - IPR protection ni China: Trends in Litigation and Economic Damages’-at page 5

59 China State Intellectual Property Office, http://www.sipo.gov.cn/sipo_English/news/iprspecial/200701/t20070129_131237.htm, accessed 20 July 2013.

Damages in the Administrative Process

In practice, the lack of an empirical formula for calculating damages had led to inconsistent determinations of compensation⁶⁰ to the point where the damages awarded are not proportionate to the damage suffered. For example, in a case brought by Microsoft against a Chinese company that reproduced over 650,000 copies of a Microsoft software product, Microsoft were awarded \$250 in damages despite the alleged loss of \$20 million.⁶¹ It has been contended that since the early 1990's, however, a trend towards awarding harsher damages has been emerging.⁶² Alford submits that it is almost impossible to accurately calculate damages at all, as he points out that "[...] those engaged in pirating IP have not been considerate enough to compile statistics for academic researchers,"⁶³ while this is true, other sources gathered by the International IP Alliance (IIPA) suggest that administrative actions are not effective.⁶⁴ With this in mind, the awarding of damages in the PRC for copyright infringement should be regarded as an on-going and unresolved issue.

It is submitted that the shortcomings of Articles 46 and 47 of the PRC's Copyright Law could easily be rectified by changing the loose language of the legislation so that damages are awarded on a compensatory basis rather than leaving the matter to the judge's discretion. However, it is likely that the "trend" towards harsher damages will continue to occur under the present circumstances. In summary, steps have been taken to secure damages for claimants in copyright infringement pursuits; however, it is this lack of specific remedial instruction in the Copyright Laws that prevents the PRC's enforcement measures from producing its deterrent effect.⁶⁵

Judicial Framework

The judicial system of China has four levels of courts. The highest court is the "Supreme People's Court". Immediately below that are thirty "Higher Level People's Courts", spread across the PRC's provinces and autonomous regions such as Shanghai and Beijing. Below that are 389 "Intermediate Level People's Courts" that sit at the municipality level throughout the rest of the PRC. And at the lowest level are around three thousand "Basic Level People's Courts", which reside at the county level.⁶⁶ The number of judges selected by the People's Congress is around 200,000.⁶⁷

Copyright cases are heard in China's "Civil Trial Division", whereas other areas of IP law are dealt with in the "Economic Trial Division", along with issues concerning unfair competition law. The "Criminal Trial Division" may hold defendants liable under criminal law for IP law infringements.⁶⁸

60 Li, Yiqiang, 'Evaluation of the Sino-American Intellectual Property Agreements: A Judicial Approach to Solving the Local Protectionism Problem' (1996) 10 *Columbia J. Asian L.* 391, at 408

61 Silk, Michael, 'Cracking Down on Economic Crime Will China's Latest Anti-Corruption Campaign Have Any Impact?' *China Bus. Rev.*, May 1, 1994, at 25

62 Schlesinger, Michael, 'Intellectual Property Law in China: Part II – Evolving Judicial Role in Enforcement' *E. Asian Exec. Report*, Mar. 15, 1997, at 9

63 Alford, William, *To Steal a Book is an Elegant Offense: Intellectual Property Law in Chinese Civilization* (California: Stanford University Press, 1995) at 6

64 International Intellectual Property Alliance (IIPA), '2004 Special 301 Report: People's Republic of China', at 40

65 Li, Ying, 'Procedural Provisions for Intellectual Property in GATT and the Legislation in China' (1994) 4, *China Patents & Trademarks* 17, at 17

66 Clarke, Donald, 'Power and Politics in the Chinese Court System: The Enforcement of Civil Judgements' (1996) 10 *Columbia J. Asian L.* 1, at 7

67 Cohen, Jerome, 'China's Legal Reform at the Crossroads' March 2006, Council on Foreign Relations, *Far Eastern Economic Review*, available at <http://www.cfr.org/china/chinas-legal-reform-crossroads/p10063> accessed 2nd August 2012

68 Zhang, Naigen, 'Intellectual Property Law Enforcement in China: Trade Issues, Policies and Practices' (1998) 8 *Fordham Intell. Prop. Media & Ent. L. J.* 63, at 66

In an effort to better manage the enforcement of IP laws, the “Intellectual Property Rights Trial Division” (IPTD) was established in 1993 in the Higher Level People’s Courts. An IPTD was established in cities where Higher Level People’s Courts were located, as these were the more developed areas and as such, “three to one” trials took place. This is where civil, criminal and economic cases, with IP related disputes occurred.⁶⁹ In 1996, the Intellectual Property Rights Office was established.⁷⁰

Judicial Enforcement and Civil Law Tradition

The unsuitability of the PRC’s legal system for the Western concept of copyright is often cited as a primary cause for its poor enforcement.⁷¹ Most countries with a developed IP system operate on a tradition of common law, where case law serves as precedent. China does not follow this model, and instead favours civil law, where judges determine the outcome of each case as they see fit.⁷² One severe setback of this system is that a judge’s function is to ratify the facts of a case, and then apply the law to the facts; as a result, judges are not obliged to make precedent of their legal reasoning.⁷³ This is adequate for the purposes of TRIPS, which requires that “[d]ecisions on the merits of a case shall preferably be in writing and reasoned. They shall be made available at least to the parties to the proceeding without undue delay [...]”⁷⁴ However, the fact that there is no requirement to keep a written decision on record as judicial precedent prevents the consistent application of the law.

Liu contends that the published cases in the “Gazette of the Supreme People’s Court” are the closest thing to judicial precedent available to judges in lower-tier courts.⁷⁵ In fact, since 2007, the Chinese Supreme Court has published the ten most influential IP cases each year to provide a form of guidance for judges.⁷⁶ Whilst this is a promising step towards a standard of judicial precedent, it could be argued that only selecting the “top ten” cases out of all those heard throughout the year to be set as judicial guidance is extremely narrow, especially as since joining the WTO in 2001, the number of IP claims from foreign companies heard in Chinese courts of all levels has soared from 41 in 2001⁷⁷ to 1,369 in 2010.⁷⁸

This approach to IP has been criticised as too focused on individual facts, leading to unpredictable outcomes.⁷⁹ The preference towards inconsistent judicial application is more likely to act as a deterrent for pursuing copyright claims, especially from foreign copyright holders. This is contrary to the purpose of international copyright protection standards.

69 Zhang, Naigen, ‘Intellectual Property Law in China: Basic Policy and New Developments’ (1997) 4 (1) Annual Survey of International and Company Law, at page 15

70 Hanes, Kathryn, ‘Signs of the Times-IP Registrations on the Rise’ IP Asia, Dec. 1996, at 29.

71 Patel, Nilay, ‘Open Source and China: Inverting Copyright?’ (2006) 23 (4) *Wiscon. Int. L. J.*, 781 at 790

72 Kolton, Gregory, ‘Copyright Law and the People’s Courts in the People’s Republic of China: A Review and Critique of China’s Intellectual Property Courts’ (1996) 17 *U. Pa. J. Int’l Econ L.* 415, at 435

73 Zhang, Naigen, ‘Intellectual Property Law Enforcement in China: Trade Issues, Policies and Practices’ (1998) 8 *Fordham Intell. Prop. Media & Ent. L. J.* 63, at 81

74 TRIPS Article 41 (3)

75 Liu, Nanping, “‘Legal Precedents’ With Chinese Characteristics: Published Cases in the Gazette of the Supreme People’s Court” (1991) 5, *Journal of Chinese Law* 107

76 ‘The Supreme People’s Court published top ten cases in IPR judicial protection’, April 2011, Intellectual Property Protection in China, at http://www.chinaipr.gov.cn/newsarticle/news/headlines/201104/1219150_1.html accessed 13th Feb 2013

77 Wild, Joff ‘Chinese Supreme Court judge signals higher damages are on the way in IP cases’, 27th February 2008, Intellectual Asset Management, at <http://www.iam-magazine.com/blog/detail.aspx?g=fc843e59-0bc1-43c1-9857-b250c35d9688> accessed 13th February 2013

78 ‘The Supreme People’s Court published top ten cases in IPR judicial protection’, April 2011, Intellectual Property Protection in China, at http://www.chinaipr.gov.cn/newsarticle/news/headlines/201104/1219150_1.html accessed 13th Feb 2013

79 Zhang, Naigen, ‘Intellectual Property Law Enforcement in China: Trade Issues, Policies and Practices’ (1998) 8 *Fordham Intell. Prop. Media & Ent. L. J.* 63, at 81

One example of judicial enforcement is found in the case of *Walt Disney Co v Beijing Youngsters and Children's Publishing House*.⁸⁰ In summary, the defendants distributed books containing pictures of well-known Disney characters without permission from the claimant. The claimant subsequently sought an injunction and damages amounting to \$70,000 under Article 46 of the Copyright Law. The judge awarded Disney the sum of \$27,000 in damages, and ordered Children's Publishing House to issue an apology and stop the production of the offending product. The damages were far lower than what the claimant pursued. Even so, the sum of damages in this case is a vast improvement over a previous Disney trademark infringement pursuit, which amounted to \$91 in total.⁸¹ This example brings into question the stability of IP enforcement under a civil law position.

In the context of software copyright infringement, Business Software Alliance (BSA) in 1994 claimed against five Beijing-based companies for pirating and selling software. For each of the ten infringements, BSA were seeking damages of between \$10,000 and \$30,000. Again, the judge ordered less than what the claimants were pursuing, awarding \$53,000 in damages, just over \$5,000 for each infringement.⁸² The court also ordered the defendants to make a public apology.

These cases outline that a pursuit of IP claims from foreign companies will indeed obtain remedies, contrary to the situation some decades before. However, these remedies will only be sufficient in the eyes of the presiding judge. It is contended that the lack of instruction to the judiciary, along with the insufficiency of damages awarded, significantly undermine the deterrent effect that the legal system is expected to employ.⁸³

As stated previously, Article 36 of the Implementing Regulations state that fines for copyright infringement cannot exceed "three times the amount of illegal business turnover",⁸⁴ to a maximum of ¥100,000. As the cases above fail to mention fines at all, it is clear that judicial application of this rule is sparse, if it is ever implemented.

There are no set guidelines for judges to calculate damages in a copyright case. However, in the field of patent law, the prevailing principle is that of fairness;⁸⁵ damages are calculated based on the monetary injury inflicted on the right holder and the profits that the infringer gains.⁸⁶ In the context of copyright protection, the guidance is not clear and the requirement of "fairness" opens the door to subjective and independent rulings, hampering the consistent application of copyright protection in the PRC. As a result of the inadequate deterrent effect of judicial rulings, "[m]any foreign companies have been reluctant to litigate their rights in the Chinese legal setting, with only about 3% of all civil litigation in China today involving a foreign entity."⁸⁷

In summary, while the PRC has established a substantial judicial system to cater for the new Copyright Law, in practice its effects are largely insufficient. Specifically, judicial enforcement of copyright law in the PRC fails to create a deterrent effect through fines, as required by Article 61

80 Walt Disney Wins in Copyright Case, *China L. & Prac.*, Sept. 13, 1995, at 17

81 Walters, Donna, 'Chinese Court for First Time Upholds U.S. Firm's Copyright' *LA Times* August 5th 1994, available at http://articles.latimes.com/1994-08-05/business/fi-23941_1_intellectual-property-theft accessed 3rd August 2012

82 Zhang, Naigen, 'Intellectual Property Law Enforcement in China: Trade Issues, Policies and Practices' (1998) 8 *Fordham Intell. Prop. Media & Ent. L. J.* 63, 81

83 Zhang, Naigen, 'Intellectual Property Law Enforcement in China: Trade Issues, Policies and Practices' (1998) 8 *Fordham Intell. Prop. Media & Ent. L. J.* 63, 81

84 Implementing Rules Article 36

85 Intellectual Property Law Services, PRC I.P. Law and Regulations Service

86 Cheng, Wenting, 'Inside Views: Third Revision of Patent Law in China (Part II)', IP Watch.org, available at <http://www.ip-watch.org/2009/10/01/third-revision-of-patent-law-in-china-part-ii/> accessed on 3rd August 2012

87 Suttmier, Yao, 'China's IP Transition: Rethinking Intellectual Property Rights in a Rising China' (July 2011) NBR Special Report #29, at 24

of TRIPS.⁸⁸ Also, the lack of judicial precedent in the court systems allows decisions and the awarding of damages to be unpredictable, which prevents damages being awarded on a compensatory basis, for the purposes of Article 45 of TRIPS.⁸⁹ Finally, the absence of a requirement to give legal reasoning when making a decision contravenes Article 41 of TRIPS.⁹⁰ Ultimately, the effect of these discrepancies is that copyright protection in the PRC contravenes the TRIPS Agreement to which the PRC is a signatory party. This, in turn, deters foreign pursuit of copyright claims and strains the business relations of the PRC and other states.⁹¹

Other Enforcement Issues

Decentralisation

The 1996 IPR Agreement⁹² between China and the United States purported to combat IP infringement in China through robust administrative enforcement over an intense process to shut down piracy operations.⁹³ The understanding was that the Chinese government would expand enforcement powers in activities such as the coordination of investigations, the assigning of “task forces”, and prosecution.⁹⁴ Once an appeal to investigate a potential infringement has been made to the local enforcement authority, usually the Basic Level people’s Court, an “action plan” will be drafted and then executed by local enforcement officials.⁹⁵ Despite this, “inconsistencies in enforcement” allowed the frequent occurrence of IP infringement to continue.⁹⁶

Lazar submits that the Chinese government itself lacks the sufficient power to control the situation,⁹⁷ while others remark that “political unwillingness” lies at the heart of the problem.⁹⁸ Li contends that the main concern is the disparity between local and administrative bodies which hinders effective implementation of IP enforcement.⁹⁹

Each jurisdiction in China is governed by the “Local People’s Congress” (LPC). Officials of the LPC are elected directly by the citizens and the decisions of the Congress are not dictated by central government.¹⁰⁰ Also, Article 101 of the Chinese Constitution grants the LPC the power to elect and dismiss personnel at its own level.¹⁰¹ This prevents central governmental authorities from

88 TRIPS Article 61

89 TRIPS Article 45 (1)

90 TRIPS Article 41 (3)

91 Lewis, Lloyd, ‘US-China Relations on the Protection of Intellectual Property’ (1997) available at <http://gurukul.ucc.american.edu/ted/hpages/ipr/lloyd.htm> accessed on 3rd August 2012

92 Agreement Regarding Intellectual Property Rights, Feb. 26, 1995, U.S.-P.R.C., 34 I.L.M. 881 (1995)

93 Seth Faison, ‘U.S and China sign Accord to end piracy of software, music recordings and film’ New York Times, Feb 27, 1995, available at <http://www.nytimes.com/1995/02/27/business/us-and-china-sign-accord-to-end-piracy-of-software-music-recordings-and-film.html?pagewanted=all&src=pm> accessed 31 July 2012

94 People's Republic Of China Implementation Of The 1995 Intellectual Property Rights Agreement – available at http://tcc.export.gov/Trade_Agreements/All_Trade_Agreements/exp_005361.asp accessed 31 July 2012

95 ‘China-United States: Agreement Regarding Intellectual Property Rights’ Feb. 26, 1995, Annex, 34 Int. Legal. Mat. 881

96 Maggie Farley & James Gerstenzang, ‘China Piracy of US Products Surges Despite Accord’ L.A. Times, Oct. 10, 1995, at A1 – at http://articles.latimes.com/1995-10-10/news/mn-55287_1_china-trade accessed 20 July 2012

97 Lazar, ‘Protecting Ideas and Ideals: Copyright Law in the People's Republic of China’ (1996) 27 Law & Pol. Int’l Bus. 1185, at 1198

98 David E. Sanger, ‘In Trade Rift, U.S. Outlines Penalties, and So Does China’ N.Y. Times, May 16, 1996, available at <http://www.nytimes.com/1996/05/16/business/in-trade-rift-us-outlines-penalties-and-so-does-china.html?pagewanted=all&src=pm> accessed 3rd August 2012

99 Berkman, Jeffrey ‘Intellectual Property Rights in the P.R.C.: Impediments to Protection and the Need for the Rule of Law’ (1996) 15 U.C.L.A. Pac. Basin L.J., 1, at 19

100 Ying Li, ‘Procedural Provisions for Intellectual Property in GATT and the Legislation in China’ (1994) 4 China Pat. & Trademarks 17, at 399

101 Constitution of the PRC Article 101

having any influence over the management of the LPC.¹⁰²

This decentralisation of government allows local leaders of the LPC to prioritise local interests over state policies when making political judgements. More importantly, local governments are required to yield only a portion of their revenues to the central PRC government, leaving the remainder of income to be used on local expenses.¹⁰³ Commentators in the late 20th century observed that it was often the case where a local leader must step in and intervene in judgements that jeopardise local businesses and revenue streams, as the local officials themselves would be responsible for any negative consequences that arise.¹⁰⁴ In addition, as Clarke points out, Chinese judges themselves do not have tenure; they are accountable to the People's Congress, making them vulnerable to external pressures and localism.¹⁰⁵ In 1995, U.S. attorney David Buxbaum commented;

"There are entire villages in China devoted to making bootleg products [...] How can the policemen who live in the village close down the industry that the whole place depends on for its livelihood? They're very protective of local interests."¹⁰⁶

The problem is further aggravated as the local government is required to bear the cost of implementing enforcement measures. The local leader is forced to decide between protecting the local industry, or spending money to block the flow of revenue.¹⁰⁷

In recent years, however, the Commission for Discipline Inspection, the body responsible for seeking and resolving matters of corruption and abuse of power, set up a website to allow citizens to report instances of corruption by local officials.¹⁰⁸ Nevertheless, the Commission may not be able to completely prevent local protectionism by local officials, as it is likely that those in a community that benefits from a bootlegging industry will be reluctant to report any abuses of power.

It is clear that the local protectionism enabled by decentralised government, which forces local leaders and legal figures to prioritise local interests over copyright protection, is potentially one of the main difficulties of IP enforcement.

Cultural Disincentives

The judicial and administrative forces that implement copyright law in the PRC have not yielded the results that were intended.¹⁰⁹ There are many arguments that consider the notion that the Chinese norm is to recognize the right to personal and real property, not intellectual works or

102 Ying Li, 'Procedural Provisions for Intellectual Property in GATT and the Legislation in China' (1994) 4 China Pat. & Trademarks 17, at 399

103 Donald C. Clarke, 'What's Law Got to Do With It? Legal Institutions and Economic Reform in China' (1995) 10 U.C.L.A. Pac. Basin L.J. 1, at 13-15

104 Cheng, Julia, 'China's Copyright System: Rising to the Spirit of TRIPS Requires an Internal Focus and WTO Membership' (1999) Fordham Law Journal, 1941, at 1986

105 Clarke, Donald, 'Power and Politics in the Chinese Court System: The Enforcement of Civil Judgements' (1996) 10 Columbia. J. Asian L. 1, at 8

106 Maggie Farley & James Gerstenzang, 'China Piracy of US Products Surges Despite Accord' L.A. Times, Oct. 10, 1995, available at http://articles.latimes.com/1995-10-10/news/mn-55287_1_china-trade accessed 20 July 2012

107 Cheng, Julia, 'China's Copyright System: Rising to the Spirit of TRIPS Requires an Internal Focus and WTO Membership' (1999) Fordham Law Journal, 1941, at 1987

108 Central Commission for Discipline Inspection of the Communist Party of China
<<http://www.12388.gov.cn/xf/index.html>>

109 Zhang, Naigen, 'Intellectual Property Law Enforcement in China: Trade Issues, Policies and Practices' (1998) 8 Fordham Intell. Prop. Media & Ent. L. J. 63, 82

artistic creations,¹¹⁰ and, as a result, the laws that are enforced do not have any effect on infringement.

Article 22 of the Constitution of China¹¹¹ states that;

“[t]he state promotes the development of literature and art, the press, broadcasting and television undertakings[...] and other cultural undertakings, that serve the people and socialism, and sponsors mass cultural activities...”¹¹²

The language of the Article is very similar to the basic ethos of copyright. It suggests that the PRC wants to protect copyrights for the development and benefit of “the people and socialism.” Despite this pledge, it has been argued that the concept of copyright is fundamentally incompatible with the socio-political culture of the PRC and its current economic development.¹¹³ Also, the private property ethos of copyright contravenes the culture of acting in the “societal good”, and, as such, would require major overhaul of Chinese social institutions for effective application.¹¹⁴

Socialism

The PRC operates a system that exercises strict controls over publications, due to its intentions that labours and creations must “serve the people and socialism”.¹¹⁵ As a result, whilst international law obliges the PRC to create a system that incentivises creativity, the government is heavily concerned with external influences from Western countries. This facilitates a discouragement to effectively enforce copyright law, as to do so would undermine the ethos that a creation must “serve the people and socialism.”¹¹⁶

The language of the Copyright Law also emphasises the subordination of an individual’s personal interest to the goal of society.¹¹⁷ Article 4 states that “[...] Copyright owners, in exercising their copyright, shall not violate the Constitution or laws or prejudice the public interests...”¹¹⁸ As it is written, it could be argued that Article 4 is legitimising infringement, as long as it is in the name of development of the art or work and is beneficial to the “people and socialism” for the purpose of Article 22 of the Constitution.

Confucianism

China was founded in Confucian philosophy, an ideology that dominated China from 100BC to A.D 1911. Confucianism places an emphasis on the good of society at large instead of individual pursuits. This ideology promoted social order and frowned upon the litigious nature of law.¹¹⁹ As such, no moral negative was associated with copying a previous creation. As Alford explains, “[...] the need to interact with the past sharply curtailed the extent to which it was proper for anyone

110 Alford, William, ‘Forum: Taiwan and the GATT: Panel Three: Intellectual Property Trade and Taiwan: A GATT-Fly’s View, 1992’ (1992) *Columbia. Bus. L. Rev.* 97, at 104

111 Constitution of the PRC Article 22

112 Constitution of the PRC Article 22

113 Yiqiang Li, ‘Evaluation of the Sino-American Intellectual Property Agreements: A Judicial Approach to Solving the Local Protectionism Problem’ (1996) 10 *Colum. J. Asian L.* 391, at 393-394

114 Feng, Peter, *Intellectual Property In China* (Sweet and Maxwell, 1997) at 4

115 Constitution of the PRC Article 22

116 Zhang, Naigen, ‘Intellectual Property Law Enforcement in China: Trade Issues, Policies and Practices’ (1998) 8 *Fordham Intell. Prop. Media & Ent. L. J.* 63, 78

117 Cheng, Julia, ‘China’s Copyright System: Rising to the Spirit of TRIPS Requires an Internal Focus and WTO Membership’ (1999) *Fordham Law Journal*, 1941, at 1981

118 Copyright Law of the PRC Article 4

119 Bodde, D and Morris, C, *Law in Imperial China* (University of Pennsylvania Press, 1973) at 50

other than persons acting in a fiducial capacity to restrict access to its expressions.”¹²⁰ In short, the ideology considers copying to be of great importance when interacting with the past, which in turn facilitates further creativity and understanding.¹²¹

The Confucian principles that the PRC operates by have produced certain distrust for Western entrepreneurship. In turn, it makes it difficult for Chinese citizens to trust that the copyright model can be used as a vehicle for innovation, and does not simply serve the interests of private companies.¹²²

Also, noteworthy is the impact of the Maoist regime of 1949 to 1976 on the modern Chinese legal system, which promoted access to creative works by the masses,¹²³ and the role traditional Marxism considered the withdrawal of private property as essential to economic growth.¹²⁴

Economic Disincentives

As a developing country that spent most of its time in economic isolation, China has had difficulty in meeting the expense of “TRIPS standard” enforcement measures.¹²⁵ In response to this, software illegally obtained by Chinese software users was referred to as “patriotic software” as it allowed modernisation without research and development costs.¹²⁶ Also, software piracy enables a short term method of providing a livelihood for Chinese citizens who rely on the production of pirated goods as an occupation.¹²⁷

Yeh argues that despite the “Open Door Policy” and its intentions for China to interact with the international economy, China is not at the stage of development to efficiently enforce IP rights.¹²⁸ He further argues that vigorous IP protection doesn’t offer any further economic benefit to PRC as it increases the costs of living and compromises the livelihood of China’s citizens.¹²⁹

120 Alford, William, *To Steal a Book is an Elegant Offense: Intellectual Property Law in Chinese Civilization* (California: Stanford University Press, 1995) at 25

121 Alford, William, *To Steal a Book is an Elegant Offense: Intellectual Property Law in Chinese Civilization* (California: Stanford University Press, 1995) at 28-9

122 Suttmier, Yao, ‘China’s IP Transition: Rethinking Intellectual Property Rights in a Rising China’ (July 2011) NBR Special Report #29, at 17

123 Richard Goldstein, ‘Copyright Relations between the United States and the People’s Republic of China: An Interim Report’ (1984) 10 Brook. J. Int’l L. 403, 410-11

124 Syz, Jing-Kai, ‘Note, Expanding the Patent Law of the People’s Republic of China: A Proposal for Patent Protection of Computer Programs’ (1991) 5 J. Chinese L. 349, at 353

125 Robert M. Sherwood, ‘The TRIPs Agreement: Implications for Developing Countries’ (1997) 37 Idea: J.L. & Tech. 491, at 537

126 Tara Kalagher Guinta & Lily H. Shang, ‘Ownership of Information in a Global Economy’ (1993) 27 Geo. Wash.J. Int’l L. & Econ. 327, at 330-31

127 Maggie Farley & James Gerstenzang, ‘China Piracy of US Products Surges Despite Accord’ L.A. Times, Oct. 10, 1995, available at http://articles.latimes.com/1995-10-10/news/mn-55287_1_china-trade accessed 20 July 2012

128 Yeh, Michael, ‘Up Against a Great Wall: The Fight Against Intellectual Property Piracy in China’ 5 Minn. J. Global Trade 503, at 516-17

129 Yeh, Michael, ‘Up Against a Great Wall: The Fight Against Intellectual Property Piracy in China’ 5 Minn. J. Global Trade 503, at 516

Conclusions

Copyright law in the PRC has undergone remarkable development since its inception in 1992, having implemented substantial administrative and judicial frameworks within just two decades. However, problems persist in the Copyright Law and its related legislation. Namely, the ambiguity of the rights of agencies reporting current affairs and the limitation of protection with regards to rental rights in Article 22 of the Copyright Law, the insufficient rights conferred to performers in Article 39, the non-deterrent nature of the fines and damages in Articles 46 and 47 of the Copyright Law and Article 36 of the Implementing Regulations.

Inadequacies are also found in the judicial enforcement of copyright law. While a sophisticated court system is in place, the civil law tradition prevents the application of judicial precedent and without a system to calculate damages court decisions are disproportionate and unpredictable.

More enforcement issues lie in the decentralisation of government and the impact of local protectionism which prevents copyright protection from reaching communities which rely on counterfeiting for a livelihood. Chinese culture itself prioritises the needs of the state at large over the needs of the individual. The Confucian culture that resides in the PRC also fuels social mistrust of the concept of IP as Confucianism values real and tangible property, not "creations of the mind". Also, it has been argued that the PRC has little economic capability to partake in copyright protection, and little to gain from participation.

It is clear that revisions need to be made to the copyright law of the PRC if policymakers intend to establish a state of protection parallel to requirements made in the TRIPS Agreement. As of 2012, a new revision of the Copyright Law is currently underway,¹³⁰ but it remains to be seen if the reforms made are sufficient to match the requirements of TRIPS. However, it could be argued that the cultural disincentives in the PRC are too strong to be applicable to the principle of copyright.

Open source software licensing in the PRC

Background

A number of provisions in the TRIPS Agreement allow for slow implementation in certain circumstances. From the outset, Article 7 sets the objective of the TRIPS Agreement to “contribute to the promotion of technological innovation and to the transfer and dissemination of technology [...] in a manner conducive to social and economic welfare [...]”¹³¹ As such, the agreement recognises the needs of “ [...] least-developed country Members, their economic, financial and administrative constraints, and their need for flexibility to create a viable technological base [...]”¹³² As China qualifies as a developing country according to the International Monetary Fund,¹³³ The World Bank Group¹³⁴ and the United Nations World Economic Survey,¹³⁵ the PRC is entitled to a ten year grace period before implementing TRIPS under Article 66.¹³⁶

130 Abrams, Stan, ‘China Copyright Infringement: It Could be Worse’ China Hearsay.com, available at <http://www.chinahearsay.com/china-copyright-infringement-it-could-be-worse/> accessed 5th August 2012

131 TRIPS Article 7

132 TRIPS Article 66 (1)

133 IMF Advanced Economies List World Economic Outlook Report, April 2012, p. 179, available at <http://www.imf.org/external/pubs/ft/weo/2012/01/pdf/text.pdf> accessed 13th August 2012

134 World Bank Group, ‘Data: Country and Lending Groups’ at <http://data.worldbank.org/about/country-classifications/country-and-lending-groups> accessed 13th August 2012

135 UN Report, ‘World Economic Situation and Prospects 2012’ page 135, available at

http://www.un.org/en/development/desa/policy/wesp/wesp_current/2012country_class.pdf accessed 13th August 2012

136 TRIPS Article 66

Additionally, the PRC is entitled to a further delay of four years courtesy of Article 65,¹³⁷ which offers the deferral to a nation “[...] which is in the process of transformation from a centrally-planned into a market, free-enterprise economy [...]” and is undertaking reform of its IP system and facing special problems in the preparation and implementation of IP laws and regulations.¹³⁸ While it remains unclear as to when China’s transition to capitalism has or will end,¹³⁹ it is certain that the PRC has encountered obstacles in implementing and enforcing its newly adopted IP policies (as explored in chapter II). This means that the PRC has until December 2015 to implement the minimum standards of protection set out in TRIPS and to overcome the obstacles preventing the performance of this protection.

As briefly outlined in the first chapter, the PRC has already taken steps to embrace open source software through the creation and adoption of Red Flag Linux in 1999.¹⁴⁰ Furthermore, a culture of free software is emerging in China,¹⁴¹ and the concept is taking hold in the business sector.¹⁴² With a new revision of the Copyright Law on its way,¹⁴³ along with the changing landscape of computer software in China and the rest of the world, the interaction between open source software licensing and Chinese copyright norms could be a central feature to the PRC’s IP framework.

This section will demonstrate that by embracing and promoting open source software licensing on a legal and administrative level in the PRC, many of the software-related problems in implementing IP laws can be circumvented, as well as many other economic benefits provided. And that, in doing so, the PRC can meet the minimum standards of protection for copyright as required by TRIPS without interfering with the politics and culture of the state.

Legal Framework

Objectives

Article 1 of the Copyright Law states that the idealistic purpose of protecting copyright in the PRC is in pursuit of;

*“ [...] encouraging the creation and dissemination of works which would contribute to the construction of socialist spiritual and material civilization, and of promoting the development and prosperity of the socialist culture and science [...]”*¹⁴⁴

Here the principle is to encourage the creation and sharing of works for the greater development of society. The GNU General Public License bears a similar ideology in its preamble;

“Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission

137 TRIPS Article 65 (2)

138 TRIPS Article 65 (3)

139 Buster, G, ‘The Transition to Capitalism’ International Viewpoint Online Magazine, December 2003, at <http://www.internationalviewpoint.org/spip.php?article117> accessed 13th August 2012

140 Lettice, John, ‘Red Flag Linux beats out Windows in Beijing’ 4th January 2002, The Register, available at http://www.theregister.co.uk/2002/01/04/red_flag_linux_beats_out/ accessed 12th August 2012

141 Jiangsu, Amy, ‘Open Source in China?’ discussion with Stephen Walli, available at <http://www.amyjiangsu.com/?p=45> accessed 12th August 2012

142 Legard, David, ‘Reports: Open-source software alliance formed in China’ Infoworld.com, 11th August 2004, at <http://www.infoworld.com/t/platforms/reports-open-source-software-alliance-formed-in-china-421> accessed 12th August 2012

143 Abrams, Stan, ‘China Copyright Infringement: It Could be Worse’ China Hearsay.com, available at <http://www.chinahearsay.com/china-copyright-infringement-it-could-be-worse/> accessed 5th August 2012

144 Copyright Law of the PRC Article 1

to copy, distribute and/or modify it."¹⁴⁵

Both documents in their objectives state the importance of protecting copyrighted works and encourage the user to create and distribute new works. This is, in turn, aligned with the objectives of the TRIPS Agreement which also emphasises the "promotion of technical innovation" and the further "dissemination of technology."¹⁴⁶

Enforcement

The PRC's administrative and judicial enforcement of the Copyright Law was observed in chapter II, and it was concluded that the enforcement measures in place were inadequate for the purposes of TRIPS for a number of reasons. This section purports to explore the potential impact of open source software licensing on the problems encountered with copyright implementation. The GPL will be used as a template, as the license has already been embraced as legally enforceable in its use by Red Flag Linux.¹⁴⁷

Article 41 of TRIPS stipulates that the enforcement measures of IP rights are to be fair and efficient, and ultimately have a deterrent effect.¹⁴⁸ Article 45 goes on to give judicial authorities the authority to order the payment of damages to compensate for a loss as a result of infringement.¹⁴⁹ The PRC's Copyright Law states its enforcement measures in Articles 46 and 47, ultimately conferring the power of remedy to the judge's discretion.¹⁵⁰ The Implementing Rules, in turn, require that a fine cannot exceed three times the amount of illegal business profit and cannot exceed ¥100,000,¹⁵¹ whereas the Copyright Law requires that where the copyright holder's injury or the infringer's unlawful income cannot be determined, a maximum of ¥500,000 can be awarded.¹⁵²

The criticisms of the system in place in the PRC were mainly concerned with the inconsistent orders and rulings of the judges presiding over copyright claims, and the fact that fines and damages were not sufficient to deter copyright infringers. It is submitted that in the instance of open source software licences, such as the GPL, some of these problems may be mitigated.

It was argued that the ordering of damages is a futile venture because it is nearly impossible to accurately calculate the amount of damages that must be paid to the claimant,¹⁵³ and the maximum fine available is never recognised in practice.¹⁵⁴ In the case of the GPL, the source code that is distributed is free. Therefore, in a claim for infringement, the amount to be compensated is zero, so the ordering of damages can never be inadequate. If there is no monetary damage to compensate for, then Article 45 of TRIPS is satisfied.

In addition, the maximum fine of three times the amount of illegal turnover would be appropriate

145 GNU General Public License version 3, 29th June 2007, Preamble, available at <http://www.gnu.org/copyleft/gpl.html> accessed 14th August 2012

146 TRIPS Article 7

147 Unknown, 'The Qt SDK is now included in the largest Linux distribution in China' RedFlag-Linux.com, 23rd June 2009, available at http://www.redflag linux.com/en/news_end.php?class1=2&class2=1&productid=&id=76 accessed 14th August 2012

148 TRIPS Article 41

149 TRIPS Article 45

150 Copyright Law of the PRC Article 46 and 47

151 Implementing Rules of the PRC Article 36

152 Copyright Law of the PRC Article 48

153 Alford, William, *To Steal a Book is an Elegant Offense: Intellectual Property Law in Chinese Civilization* (California: Stanford University Press, 1995) 6

154 Silk, Michael, 'Cracking Down on Economic Crime Will China's Latest Anti-Corruption Campaign Have Any Impact?' *China Bus. Rev.*, May 1, 1994, at 25

if asserting the enforceability of the GPL, as was the outcome of the Software Freedom Conservancy case.¹⁵⁵ It is also submitted that an outcome like this would not be unlikely as to profit from withholding source code is paramount to preventing the dissemination of science and technological knowledge, and the participation of research into technology, both freedoms provided by the Constitution of the PRC.¹⁵⁶ It would also prevent the “creation and dissemination of works” for the purposes of Article 1 of the Copyright Law.¹⁵⁷

Finally, it is often concluded that, as a result of inconsistent rulings by the judiciary, the enforcement of copyright provisions is not having the deterrent effect required by TRIPS¹⁵⁸ either because the fines or damages ordered are too low, or the infringing business is profitable enough to simply pay the fine and continue infringement. It is submitted that, in the case of GPL, the deterrent effect would be far greater. This is because, unlike proprietary software, the lightest remedy available for a GPL violation, an injunction, would make the source code of the software available to the public and, in turn, destroy the value of the product itself. Beyond that point a would-be infringer would only stand to lose money as the software would have no market value. This would give copyright enforcement a harsher deterrent effect in the context of GPL violations.

In summary, a license like the GPL would be workably enforceable in China’s copyright legislative framework as it stands. Because the GPL causes the source code to be distributed for free, the allocation of damages would no longer be an issue. The withholding of the source code prevents some of the fundamental freedoms provided in the Constitution of the PRC from being carried out, which, in turn, would put an end to judicial apathy. And, finally, the minimal remedy issued by the judiciary would be to make the source code available to the public, which would destroy the value of GPL-infringing practices, giving enforcement a heavier deterrent effect.

Civil Law Tradition

It was argued that an IP framework that works in Western countries is incompatible with Chinese law as a whole because it operates in a civil law tradition, as opposed to common law. And while the publishing of the ten most influential IP cases by the Supreme Court every year does offer some guidance to judges, that guidance is very limited considering the dramatic influx of cases and cannot be substantial enough to be considered judicial precedent.

This lack of precedent leads many to determine that judicial decision making in the PRC is highly inconsistent,¹⁵⁹ and, as a result, it only deters foreign copyright owners in pursuing copyright claims instead of deterring the infringers. This assumption is made in the context of proprietary software where the success of an infringement claim is measured by the amount of damages won. As previously stated, certain distrust for Western ideals and companies, among other cultural motives, can be cited to explain the failure for foreign claims to reap sufficient monetary awards.¹⁶⁰

In the context of the GPL and other open source licenses, success cannot be measured by monetary damages as the source code itself is free. Consequently, success or failure can only be determined if the judge finds infringement to have taken place or not; this way, the unpredictable nature of judicial application has been relaxed.

155 Software Freedom Conservancy v. Best Buy 812 F.Supp.2d 483 at 491 (2011)

156 Constitution of the PRC, Article 20 and Article 47

157 Copyright Law of the PRC Article 1

158 TRIPS Article 41

159 Zhang, Naigen ‘Intellectual Property Law Enforcement in China: Trade Issues, Policies, Practices’ (1997) 8 Fordham Intellectual Property Media & Entertainment Law Journal 63, at 81

160 Suttmier, Yao, ‘China’s IP Transition: Rethinking Intellectual Property Rights in a Rising China’ (July 2011) NBR Special Report #29, at 17

The civil law system may offer an advantage, however, in situations regarding fair use of the GPL. As judges are bound by the Constitution to enable citizens to pursue their “creative endeavours [...] in education, science [and] technology [...]”,¹⁶¹ it is likely that situations surrounding fair use will lean in favour of ensuring the dissemination of knowledge to Chinese citizens.

In fact, Chinese legislation has already made such use of software legally permissible. Article 17 of the Regulation for Computer Software Protection (RCSP) 2002 states that;

“[a] piece of software may be used by its installing, displaying, transmitting or storing for the purposes of studying or researching the design ideas or principles embodied therein, without permission from, and without payment of remuneration, to the software copyright owner.”¹⁶²

Article 17 promotes the dissemination of knowledge and works and renders the reproduction of software for the purposes of research and education permissible. This policy is perfectly aligned with the ethos of open source software licensing as this encouragement to reverse engineer software and its code is the main driving force behind the GPL.¹⁶³

On the other hand, a more complicated issue concerning fair use may not benefit from a predisposition towards the dissemination of knowledge and technology. Such as, for example, the United States case of *Sony Computer Entertainment v. Connectix Corporation*,¹⁶⁴ where an open source code was used to make a product compatible with other existing works, was ruled as fair use.¹⁶⁵ This is because the inconsistent nature of judicial rule could blur the lines on more technical matters, such as fair use.

The same could be said for the problem of downstream liability. On one hand it would appear that Chinese judges would make decisions of liability depending on “the circumstances” as required by the Copyright Law,¹⁶⁶ which may allow defences such as an honest mistake and fairness to prevail. However, the civil law system may blur the lines on downstream liability and confuse the matter further.

The backdrop provided by the Chinese Constitution¹⁶⁷ and Copyright Law¹⁶⁸ aligns the interests of the Chinese policymakers to promote the distribution of technology and knowledge with the objective of the GPL.¹⁶⁹ This “background duty” provides judges with additional guidance to enforce open source licenses such as the GPL. Also, the fact that the GPL stipulates that source code is to be made available for free makes the remedial nature of copyright implementation more sufficient. However, in practice, the lack of precedent still raises concerns about consistent application. What might be regarded as an infringement of the GPL for one judge might be considered fair use for another. Nevertheless the absence of written precedent does not contravene TRIPS,¹⁷⁰ and is therefore adequate.

161 Constitution of the PRC, Article 47

162 Regulation for Computer Software Protection (RCSP) 2002 Article 17

163 GNU General Public License version 3, 29th June 2007, Preamble, available at <http://www.gnu.org/copyleft/gpl.html> accessed 14th August 2012

164 *Sony Computer Entm't, Inc. v. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000)

165 *Sony Computer Entm't, Inc. v. Connectix Corp.*, 203 F.3d 596, 603-10 (9th Cir. 2000)

166 Copyright Law of the PRC Article 46 and 47

167 Constitution of the PRC, Article 20

168 Copyright Law of the PRC Article 1

169 GNU General Public License version 3, 29th June 2007, Preamble, available at <http://www.gnu.org/copyleft/gpl.html> accessed 14th August 2012

170 TRIPS Article 41

Other Enforcement Concerns

GPL Licence vs Contract Law

Large profile cases such as *Jacobsen v. Katzer*¹⁷¹ in the United States deal with the question of enforcing open source software, such as the GPL, through contract law; however, no such substantial precedent has been set in the PRC.

Typically, in the PRC, a breach of contract is remedied through the awarding of damages to the injured party.¹⁷² It has been commented that, in order for foreign contracts to be enforced in the PRC, three general rules must be followed. First, any enforcement through litigation must go through the Chinese court system. Second, the governing law of the enforcement must be the Chinese Law. Finally, the governing language must be Chinese.¹⁷³ Whilst foreign contracts are still enforceable in the PRC, some preliminary obstacles must be overcome.

The GPL licence itself is written in English. The authors of the licence, the Free Software Foundation (FSF), do not approve of any unofficial translations in a legal capacity, but encourage any unofficial translations of the license for the purposes of education. According to the GNU website, all translations require a notice that state that it does not legally state the distribution terms for software that uses the GPL as “only the original English text of the GNU GPL does that.”¹⁷⁴

In summary, only the English copy of the GPL can legally state the distribution terms, and, therefore, would have difficulty being enforced under contract law in the PRC owing to the general rule that foreign contracts must be in Chinese in order to be enforced.

Decentralisation

It was previously explored how the decentralisation of the Chinese government contributes to the poor implementation of copyright protection. It was found out that the officials of the Local People’s Congress are directly elected by citizens¹⁷⁵ and are not controlled by the federal government,¹⁷⁶ and the local judges are not awarded tenure.¹⁷⁷ As a result, local officials and judges are vulnerable to local pressures and it is often the case where these officials intervene on copyright infringement cases for the sake of local interests and businesses which thrive on copyright infringement.¹⁷⁸

With GPL infringement cases, the incentive for local leaders to intervene in favour of local business is removed. In the case of proprietary software, local leaders and judges obstruct copyright protection to continue infringement for the sake of the livelihood of the local people in

171 *Jacobsen v. Katzer*, 535 F.3d 1373 (Fed. Cir. 2008)

172 Contract Law of the People’s Republic of China (adopted by the National People’s Congress on March 15, 1999, and promulgated by the Presidential Order No. 15)) Chapter seven, Articles 107, 108, 109 and 113.

173 Dickinson, Steve, ‘Enforcing Contracts in China. Way, Way Better Than You Think’, China Law Blog, July 13th 2009, available at http://www.chinalawblog.com/2009/07/enforcing_contracts_in_china_w.html, accessed July 20th 2013

174 GNU website, Unofficial Translations page, accessible at <http://www.gnu.org/licenses/translations.html>, accessed 20th July 2013

175 Ying Li, ‘Procedural Provisions for Intellectual Property in GATT and the Legislation in China’ (1994) 4 China Pat. & Trademarks 17, at 399

176 Constitution of the PRC Article 101

177 Clarke, Donald, ‘Power and Politics in the Chinese Court System: The Enforcement of Civil Judgements’ (1996) 10 Columbia. J. Asian L. 1, at 8

178 Cheng, Julia, ‘China’s Copyright System: Rising to the Spirit of TRIPS Requires an Internal Focus and WTO Membership’ (1999) Fordham Law Journal, 1941, at 1986

an effort to “serve the people and socialism” for the purposes of Article 22 of the Constitution of the PRC. However, a local official desiring to obstruct the protection of the GPL would be met with a dilemma. The leader must either continue the hindrance of copyright protection, which would restrict the local population’s access to the source code, and, in turn, prevent the dissemination of knowledge for the purposes of the Copyright law and the Constitution, or alternatively, they can enable copyright protection to allow access to the source code for the public, but at the same time destroying the value of the software and perhaps harming local business.

It is submitted that a Confucian culture that does not intend to serve the interests of private companies¹⁷⁹ would allow the latter scenario to prevail as the local leader will be more attentive in protecting the local interest of shared knowledge and the various economic benefits conferred by it. Once again, it is contended that the GPL and other open source licenses are more compatible with the framework of copyright protection in the PRC than the protection of proprietary software despite the underperformances of the system owing to the decentralisation of government.

TRIPS - Article 7

Under Article 7 of the TRIPS Agreement, each state is to implement their IPR protection “[...] in a manner conducive to social and economic welfare, and to a balance of rights and obligations.”¹⁸⁰ In the case of the PRC, it is submitted that PRC policymakers should, when drafting the new Copyright Law,¹⁸¹ take into account the suitability of open source to their “social and economic welfare.” The policymakers can take advantage of this opportunity to render their laws to heavily promote open source software.

Cultural Applicability

Since implementing the “open door policy” the PRC has made policy concessions to embrace IP, which is arguably a Western capitalist venture.¹⁸² As has been explored, these concessions have led to friction between the Western concept of private ownership of “inventions of the mind” and the Chinese culture of serving the “people and socialism.”

One of the main conflicts lies between the concept of copyright, and the function of Marxism that had a great impact on the modern Chinese legal framework. As Cheng comments, “The acquisition of private property was largely forbidden in China because traditional Marxism considered the renunciation of private property essential to economic growth.”¹⁸³

In other words, production of goods should be undertaken in a spirit of cooperation and co-ownership, with the resulting creation being a “social product”.¹⁸⁴ The philosophy behind the GPL and the open source movement conform to this ideal as the source code licensed by the GPL allows users to modify and collaborate on software projects, consequently creating “social software.” As the creator of the GPL, Richard Stallman states: “Cooperation is more important

179 Suttmier, Yao, ‘China’s IP Transition: Rethinking Intellectual Property Rights in a Rising China’ (July 2011) NBR Special Report #29, at 17

180 TRIPS Article 7

181 Abrams, Stan, ‘China Copyright Infringement: It Could be Worse’ China Hearsay.com, available at <http://www.chinahearsay.com/china-copyright-infringement-it-could-be-worse/> accessed 5th August 2012

182 Hesse, Carla, ‘The rise of intellectual property, 700 B.C. – A.D. 2000: an idea in the balance’ (2002) Daedalus (Spring 2002), 6-45

183 Cheng, Julia, ‘China’s Copyright System: Rising to the Spirit of TRIPS Requires an Internal Focus and WTO Membership’ (1999) Fordham Law Journal, 1941, at 1981

184 Encyclopaedia Britannica, “socialism”, available at <http://www.britannica.com/EBchecked/topic/551569/socialism> accessed 14th August 2012

than copyright.”¹⁸⁵

It is submitted that policymakers in the PRC could therefore draft the new Copyright Law in a way that bears a heavy preference to open source licenses. In this respect, the law can still satisfy the minimum requirements set out by TRIPS but at the same time the protection can conform to Marxist ideology through the GPL.

Economic Implications

Incorporating open source into the new Copyright Law would also bring advantages for the Chinese worker. The alternative incentive of engaging with the software development community could in turn offer skills and training not normally available to Chinese citizens. Widespread participation in open source projects could lead to a new wave of innovation in the PRC. As Patel states, “[...] a generation of Chinese software engineers leaving their mark on the software that literally runs the Internet would be a major step up on the world stage.”¹⁸⁶ This in turn could lead to foreign multinationals outsourcing work to Chinese development companies, and improve trade relationships between the PRC and other states.

Also, under Article 7 of the Regulations on Computer Software Protection, the copyright owner has to pay a registration fee to obtain a “preliminary proof” of registration.¹⁸⁷ With the GPL, there is no such fee or registration as the license itself is embedded in the source code. This lowers barriers for users to create open source software in the PRC.

Furthermore, legislation that places an emphasis on the benefits of open source software in the PRC could allow more people to learn about software programming. The development of free, quality software products could mitigate the reliance on pirated products in China, and could allow developers to create new software that caters for the needs of local communities.

Conclusion

It has been explained that while the IP framework of the PRC has developed at a significant pace since the 1980's, the culture of the PRC and a heavy reliance on piracy as means of support for poor communities are among the largest contributors towards the inadequate implementation of copyright protection of proprietary software. As a result, without a fundamental renovation of social values, it is likely that the PRC will never successfully implement copyright protection in a way that will address the high amount of copyright infringement that takes place.

A general consensus is that while open source licenses do not command the same legal rights as the conventional copyright does, it does attach the licensee to conditions that would signify copyright infringement if violated. In the case of the PRC, open source licensing usurps copyright protection in a very unique way, and confirms the flexibility of the IP system.¹⁸⁸ This flexibility could allow Chinese policymakers to go a long way in circumventing the copyright enforcement issue in the PRC, whilst maintaining adequate copyright protection for the purposes of the TRIPS Agreement.

185 Stallman, Richard, ‘Why Software Should Not Have Owners’ in *Free Software Free Society: Selected Essays of Richard M. Stallman*, 2nd Edition, Free Software Foundation (October 2002), p 37-43

186 Patel, Nilay, ‘Open Source and China: Inverting Copyright?’ (2006) 23 (4) *Wiscon. Int. L. J.*, 781 at 804

187 Regulations on Computer Software Protection, Article 7

188 McGowan, ‘Legal Implications of Open-Source Software’ (2001) *U. Ill. L. Rev.* 241, at 303

If policy reasons for copyright law were based on cultural understandings rather than economics, then the IP situation in the PRC would appear substantially more pacified. Open source licensing expressively alters the intended use of copyright protection and aligns its application with the cultural understandings of the PRC. A copyright policy that is preferential towards open source would advance the Chinese conformity to TRIPS' minimum protection requirements, without compromising any unique Chinese ideals. This, in turn, could allow economic benefits to develop and prosper, such as improved business relations and a new method of sharing knowledge and works.

As the Chinese government is already implementing rules to have Red Flag Linux installed on internet café computers in certain cities,¹⁸⁹ it is clear that the PRC has a vested interest in open source software. Laws that allow the use of open source software to be widespread in the PRC could, in time, run piracy out of business with new, better, free software. They could use this opportunity to address some issues faced by licenses such as the GPL by, for example, redefining fair use and ensuring conformity among the judicial application of the principle, and providing guidelines for judges when presiding over a case concerning downstream liability.

It is recommended that policymakers of the PRC consider the vast benefits of open source software and its licensing, and take advantage of the timing of the new Copyright Law. As Patel states, "An IPR regime based around copyright as the basis for open source instead of economic incentive could very well take China's WTO compliance from 'uneven' to 'revolutionary'."¹⁹⁰

About the author

James Saxton graduated Sheffield University in 2013 with an LLM in Commercial Law. His research interests revolve around the impact of the evolving state of technology on the Law. Currently he works at Sheffield Hallam University's Law Clinic.

189 Johnson, Bobbie, 'China: We'll keep Red Flag flying here' The Guardian, 4th December 2008, available at <http://www.guardian.co.uk/technology/blog/2008/dec/04/linux-microsoft> accessed 9th August 2012

190 Patel, Nilay, 'Open Source and China: Inverting Copyright?' (2006) 23 (4) *Wiscon. Int. L. J.*, 781 at 805

Licence and Attribution

This paper was published in the International Free and Open Source Software Law Review, Volume 5, Issue 2 (December 2013). It originally appeared online at <http://www.ifosslr.org>.

This article should be cited as follows:

Saxton, James (2013) 'Red Flag Way: Exploring copyright protection, TRIPS and Open Source software licensing in the People's Republic of China', *International Free and Open Source Software Law Review*, 5 (2), pp 55 – 78

DOI: [10.5033/ifosslr.v5i2.80](https://doi.org/10.5033/ifosslr.v5i2.80)

Copyright © 2013 James Saxton.

This article is licensed under a Creative Commons UK (England and Wales) 2.0 licence, no derivative works, attribution, CC-BY-ND available at <http://creativecommons.org/licenses/by-nd/2.0/uk/>

As a special exception, the author expressly permits faithful translations of the entire document into any language, provided that the resulting translation (which may include an attribution to the translator) is shared alike. This paragraph is part of the paper, and must be included when copying or translating the paper.



Expendable 'Written' ICT Policies in a Digital Era, No Broken Promise

Hüseyin Tolu^a

(a) PhD student at University of Bristol

DOI: [10.5033/ifosslr.v5i2.86](https://doi.org/10.5033/ifosslr.v5i2.86)

Abstract

In Turkey, whether distinguishing software as Free Open Source Software (FOSS) or Proprietary Closed Source Software (PCSS), there is no precise 'National ICT Policy in Public Institutions.' It is crucial to evaluate ICT Policy, particularly how and why it is incomprehensible, as a case study to conceptualise ICT Policy from a national psyche. The study focuses on the reasons for not 'governing' ICT Policy and identifies the conditions behind this omission. I argue how FOSS is deliberately ignored due to: obvious, institutional inertia, path dependence and ungovernable ICT changes and, arguably, corruption in new public management. The study concludes that Turkey has failed to produce written ICT Policies and to establish pervasive and trustworthy (flexible) ICT ecosystems, which recognise either a balanced development between FOSS & PCSS or a FOSS favourable system. Turkey has taken a de-facto ICT Policy, by which Microsoft dominant markets control public institutions. Whilst techno-institutional lock-ins politically exist and are irreversible, the future is mistakenly defined as a Procrustean ICT Bed Strategy. Globally, ICT Policy is understood to be an 'experimental strategy' (not definitive), perhaps for the purpose of ongoing negotiations and positioning of a national state within global networks because of evident nationally prioritised values and interests. Thus, the dynamic and failing nature of ICT ecosystems leads to 'no broken promise.'

Keywords

Un-Written ICT Policy; Free and Open Source Software; Corruption in New Public Management; a Procrustean ICT Bed Strategy; Governance

Introduction

"In the age of information, ignorance is a choice." Donny Miller

Scholars distinguish software as Free Open Source Software (FOSS) and Proprietary Closed Source Software (PCSS) each of which has its own characteristic working properties and, not inevitably, the same rationale, breath and harmony, resulting in their own evolving strengths and weaknesses. The scope of this distinction is comprehensively argued in software literature; however, there are no compelling arguments to attempt conceptualising 'National ICT Policy' with or without hearing this crucial distinction in Turkey¹. Explicitly, the literature argues under the title of 'ICT Strategy' or 'ICT Capability Strategy', rather than 'ICT Policy', indicating how the concept is globally challenged and the relevant conditions, in particular, formal and informal rules in public institutions, are neglected. Therefore, it is crucial to evaluate ICT Policy in Turkey, particularly how and why it is incomprehensible, as a case study to conceptualise ICT policy from a national perspective in a digital era.

The study focuses on the reasons for not governing ICT policy and the conditions that drive poor government intervention. I also extend the scope of this article to argue that FOSS is deliberately ignored in ICT projects due to obvious: (a) institutional inertia, (b) path dependence, (c) ungovernable ICT changes, and, arguably, (d) corruption in new public management (NPM). This study exposes the deliberate disregard of the above to conclude that Turkey has failed to produce written ICT Policies and to establish pervasive and trustworthy (flexible) ICT ecosystems which recognise either a balanced development between FOSS & PCSS or a FOSS favourable system. The Government has taken a de-facto ICT Policy by which Microsoft dominant markets control public institutions. Whilst techno-institutional lock-ins politically exist and are irreversibly in Turkey, the future is mistakenly defined as requiring a Procrustean ICT Bed Strategy. Therefore, this study finally argues that ICT Policy in a national state is globally understood as using an 'experimental strategy' rather than 'definitive.'

Brief notes, in Turkey, we have had original Linux. The Scientific and Technological Research Council of Turkey (TUBITAK) has developed Pardus Operating Systems (OSs) (nationally distributed Linux distro) between 2003 and 2012. After ten years of Pardus development, the Pardus project has not achieved its initial or subsequent objectives as declared in 2004 & 2011, and has mistakenly diverted away from those objectives to become Pardus Fraud-Debian, as Turkey's present day accepted open source software solution. Crucially, the Pardus project has been deliberately utilised as leverage to gain better ongoing deals from the Microsoft Corporation. So, Turkey has always aspired to Turkish Linux, however Turkey could not appreciate its opportunities. Nevertheless, Turkey has still FOSS communities, in particular for Pardus Original and Pardus Fraud-Debian².

Pardus made us salivate, but not eat!

Considering the (previous) fact that the latest international reports show that FOSS is a real alternative to PCSS through global political-economic perspective, in Turkey, nonetheless, with the exception of the Ministry of Justice, software which has been developed by public institutions and/or private sectors, through supplying services methods, are not compatible with other OSs.

¹ There is also a lack of academic argument in the concept of 'National ICT Policy'. See, Uckan, O. (2009). Weakness of National ICT Policy-Making Process in Turkey: The Governance Phobia, *ICEGOV- International Conference on eGovernment and eGovernance*, 12-13 March 2009, Ankara-Turkey.

² Pardus OSs Journey in Turkey is so argumentative due to the complexity of perceptions FOSS movements and philosophies, relationships and conflicts of FOSS communities, interventions from TUBITAK and the Government etc. The whole argument might be seen from FOSS communities in Turkey. There are so many detailed information shared by Pardus developers and academicians, e.g. Mustafa Akgul, Dr. Necdet Yücel, Doruk Fisek, Sezayi Yeniay, etc. All criticisms are recorded on the internet.

This demonstrates that there are techno-institutional lock-ins within Turkey, particularly with Microsoft platforms (see, parliamentary written questions³). Notably, there is only one public institution, the Centre of High Performance Computing, that intentionally and solely relies on FOSS, 99% (no Red Hat). Therefore, in Turkey, it is impossible to determine from the Government reports that there is a precise legal regulation in public institutions to incorporate FOSS. It is also true that there is no precise 'National ICT Policy' in Public Institutions (see, E-State: Concept and General Issues Report by the Prime Minister, June 2012⁴, and 25th Meeting of the High Council of Science and Technology Report, January 2013⁵).

From a legal perspective, the law (policy) could be considered as; nothing is equal before legislation. However, when the concept is ICT, evidently legislation is not sufficient in order to counterbalance FOSS and PCSS, because

*'Between equal rights, force decides' Marx;
'There is nothing more unequal than the equal treatment of unequals'*

From this point of view, why is Turkey a particularly good case study for investigating ICT policy? Turkey's centralised approach to ICT policy (de facto) and the expectation gap between its ambitions (to be global leader) and realisation (ongoing project failures) make it easier to identify where the issues lie. However, Turkey is not alone in failing to address ICT policy successfully; it is a global issue and locally, nations are getting it wrong. For instance, Marketshare (Market Share Statistics for Internet Technologies) state that in terms of market share in OS, Microsoft has 80.82%, Apple has 7.02% and others 3.16%⁶. There are similar claims, similar histories and the same outcomes in accepting the same (de-facto) ICT policy in many states. However, those states may have differing reasons for allowing themselves to be locked-in (controlled) by giant corporations.

'He who controls the past controls the future. He who controls the present controls the past.' George Orwell

Methodology

In the study, the data is obtained through documentary sources (only government reports and parliamentary written questions⁷). Notably, most provided documents are in Turkish. Therefore, it is not possible for the main target audiences to understand the original sources. So, further clarifications may be needed; for instance, are they official advices or regulations? In this study, the data is argued by employing a process tracing approach, which is

“The systematic examination of diagnostic evidence selected and analyzed in light of research questions and hypotheses posed by the investigator. Process tracing can

3 All parliamentary questions – over three hundreds- available from www.tbmm.gov.tr. Some parliamentary written questions from MP, Professor Dr. Alim Isik (08th March 2012, No:7/5313, 27th March 2012, No:7/5228), MP, Isa Gok (25th April 2008, No:7/2983), MP, Ayse Jale (24th January 2008, No:7/1727), MP, Husnu Collu (24th January 2008, No:7/1540), MP, Muharrem Toprak (24th February 2005, No:7/5052), MP, Emre Kocaoglu (23rd January 2002, No:7/5728), etc.

4 Prime Minister. (2012). E-State: Concept and General Issues Report, (E-Devlet: Kavram ve Genel Sorunlar); 2012, June 6, Retrieved 25/10/2013 from

http://www.tbmm.gov.tr/arastirma_komisyonlari/bilisim_internet/docs/sunumlar/Koordinasyon_Calismasi_Sunum-ea_06062012_1045.pdf

5 Scientific and Technological Research Council of Turkey (TUBITAK). (2013) 25th Meeting of the High Council of Science and Technology Report; 2013, Retrieved 25/10/2013 from

http://www.tubitak.gov.tr/sites/default/files/btyk25_yeni_kararlar_toplu.pdf.

6 More information from <http://www.netmarketshare.com/operating-system-market-share.aspx?qprid=10&qpcustomd=1>

7 In this study, there are many translations (the author interpretations), particularly formal reports. Translation is squared brackets, and italic is for emphasising ([translation]).

contribute decisively both to describing political and social phenomena and to evaluating causal claims” (Collier, 2011, p.823⁸).

In using the process tracing approach, this study focused on interpreting the data by taking a picture of a range of particular movements in order to address/identify a series of interlinked phenomena, which cause and/or affect the outcome in this case-specific study. Many process tracing scholars (like historical scholars) aimed to clarify a particular historical outcome within a single-outcome study on the basis of sufficient and complete evidence through eclectic theorisation, as is the aim in this study. Process tracing is not really an evaluated and set related theory, unlike other research principles.

“The 'eclectic messy centre' should be clearer ... Neither theories nor cases are sacrosanct. Cases are always too complicated to vindicate a single theory, so scholars who work in this tradition are likely to draw on a mélange of theoretical traditions in hopes of gaining greater purchase on the cases they care about. At the same time, a compelling interpretation of a particular case is only interesting if it points to ways of understanding other cases as well” (Evans, 1995, p.4⁹).

The purpose of this case-specific study is to

“uncover what stimuli the actors attend to; the decision process that makes use of these stimuli to arrive at decisions; the actual behaviour that then occurs; the effect of various institutional arrangements on attention, processing, and behaviour; and the effect of other variables of interest on attention, processing, and behaviour” (George and McKeown, 1985, p.35¹⁰).

This study question is whether or not there is a (ongoing) precise ‘National ICT Policy’ in Public Institutions in Turkey and, in particular, an official recognition of the crucial distinction and subsequent evaluation between FOSS and PCSS?

Lamenting FOSS in Turkey

In Turkey, there is no precise ‘National ICT Policy in Public Institutions’ and thus no FOSS Policy. Nonetheless, there are various evaluation reports in the use of FOSS, namely ‘Short-Term Action Plan 2004 and 2005 Reports¹¹’, ‘2006-2010 Action Plan for Information Society Strategy Reports¹²’ and over three hundred parliamentary written question responses during the years of 2005, 2008 and 2012.

Initially, No.3 Action Plan in 2004 emphasised that

[Many states in Europe, mainly Germany, have preferred to use open source software. *EU standards and draft decisions* submitted by the Global Information

8 Collier, D. (2012). Understanding Process Tracing, *PS: Political Science and Politics*, 44, No. 4 (2011): 823-30.

9 Kohli, A., Evans, P., Katzenstein, P. J., Przeworski, A., Rudolph, S. H., Scott, J. C., et al. (1995). The role of theory in comparative politics: A symposium. *World Politics*, 48(1), 1-49.

10 George, A.L. and McKeown T.J. (1985). Case Studies and Theories of Organizational Decision Making. *Advances in Information Processing in Organizations* 2: 21-58.

11 State Planning Organization Information Society Department. (2005). Short-Term Action Plan 2004 and 2005 Reports, Retrieved 25/10/2013 from <http://www.bilgitoplumu.gov.tr/Portal.aspx?value=UE9SVFEFMSUQ9MSZQQUdFSUQ9MzYmUEFHVRZFUINJT049LTEM9ERT1QVUJMSVNIRURfVkvSU0IPTg==>.

12 State Planning Organization Information Society Department. (2006-2010). 2006-2010 Action Plan for Information Society Strategy Reports, Retrieved 25/10/2013 from <http://www.bilgitoplumu.gov.tr/Portal.aspx?value=UEFHRIEPTe2Jk1PREU9MQ==>.

Society *recommend using open source software*. In particular, in e-government projects, they recommend *software should not be closed source software*] (p.13¹³).

In the scope of E-Transformation Turkey Project (E-TTP) within the agreement of E-Europe+ Program (since 2003), No.7 Action Plan endeavoured to conduct an investigation to use FOSS in public institutions; it included all legislative, administrative and financial aspects. The accountability, under the headings of 'Feasibility Report', 'Migration Plan' and 'Pilot Study', was given to TUBITAK-UEKAE. Within one year, TUBITAK-UEKAE presented two comprehensive reports. The first, 'Viability of the Use of Open Source Software in State Institutions and Organizations'¹⁴, instructs the migration process, providing global successful examples and recommending popular FOSS alternatives to PCSS. The second, 'Managerial, Financial and Juristic Dimensions of Open Source Software'¹⁵, instructs government responsibilities and the importance of FOSS underlining two features: interoperability and accessibility/usability of data. The 'Feasibility Report' & 'Migration Plan' studies recommended prioritising FOSS. The Pilot Study closed in its initial stage was abandoned in preference to the Information Society Strategy 2006-2010.

No.7 Action Plan also identified some of the major obstacles in the use of FOSS in public institutions, though this was not so comprehensive as to have included legal and legislative obstacles. Indications suggest that this could have been the result of a lack of nationalised ICT policy; there were three legal and technical criteria used in reasoning FOSS usage impractical.

[(1) *Requiring warranty* for software, (2) *Required criteria in service network* is not compliant with a FOSS supplier, and (3) *Lack of written documents* which are recognised by the current legislation to ensure that a FOSS supplier is the rightful owner of the software] (ibid, p.32)

TUBITAK defectively identified these three criteria to be manageable alongside 'judicial discretions' in administrations. This would suggest that the flexibility of 'judicial discretions' within the criteria conditions was mistakenly pursued. From legislative aspects, the conditions were:

[(1) The '*Law on Intellectual and Artistic Works*' is shaped and designed through PCSS. Regularisation is needed (*high risk*). (2) The '*Public Procurement Law*' has no legal obstacle, however, tender specification is shaped through PCSS and there is path dependence (*medium risk*). (3) In the '*Law of Mortgage*', a written document is required for transferring financial rights, however, it cannot applied to FOSS (*low risk*). (4) In the '*Consumer Protection Law*', some public institutions require warranty, however, regarding consumer protection, it is not possible when the product is software (*low risk*). And (5) the '*Competition Act*' has (*no risk*)] (ibid, p.33)

From administrative aspects, the conditions were:

13 State Planning Organization Information Society Department. (2004). No.3 Action-Plan in 2004, Retrieved 25/10/2013 from

http://www.bilgitoplumu.gov.tr/Documents/1/KDEP/050300_Eylem03.pdf

14 Scientific and Technological Research Council of Turkey (TUBITAK) – Informatics and Information Security Research Centre (UEKAE). (2005). Viability of the Use of Open Source Software in State Institution and Organization (Kamu Kurum ve Kuruluşlarında Açık Kaynak Kodlu Yazılımların Uygulanabilirliği), Retrieved 25/10/2013 from http://www.linux.org.tr/wp-content/uploads/2010/04/goc_kilavuzu.pdf

15 Scientific and Technological Research Council of Turkey (TUBITAK) – Informatics and Information Security Research Centre (UEKAE). (2005). Managerial, Financial and Juristic Dimensions of Open Source Software (Açık kaynak kodlu yazılımların idari, mali ve hukuki boyutları), Retrieved 25/10/2013 from <http://linuxogrenmekistiyorum.com/wp-content/uploads/Eylem-7-rapor-1.pdf>

[(1) *Continuing contracts*: Decision-makers cannot play an active role in tenders, previous contracts and agreements to decide next steps (*high risk*). (2) *The arbitrary behaviours of public administrators, as supporters of protectionism and disrupter's of innovation*: Public ICT employees rarely achieve accolade for their success but, conversely, they are rarely held to account for their failures. These behaviours devastate innovative and creative mentalities in public personnel and institutions. Consequently, uninitiated employees quickly adopt public worker culture to conform and minimise risk, consistent with using PCSS accountable solutions only with PCSS accountable suppliers; 'the buck stops elsewhere'. If PCSS ICT projects fail, personnel in public institutions believe that they would be less accountable in the project evaluation process (*high risk*). (3) *Software ownership*: Administrators in public institutions desire to see owners of FOSS as a legal entity due to the habit of solving possible software problems within a single point. The culture discourages internal/public accountability of unsolvable software problems. Any insurmountable failure will be normalised and commoditised as business as usual. Therefore, accountability normally sits solely with the final decision-maker and project/programme owner (*high risk*). (4) *Meeting needs*: There are various products in ICT, and perception of products is shaped by needs and requirements. End-users historically have more experience of PCSS and their evaluation criteria are technopolitically biased towards PCSS; the evaluation criteria for FOSS is applied incorrectly and misunderstood, e.g. end-users evaluate FOSS without FOSS user experience, end-users apply supplier driven PCSS evaluation criteria to FOSS or end-users evaluate FOSS reality rather than FOSS potential (*medium risk*). (5) *Awareness of example studies*: There is little known case study precedent to encourage FOSS usage in public institutions. Where FOSS is used successfully within public institutions, there is also a high likelihood that it's operability and security will be highly sensitive, so highly confidential. The main impediment to FOSS usage is low confidence within the Government. Although some private sector suppliers also provide FOSS-based products, they do not clearly indicate/share widely due to the reluctance of their clients to encourage criticism re-risk (*medium risk*). (6) *The uncertainty of future institutional software*: Historically, software which has been developed by public institutions and/or the private sector has not always been, during its life-cycle, compatible with other OSs. There is an unreasonable belief that rewriting PCSS software for FOSS (or vice versa), to secure and compatible standards required, would be too resource hungry (*medium risk*). (7) *The use of pirated software*: Pirated software is a serious threat for FOSS development and implementation. There is common newspeak and misleading information about intellectual values in the public (*low risk*)] (p.36-37).

(Institutional inertia, path dependency and ungovernable ICT changes are clear.)

These three legal and technical criteria and legislative and administrative obstacles that make FOSS usage impracticable in public institutions, as argued in 2005. Crucially, the conditions have taken a turn for the worse, and are still in force.

Post 2005, No.74 Action Plan, 'the Use of Open Source Software in Public Institutions', within the scope of Information Society Strategy 2006-2010, endeavoured to conduct a feasibility study in a particular institution. Based on the principal of implementation outcomes, it was aimed at setting multiple FOSS migration models for all public institutions. TUBITAK-UEKAE introduced the promotion of cooperation studies. Unfortunately, three years later, in December 2009, TUBITAK-UEKAE and the Energy Market Regulatory Authority (EPDK) signed a protocol to provide integrated information system solutions and so to implement FOSS migration. Meanwhile, TUBITAK declared several FOSS related projects, such as 'Collaborative Software Development

Platform’, ‘Public Sector Linux Competency Centre (Linux Training)’, ‘Teacher Learning Pardus-Linux Protocol’, etc.

However, all of these combined efforts have not achieved their initial and subsequent objectives, and resulted in failure. In the scope of the Information Society Strategy 2006-2010, five evaluation reports were published (from 2006 to 2010). The general discourse is that although the use of FOSS in Turkey is nearly as advanced as in many leading nations, there are some crucial obstacles. In public institutions, in particular, in E-TTP, FOSS products and usage are not encouraged. The main causes of this outcome are as No.7 Action Plan underlined in 2005. Consequently, available technologies have been platform dependent and shaped by ‘non-standard ways’. The perceived urgent issue was that no available/precise ‘National ICT Policy and Strategy Reports’ resulted in no software and FOSS consideration. There are also uncertainties about accountability and responsibility in introducing and implementing ICT policy in Turkey.

These five evaluation reports repeatedly stated that performance measures are unclear and the plan does not yet exist. The last report (March, 2010) stated that ‘the Use of Open Source Software in Public Institutions Project’ is still in its start-up phase. After four years only 10% was completed.

[There was *no progress made* for intended studies, e.g., setting up a *technical support system* within TUBITAK and preparing *training programs*, and *establishing a competence centre* which carries out awareness, information, education, research, testing and certification in the use of open source software.] (ibid, p.224¹⁶)

Expendable ‘Written’ ICT Policy

It is clear that FOSS migration efforts have failed. However, the reasons for the failure of migration efforts are much more complex than the required legal and technical criteria and legislative and administrative obstacles, as argued in 2005.

There are always ‘ICT Project Preparation Guides’ (July 2005, August 2010, September 2011 and July 2012¹⁷) in the scope of E-TTP. The software chapter of the guides states that if software fulfils conditions and requirements of ICT projects, FOSS should be privileged & prioritised in order to avoid technology dependent platforms. If software (1) clearly meets needs; (2) sustainability is not an issue; (3) there is a certification for favourable quality of product, or suppliers maturity; (4) searching harmony with ISO/IEC 15408 standards for information security; (5) if the terms and conditions are provided, national and open source software are privileged; (6) all source code and documentation (case tools, etc.) are taken by public institutions.

Despite the guides, there are crucial issues in the scope of E-TTP. The identified issues from the Prime Ministry Report (June 2012¹⁸) might be grouped as: (1) Data sharing issues (breaking principles of interoperability reports, established legislations prevented data sharing and lack of privacy in personal data); (2) Software and system dependencies, particularly OSs; (3) Lack of coordination, communication and experience (poor coordination between investor institutions, lack of know-how concept in designing ICT projects, absence of directional consultancy services,

16 State Planning Organization Information Society Department. (2006-2010). 2006-2010 Action Plan for Information Society Strategy 2010 V Report, Retrieved 25/10/2013 from

http://www.bilgitoplumu.gov.tr/Documents/1/BT_Strateji/20100323_BTS_Degerlendirme_V.pdf

17 State Planning Organization Information Society Department. (2012). ICT Project Preparation Guides (July, 2012) (Kamu Bilgi ve İletişim Teknolojileri Projeleri Hazırlama Kılavuzu, Temmuz 2012), Retrieved 25/10/2013 from

http://www.bilgitoplumu.gov.tr/Documents/1/Diger/Kamu_BIT_Projeleri_Hazirlama_Kilavuzu_2012_3.pdf

18 Prime Minister. (2012). E-State: Concept and General Issues Report, (E-Devlet: Kavram ve Genel Sorunlar); 2012, June 6, Retrieved 25/10/2013 from

http://www.tbmm.gov.tr/arastirma_komisyonlari/bilisim_internet/docs/sunumlar/Koordinasyon_Calismasi_Sunum-ea_06062012_1045.pdf

unprofessionally written tender specifications & reports and delivery phases, and poor monitoring and evaluating); (4) Duplication of geographic information systems projects (mutual data standards are not coordinated, and even no communication with each other); (5) No national information security policy document (lack of technical support for information security, poor management and lack of coordination within/between public institutions regarding policy sharing); and (6) Protection of personal information (fear, uncertainty and doubt (FUD) factors). So, the Government documents provide evidence to state that there is no precise legal regulation in the use of ICT in public institutions by 2013 because of non-existent political interference. Although since 1983 TUBITAK has been responsible for identifying long term ICT policies and strategies based on the Law.77 (delegated legislation), TUBITAK has no political power to influence Ministries and the Government initiatives, resulting in no certain delivery and implementation of the ICT policy and strategy.

An example of a coordination issue is,

[Whilst establishing cable infrastructure between two cities, independent and uncoordinated projects were established, resulting in two separate and disjointed setting up lines between these two cities.] (ibid, p.7)

If the recommendations from the ICT Project Preparation Guides and the E-TTP issues from the Prime Minister are considered, the evidence indicates that there are some misconceptions within/between Ministries about what FOSS is. Is it possible to fully provide sustainability with FOSS products? Is it possible to certify all FOSS products? Naturally it is not, assuming accountability requirements. And how is it possible for an institution to decide on software through these recommendations? Is there any central public institution to provide appropriate support and documentation, even by 2013? No. The Government reports provide recommendations, but none of them are compatible and consistent with the FOSS ecosystem and potential.

Even though ICT Project Preparations Guides exist, they are not followed by public institutions. In response to parliamentary written questions, most Ministries could not give exact information about their software expenditures. The reason was clarified by the Prime Ministry/State Planning Organisations (SPO) in 2008. Based on the Law No.5018, 'Public Financial Management and Control Law', an investment proposal from public institutions is transmitted to the Undersecretariat of SPO, and then the 'Investment Program Preparation Guide' is taken as a basis to transmit the proposal for inclusion/exclusion. Software expenditures are also within this framework. Within ICT projects, hardware, software, consultancy etc. are included and are normally proposed as sub-components of the projects. This investment proposal was intended to detail far more than merely proposing to purchase software. Importantly, ICT projects included into 'Investment Programs' are not monitored through their sub-components; whole projects only are monitored. Naturally, there is no detailed information to identify sub-categories of ICT projects. Most purchased ICT products in Ministries are performed within open negotiation and/or direct purchasing in the frame of No.4734, 'Public Procurement Law'¹⁹.

SPO clarified the process of ICT related investments as above but, however, neglected other formal legislations. There are always circular letters from the Prime Ministry which translate as the 'Use of Licensed Software' (06th February 1998²⁰ & 16th July 2008²¹). The circular letters

19 Prime Ministry/State Planning Organisations (SPO), Turkish Grand National Assembly (08th May 2008, No.7/1917), Retrieved 25/10/2013 from <http://www.tbmm.gov.tr/d23/7/7-2983c.pdf>.

20 Prime Minister/ Directorate General for Personnel and Principles. (1998). Use of Licensed Software, 16th July 2008, Retrieved 25/10/2013 from http://www.basbakanlik.gov.tr/genelge_pdf/1998/1998-0320-01979.pdf.

21 Prime Minister/ Directorate General for Personnel and Principles. (2008). Use of Licensed Software, 16th July 2008, Retrieved 25/10/2013 from http://www.basbakanlik.gov.tr/genelge_pdf/2008/2008-0010-006-08468.pdf

structured (must be followed) purchasing computer software in public institutions.

[Budgeting: Prior to purchasing computer software, *software and hardware must be specified as a separate item*. When budgeting is prepared, licensing principles must be considered, number of needed software should be included in the budget.

Specification: In specifications, *purchased computer software must be specified as a separate item, provided software must be licensed and cost of licences must be specified*.

Delivery: In the temporary and final acceptance processes, for delivered software, *it must be controlled as to whether or not software is licensed and only licensed software can be obtained*.]

Evidently, public institutions have completed ICT investments and projects in contrary to 'Use of Licensed Software' instructions. The Prime Ministry itself has not been compliant in this regard. According to Law 3056 issued in 1984, the first duty of the Prime Minister is to ensure cooperation between the Ministries, to supervise the general policy of the Government, and to take necessary measure in order to fulfil the given services based on the Constitution and Laws. In this sense, any initiative perceived as inconsistent with the laws should be argued in the Ministerial Cabinet. However, there has no precedent case in the concept of this malpractice in Turkey. Crucially, there is no consideration of FOSS. Nevertheless, the operating norm of ICT-related projects and their purchasing processes also show institutional inertia and lack of version control management of ICT changes. Institutional economic exchanges occur through imperfect markets but, however, are barely coordinated by Ministries or the Government. From this point, the concept is exactly what Pierre Bourdieu argued.

"The left hand of the state has the sense that the right hand no longer knows, or, worse, no longer really wants to know what the left hand does. In any case, it does not want to pay for it. One of the main reasons for all these people's despair is that the state has withdrawn, or is withdrawing" (cited in Droit & Ferenczi, 1992²²)

Regarding ICT and a national state, the evidence suggests that the concept goes beyond 'no longer knows' or 'really wants to know'. The concept is arguably more like 'Corruption in NPM'; indeed, it depends on how to define 'corruption'. According to Williams (1999²³), "corruption is complex and multifaceted and resists simple labelling. How corruption is defined depends on the context in which it is located; the perspectives of the definers and their purpose in defining it" (p.512). As a general term, McCormack (1997²⁴) identified corruption, on the part of a normal assignment of public officers, by reason of 'pecuniary' or 'status gains'. Corruption occurs 'behind the screen', and is not readily brought to light; in particular, 'petty corruption' at lower duties and 'grand corruption' at higher duties.

The latest reports shows that ICT contributes towards fighting corruption with NPM: (1) monitors public employees' corrupt behaviours and practises, (2) introduces a new solution to curb/mitigate corruption, (3) illustrates anti-corruption efforts with transparency of procurement systems, (4) improves the quality of public services, and (5) reduces the level of corruption (see

22 Droit R.P. and Ferenczi, T. (1992). The Left Hand and the Right Hand of the State, interviewed with Pierre Bourdieu, Retrieved 25/10/2013 from <http://www.variant.org.uk/32texts/bourdieu32.html>.

23 Williams, R. (1999). New Concept for Old? *Third World Quarterly*, 20 (3) June, 503-13

24 McCormack, R. (1997). International Corruption: A global concern. Paper presented to *the International Anti-corruption conference*, Peru, 1997.

Proskuryakova et al., 2011²⁵; Shim & Eom, 2009²⁶, etc.). However, ICT also creates uncertainties and incompleteness in accountability processes (managerial, political, financial and public accountabilities in NPM). Is the portfolio management of the ICT landscape clear? Is ICT strengthening governance with public or private sector interests, or both? Are ICT suppliers really positioning themselves inside and/or outside in NPM? Or more likely, are ICT suppliers within a fragmented network? Is there any clearly identified accountability? In this sense, ICT may have a positive and negative impact on socio-economic capital. So, many of these actions introduce not just technological changes, but changes of the operating culture of governing within a government.

The Government reports provide evidence that Ministries and the Government have favoured PCSS products and they are techno-politically biased towards PCSS in ICT projects, as argued later in the article. When the Government stated that there are coordination issues, the evidence suggests that many of these can be attributed to corruption. There is evidence to state that these coordination issues have been identified by different parts of state apparatus, highlighted as to be urgently rectified, yet the Government has not taken any initiative to address these issues by 2013. These issues continue deliberately, through covert lobbying²⁷, abusing the failings of an imperfect market only likely to become more clandestine and sophisticated in future due to mainly 'know-who' and 'trust' concepts. Nevertheless, in reality, it is extremely difficult to prove 'corruption' versus 'coordination', however, evidence of techno-politically protected failed ICT projects are too numerous to ignore.

The concept of 'corruption in NPM' may also be interlinked with the consideration of 'Governance Models' in identifying how the Government in Turkey has been acting in the digital era, whether it is 'Cooperative Governance' as declared by the Government since 2005 or other governance models (e.g. Anglo-Governance, Polycentric Governance etc.). Nonetheless, what is clear is that,

"Politically protected monopoly rents are at the heart of profitability in the most advanced sectors of the global neo-liberal economy. Profitability for everyone from Big Pharma and their proprietary drugs to Microsoft and its monopoly on Windows depends on gaining and maintaining monopoly control over intangible assets, which can be achieved only by political means" (Evans, 2008, p.278²⁸).

Michael Tiemann, who is the President of 'Open Source Initiative' and the Vice President of 'Open Source Affairs' in Red Hat in 2010, stated that although there is a strong growing global FOSS economy, "more than \$500 USD IT spend is wasted; 18% of all IT projects abandoned before production; 55% of all IT projects "challenged" (late, broken, or both)." "Proprietary software model destroyed 85% of the global innovation potential."²⁹ The current argument in the UK Parliament is under the title of 'tech-light budget'³⁰. Importantly, Savage (2010) earlier

25 Proskuryakova, L., Abdrakhmanova, G., and Pitlik, H. (2013). Public Sector E-Innovations: E-Government and Its Impact on Corruption, Basic Research Program, Working Papers, Series: Science, Technology, Innovation, *Higher School of Economics Research Paper*; No. WP BRP 04/STI/2013, Retrieved 25/10/2013 from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2206964.

26 Shim, D.C. and Eom, T.H. (2009). Anticorruption effects of information communication and technology (ICT) and social capital, *International Review of Administrative Sciences* 2009 75: 99.

27 It is more ambiguous, because Turkey has no clear lobbying regulation, and is defined as 'No Statutory Rules' by Chari, R., Hogan, J., Murphy, G. (2010) *Regulating Lobbying: a Global Comparison*. Manchester: *Manchester University Press*. See more, the lobbying global regulations from <http://regulatelobbying.com/index.html> and also, in more specific, it can be seen at the Lobbying Disclosure Act Database in the United States Senate from <http://soprweb.senate.gov/index.cfm?event=selectfields>, see registrant name as Google, Microsoft, and Apple etc. Turkey as many other leading & led nations, has no disclosure regulation as specified as in the USA.

28 Evans, P. (2008). Is an Alternative Globalization Possible? *Politics Society*; 36; 271,

29 Tiemann, C. (2010). Growing an Open Source Economy With Competence at the Centre, Open Source Initiative Vice President, Open Source Affairs, Red Hat Inc.

30 See, IT industry slams chancellor's "tech-light" Budget, Retrieved 25/10/2013 from <http://www.computerweekly.com/news/2240179870/IT-industry-slams-chancellors-tech-light-Budget>.

remarked in the independent that

“The total cost of Labour's 10 most notorious IT failures” (£26bn) “is equivalent to more than half of the budget for Britain's schools last year. Parliament's spending watchdog has described the projects as “fundamentally flawed” and blamed ministers for “stupendous incompetence” in managing them.” ... IT experts blamed ministers for being too easily wooed by suppliers. Insiders said a lack of expertise within the Government about the technology industry meant they were willing to believe claims made by major IT firms before contracts were awarded.”³¹

This situation was replicated in Turkey, e.g. the Pardus project (abandoned by TUBITAK- over 17.5 Million TL), Eskisehir Software Base Young Entrepreneur Training Centre (1 Million TL lost³²), ILSIS system delay, etc. An example of a failed project is the ‘Institutional Source Planning Project’ in the scope of the ‘Digital Recording Archive and Analysis System (SKAAS) Project’. It aimed to gather all Radio and Television High Council databases in a particular system and to make a secure digital document circulation system. The responsibility was given to the General Directorate of State Supply Office (DMO) in 2007. DMO designed the tender within 36 weeks. Due to project incompleteness, the tender supplier incumbent was given a project extension of 15 weeks. In the project, there were two main components: (1) hardware and license and (2) software. Hardware and license were provided to the DMO HQ. The software system analysis and design reports were delivered, but multiple other deliverables were not completed / provided. Although the company requested another extension, DMO decided to cancel the project. The Supervisory Board launched an investigation, and found that the project was ‘improvidently’ coordinated³³. In other words, 4.3 Million TL lost. In ICT projects,

“The governance network and policy network analysis schools both share the view that ... policymaking is best seen as an interactive process in which different actors exchange resources in a series of trust-based relationships in order to achieve their goals.” (Daugbjerg, 2011, p.4³⁴)

An interactive process can be argued from Cowan & Gunby (1996³⁵) perspectives. They proposed three main forces: ‘technology externalities’ (resulting in excess inertia - more agents use it), ‘learning curve’ (‘learning by using’ and ‘learning by doing’ as a snow-balling effect) and ‘uncertainty reduction’ (perceived benefits/risks of switching to a new technology); these all resulted in positive feedback, which all share three features: ‘path dependence’, ‘inflexibility’ and ‘potential regret’.

In Turkey there is both clear technological path dependency and institutional inertia, but these arguments make us think institutionally as to how the policy influences dependencies and inertia. North (1990³⁶) stated that “institutions are the rules of the game in a society, or more formally, are the humanly devised constraints that shape human interaction. In consequence, they structure incentives in human exchange, whether political, social, or economic”; it reduces “uncertainty by

31 Savage, M. (2010). Labour's computer blunders cost £26bn, 2010, Retrieved 25/10/2013 from

<http://www.independent.co.uk/news/uk/politics/labours-computer-blunders-cost-16326bn-1871967.html>.

32 Prime Ministry/State Planning Organisations (SPO), Turkish Grand National Assembly (08th October 2008, No.7/10155), Retrieved 25/10/2013 from http://www.tbmm.gov.tr/develop/owa/yazili_sozlu_soru_gd.onerge_bilgileri?kanunlar_sira_no=77722

33 Ministry of State, Turkish Grand National Assembly (23rd March 2011, No. 7/18884), Retrieved 25/10/2013 from http://www.tbmm.gov.tr/develop/owa/yazili_sozlu_soru_gd.onerge_bilgileri?kanunlar_sira_no=89789

34 Daugbjerg, C. (2011). Governance Theory And The Question of Power: Lesson Drawing from The Governance Network Analysis Schools, *Paper to the 61st Political Studies Association Annual Conference*, 19-21 April 2011, London. Panel: Governance Networks and Policy Outcomes.

35 Cowan, R. and Gunby, P. (1996). Sprayed to Death: Path Dependence, Lock-In and Pest. Control Strategies. *The Economic Journal* 5 (106): 521-42.

36 North, D.C. (1990). *Institutional Change, and Economic Performance*, Cambridge: Cambridge University Press.

providing a structure to everyday life” (p.3). So "institutions define and limit the set of choices of individuals” (p.4). There are three main concepts: ‘the rules of the game’, ‘humanly devised constraints’ and ‘shape human interaction’, and all these result in individuals and institutions shaping each other. There are ‘formal written rules’ (explicit enforcements from state, e.g. political, judiciary and economical rules and contracts, ‘*often devised with private (rather than social) benefits in mind, so the actual structure of rules will reflect the relative bargaining power of different parties*’) (p.47) and ‘unwritten codes of conduct’ (implicit interpretations of actors from formal rules because there is no formal enforcement by state as ‘*transmitted information and are a part of the heritage*’ that is called ‘*culture*’ or ‘*commitment*’) (p.37). North further argued that “we need to know much more about” (informal rules) and “how they interact with formal rules” (p.140) to understand the shift from governing behaviour rules to actual acting behaviours. Greif (2006³⁷) stated that “an institution is a system of rules, beliefs, norms and organizations that together generate a regularity of (social) behaviour” (p.30). According to Greif, these elements (rules, beliefs, norms, organisations and regularities) are ‘equally ambiguous concepts’ because there might be formal rules which are not as effective as informal rules, or vice versa. The study argues that formal and informal rules are not directly distinguishable in relation to their powers in ICT projects, because formal rules are interpreted from actors’ subjective perceptions and, thus, informal rules simply exist through actors understanding. Informal rules (culture) is the binder for the practices with obeying/ignoring formal rules that causes us to think that there is beyond ‘no longer knows’ or ‘really wants to know’ concepts, but arguably ‘corruption in NPM’.

In Turkey, Justice and Development Party (AKP) has been the compelling Government since 2002, so all these reports represent AKP’s political and social perspective regarding FOSS. Contrary to popular opinion, in a thoroughly pliable media, the parliamentary reports demonstrate that not all Ministries promote FOSS and Linux OSs; some of them clearly criticise FOSS and discount FOSS philosophies in terms of economical perspectives. Although there is no particular coherence in Ministries’ behaviours regarding ICT when a culmination of these reports is taken into account, the Government has taken pragmatic decision strategies within a global political economy without examining ICT changes and its intellectual history, and have carelessly neglected the importance of FOSS, e.g. in 2008, the Ministry of Environment and Forestry stated,

[Applications in Linux Ecosystem are still in the development process. *Eliciting so much effort and then granting all these as a public good-GPL are still in continual dispute*] (p.83³⁸)

A cynical response to the Ministry would be that FOSS developers look like penguins; they are pretty wealthy, just see Richard Stallman! It is necessary for successful computer scientists to start by being a FOSS developer.

Notably, in response to parliamentary written questions, some Ministries have preferred to provide misinformation and disinformation to the parliament instead of giving accurate and unbiased information and so accepting path dependencies and vendor lock-in issues, particularly Microsoft and Oracle products, e.g. The Ministry of National Education (MoNE) impenetrably disavowed the lock-in issue to the Internet Explorer in MEBBIS system, which is an educational portal for Turkey,³⁹ and claimed that MEBBIS was designed based on open source software and Pardus-Linux OS is not compatible with this kind of infrastructure.

For Ministries, what are the consequences or sanctions of misinforming and disinforming the

37 Greif, A. (2006). *Institutions and the Path to the Modern Economy*, Cambridge: Cambridge University Press.

38 Ministry of Environment and Forestry. (2008) Turkish Grand National Assembly; 2008, March 13, No: 7/0727, Retrieved 25/10/2013 from <http://www.tbmm.gov.tr/d23/7/7-1727c.pdf>

39 Ministry of National Education, Turkish Grand National Assembly (No. 7/1727, 24th January 2008), Retrieved 25/10/2013 from http://www.tbmm.gov.tr/develop/owa/yazili_sozlu_soru_gd.onerge_bilgileri?kanunlar_sira_no=60399.

parliament? Unfortunately, the ‘Constitutional Law’ in Turkey does not contain or clarify any information on this issue. Nevertheless, in accordance with the Law No.99, ‘the Internal Regulation of Grand National Assembly of Turkey (TBMM)’, a parliamentary written question is sent to the Prime Minister or related Ministry, requiring an answer within fifteen days. If a response is considered inadequate, MPs have a right to speak in parliament, without exceeding five minutes, to challenge the response. The proficiency of the speaker determines the exposure of the responses accuracy and robustness; this is a common method of objection in Turkey, but not always effective. Consequently, there is no requirement to take political responsibility because there is no penal or legal sanctions. The government, ideally, relies on the independent separation of legislature, judiciary and executive powers, however, the concept of parliamentary written questions is a political pathing (path-control) and its sanction is only political. In an ideal scenario, the Government and Ministries lose confidence in the parliament on this question. If 66% of parliament feels further investigation into the question is required, then an interpellation for the relevant Ministry or the Government takes place; this has no precedent in the concept of ICT. In regards to software, the disinformation / misinformation provided by Ministries have been perceived as either inconsequential or too difficult to pursue. This difficulty to account further supports the potential opportunity and breadth for ‘corruption in NPM’ in the digital era.

All responses to parliamentary written questions are significantly detailed; therefore, this study has chronologically prioritised both the salient points that Ministries raised and where they divert from No.7 Action Plan of 2005. In the early stages, in 2008, Ministries stated that OS is a specialisation study because of its complexity, but the same complex technical service and support has not been reflected in software developed by volunteers. 800,000 companies across the world and 7,000 companies in Turkey provide Microsoft products support. In each city and in each district, there is one Microsoft business partner who can provide technical support. In comparison, ‘Linux World’ support is based on ‘volunteers’ alone; though this perception is misleading as it would suggest by ‘volunteers’ that the FOSS ecosystem support strength is underestimated. By many, it is!

As SPO earlier concluded that

[Making regulation for the use of Linux OSs (particularly Pardus) as imperative in all public institutions is not considered in a short period because it is evaluated as nonenforceable]. (2008, p.4⁴⁰)

Making regulation was considered unenforceable. However, after four years, the concept has shifted to a different direction; stakeholders have realised that the nature of mandatory policy restricts effective development, whilst Ministries have met with Linux. Within initial interactions, Ministries highlighted various technical issues and criticisms with the ‘Linux Ecosystem’, without evaluating/criticising their institutional structures in relation to ICT. The Ministries’ criticisms are not logical, truthful and professional, e.g. Linux OSs do not support software used in institutions, but institutions can ensure that software is written OS-Agnostically (‘write once/run anywhere’).

To explain in simple terms, the crucial mistake is that the Ministries expected Linux to be a clone/mirror of Microsoft Windows; however, Linux is Linux and should not be perceived or evaluated in that way. Additionally, the overall attitude of Ministries upon ICT is;

“If your attitude to IT is ‘Who do I sue when things go wrong?’ the document concludes, then perhaps OSS is not for you” (IDA, 2003⁴¹)

40 Prime Ministry/State Planning Organisations (SPO), Turkish Grand National Assembly (No.7/2983, 9th April 2008), Retrieved 25/10/2013 from http://www.tbmm.gov.tr/develop/owa/yazili_sozlu_soru_gd.onerge_bilgileri?kanunlar_sira_no=63688

41 International Development Association (IDA) (2003). Open Source Migration Guidelines, Retrieved 25/10/2013 from <http://ec.europa.eu/idabc/en/document/1921.html>.

In 2012, the Ministry of European Union attempted refuting the argument of FOSS and PCSS distinction, through publicly commenting on (1) the essential technological knowledge and skill in public institutions and (2) positive feedback of being kept in institutional inertia (i.e. uninterrupted service provision). These two realities might be casuistry logical but “a decision can be rational without being right and right without being rational” (Peterson, 2009, p.4⁴²). However, the Ministry totally dismissed the case and accused MPs, who respectfully submitted the parliamentary written questions, of being too naive to understand ICT reality and politically and apathetically were ignoring the Government efforts. The Ministry stated that end-users possess only PCSS platforms knowledge and skill, in particular Microsoft Oss, that restrict seeking solutions outside of these available ICT parameters within public institutions. When the concepts of (1) end-users’ reluctance to change and so their rejection due to their vested skill, and (2) their average age are considered, initially end-users should be persuaded to use Linux OSs at work as additional in-service training. The Ministry believes ‘voluntary migration processes’ should be utilised to obtain user buy-in. The Ministries’ generic argument shows a fear of migrating to Linux OSs and, as a result, being suddenly ignorant of ICT. Their arguments neglect to account for consideration of ‘knowledge transferring effect’, ‘de-learning effect’, etc. The literature of technology in society argues that the key concept is how to be a ‘Digital Naive’ from a ‘Digital Alien’, not to be a ‘Windows Naive’. Admittedly, the concept of ‘digital literacy’ entails, as its very name implies, ‘digital’, so the concept is to be possessed of ‘a lifelong learning of technology’, not just to be knowledgeable of ‘skills of particular ICT applications’. The key issue is ‘human resources-specific management’ within national and international lobbying activities rather than technology-specific visibilities.

In this sense, the Ministries’ ‘voluntary migration’ approach of needing buy-in for FOSS acceptance is misleading because ‘modern’ history shows that when governments put a law into force, society obeys, e.g. in the scope of the E-TTP project, nearly all public institutional services have been digitalised but none on a voluntary basis. Is MEBBIS voluntary for teachers and students? No! Using Standard Turkish F-Keyboard is obligatory in the MoNE since 2001 (No.1817). Is F-keyboard voluntary-based? No. So, either:

- (a) The Government attempted to make initiatives imperative, rather than voluntary, if they thought they could get away with it if it was deemed an important priority / internationally accepted, or
- (b) The Government attempted to normalise their contributions towards ICT policy deployment failure, or
- (c) Both

The evidence shows that it is both, as imperative ICT regulations and judicial legitimacy in public institutions are also neglected and ironically suffering (they are aware of this). Regulations are not followed by public institutions, such as interoperability framework guides, F-keyboard regulation, etc. Obviously, some formal rules have become ineffective due to neglecting the influence of informal rules and other perceivable and unperceivable effects, such as Network Effect (applications barrier to entry), Indirect Exclusionary Effect (actually a design choice), Fashion affect of ‘new’ technology, etc.

From the arguments of voluntary migration and ineffective ICT formal rules, it is clear that Ministries have provided their disingenuous support for FOSS with an emblematic amount of (failed) FOSS investment. What makes this interesting is that some Ministries jejunely stated that the pool of developed applications for Linux ecosystem are not broad enough in comparison with the current system they use, and Linux ecosystem is not widespread globally. These are the main reasons given for not using Linux OSs. If Linux OSs are to become a common OS and developed applications are to become compatible with Linux OSs, there is no obstacle to migrating to Linux

42 Peterson, M. (2009). *An Introduction to Decision Theory*, Cambridge University Press

OSs. The discourse of Ministries emphasized one reality (uncommon OSs) in the Linux ecosystem; however, they have deliberately neglected the main responsibility of the Government and their contributions for this outcome; in particular, their tender specifications reports, ICT policies and strategies, etc. Indications suggest the efforts to normalise (diminish) their contribution to this failure. In this sense, Ministries have pursued Linux to be Windows and, thus, are inadvertently a Microsoft spokesman, though the concept is much more complicated than that, as argued in the final section.

Besides all these imperfections, most Ministries stated that 'the best', 'the most reliable' products with 'the best price' are chosen for their ICT projects. The Ministries feel an obligation to provide 'uninterrupted service to 74 million citizens' and give this priority as their motivation, but their decision making is overly risk averse. This perspective is controversially arguable through technological comparative studies between FOSS and PCSS; and Linux OSs and Windows OSs. We can simply ask how Ministries, based on Microsoft platforms, provide their services successfully; e.g. MEBBIS crashed, so could not be assigned to teachers (2012); e-school totally crashed; teachers were not able to provide students grades, school reports were at risk, unable to input school data (2010) etc. Thus, purchasing products and taking technical services and support through the best, the most reliable and the best price (for them) are clearly not a guarantee for providing uninterrupted services for Ministries. Fundamentally, ICT culture should be,

"Today's technological transformations hinge on each country's ability to unleash the creativity of its people, enabling them to understand and master technology, to INNOVATE and to ADAPT technology to their own needs and opportunities" (UNDP Human Development Report, 2001, p.79⁴³)

The Future- a Procrustean ICT Bed Strategy

The above imperfections, discussed in the '25th Meeting of the High Council of Science and Technology', held at TUBITAK on 15th January 2013, with the purpose of evaluating emerging developments and identifying a new Turkey roadmap, included the following concerns;

[to complete 'Ex-Ante Impact Assessment of 'Horizon 2020: the EU Framework Programme for Research and Innovation' for Turkey' (which is an assessment forecast to identify actual and potential 'scientific', 'economic/industrial' and 'societal' impacts of an intervention in the processes of planning, designing and approving interventions through considering economic, social and environmental actors and factors);

to establish new 'Working Groups' that facilitate the coordination within TUBITAK to identify *National ICT System and Performance*;

to establish *E-transformation Organisation Management Models* for *coordination issues within/between institutions* (an agent from each institution for a technical consultancy unit);

to establish *the Procurement Service Company Certification System* for the E-TTP (in particular, for software suppliers, (so crucial for FOSS) but there was no information, no defined benchmarking and no performance measurement. This looks like a blueprint program but it is unclear at this point);

43 United Nations. (2001). *Human Development Report*, Retrieved 23/04/2011 from <http://hdr.undp.org/en/reports/global/hdr2001/chapters/>.

to establish *Package Software Solutions Supply Volume Method* required by public institutions (*creating package software inventory*, and for bulk purchases as *technical, legal, administrative and application model developments*. Most institutions have been using the same software products, and so it is necessary to purchase them in bulk under one roof (owner) for retrenchment and avoiding wastage, in particular package software (office, database, etc.), common systems (electronic data processing systems, in-service education, document management systems, and geographic information systems for local services);

(This initiative is the same as in the UK, (see, the report of ICT Strategy by Cabinet Office, p.13-Action 2⁴⁴). For the UK, Action 4 is to establish an open source implementation group. For Turkey, there is no such thing in existence or planned, just FOSS recommendations.)

to start feasibility study for *National Data Centre Structure* (as in South Korea) (as argued above, it previously failed - SKAAS project)]

The ICT Strategies in Turkey and in the UK have the purpose of increasing accountability in public and private sectors and improving the participation of the private sector, within public sectors, through encouraging the SMEs. In an expensive and fragmented ICT infrastructure (generally in the duplicated solutions that impede reuse of services and sharing), the declaration is that 'common and secure application solutions, strategies and policies' will be taken through (again) 'common technology standards and components', as the reports highlighted that the concept of 'commonality' will be used in Turkey and in the UK. However, there is no clear statement to explain what is really meant by the statement of 'commonality of standards and components'; is it a dominant orientation of ICT governance? Is that horizontally coordinated and balanced between FOSS and PCSS by multi-stakeholders agreements? Is the paradigm still in centralist stagnation by vertical/hierarchical decision imperfection? Where is 'policy interaction-clustering' to define the same target from different actors' interests and values? Where is (inter/intra) industry-academy cooperation as strategic alliances/counterparts? Is there a social contract or a systematically changed strategy? Or are there 'Black Holes'? Nonetheless, it is clear that the ICT Strategy Report is a kind of declaration of intended future steps; the actual practices depend on the strength of non-uniformity.

Regarding software, the declared strategy, in particular 'commonality', actually is 'One-Size-Fits-All-Software' as a Procrustean bed. Nevertheless, a one-size-fits-all software system cannot be adapted to ICT nature, even within a short period of time and is not the most productive and persuasive solution in ICT. The various needs of a nation state, current and future, cannot be adjusted to one-size-fits-all; ICT is naturally borderless and unmanageable; different software may work better in different settings, and there are always vendor lock-in issues, etc. Importantly, FOSS cannot (might not, shall not, etc., depending on contents) be a tailored one-size-fits-all system. Consequently, the Government in Turkey has already put FOSS alternatives out of Turkey's future reach, lost any ability to gain FOSS opportunities, and critically and significantly narrowed the potential for Turkey. So what might be the actual reasoning for this outcome?

Due to emerging technologies, throughout history, communication channels and public and private sector services have all been digitalised. Nowadays, all performed services, in any institution, totally depend on ICT. The infrastructure of ICT in institutions is formed by various components, which are integrated to be compatibly working together. Software, in particular OSs, is the fundamental backbone in these components, and it is crucial. For this reason, available personal computers used in institutions have become no longer a stand-alone system. Institutional

44 Cabinet Office (2010). UK government ICT Strategy resources, Retrieved 25/10/2013 from <https://www.gov.uk/government/publications/uk-government-ict-strategy-resources>.

requirements (ICT security, network applications, information sharing and communication platforms, software source etc..) run compatibly with each other via Oss, and it is thereby essential to achieve integration among complex software structures (the average is ten software plus in a small institution). As a result of these complexities and vulnerabilities, the Government is willing to see a perfect fit through perceiving the stand-alone system as a Procrustean ICT Bed. Collaboration efforts between knowledge, technology and infrastructure, within human interactions, are complementary resources; however, is there a magic solution?

Most Ministries argued that, in 2012, one particular OS, which is capable of elementary working, does not fundamentally suffice for each institutional ICT infrastructure. To perform institutional services, without interruptions and free from problems, mutual dependencies (hardware & software) are vital. Therefore, the Government wrongly perceived that it is essential to have all these technologies in a common language, and so the same technology platform gave an assurance of cohesiveness and completeness. In ICT infrastructure, changing the OS is the real threat for creating uncertainty in cohesiveness and completeness of all other components, so it is essential to plan all infrastructures at the beginning in terms of political, technical and institutional (including cost) dependencies. The difficulty/challenge is obvious, in particular, in large and crucial institutional networks. The Ministries wrongly believe that FOSS solutions will generate higher resource draining queries (time and cost consuming) than the currently available system and, in the migration process, the required efforts will result in disrupted and interrupted institutional routines and schemes; therefore, the risk cannot be taken by the Government. These are the reasons Ministries have given. The concept of managing ICT within institutions is challenging; however, can common language / the same technology platforms always promise ensuring cohesiveness and completeness in institutions? Or can commonality (without interoperability) only promise ensuing path dependency and lock-in? Nevertheless, technology emerges from various disciplines for various purposes, which are not inevitably in harmony. That concept is neglected from the reductionist approach taken by the Government.

The latest change is not only the One-Size-Fits-All-Software strategy. TUBITAK just declared that Turkey has developed a 'Real-Time Operating System' (RTOS) based on FOSS, which is available only in eleven advanced nations. The developed system is to complete unique and critical technology used for the national defence system. However, it is unclear whether RTOS is Pardus Fraud-Debian or not. The aim is to end external dependence, to be trusted within national secret projects and to create totally compatible system with other OSs⁴⁵. Meanwhile, Turkey is also a part of 'International Symposium on Foundation of Open Source Intelligence and Security Informatics', which is to "provide a unique international forum for researchers, professionals, and industrial practitioners to socialize, seek collaboration, share and exchange their data, knowledge, and expertise."⁴⁶

In the light of this information, it is clear that when the objective is perceived as an urgent issue for national defence & security, FOSS is rigorously pursued as a real alternative; however, when the concept is to control/intervene in Microsoft dominant markets, the Government has not taken the liability to take the strategic initiative. What the Government in Turkey missed/neglected is that the digital security (cyber war) is not solely the concern of the government. There are several government and parliamentary reports directing how governments and ministries act in digital security and cyber wars; for example, how Ministry of National Defence, UYAP, MEBBIS, ILSIS were hacked. The history of cyber wars (since the first precedent between the USA and Iran) is crucially explained in the parliament as well⁴⁷. Additionally, the 'Phishing Activity Trends Report

45 Scientific and Technological Research Council of Turkey (TUBITAK). TÜBİTAK'tan Savunma Sanayi'nde 'Yerli' İşletim Sistemi Devrimi, Retrieved 25/10/2013 from <http://www.tubitak.gov.tr/tr/haber/tubitaktan-savunma-sanayinde-yerli-isletim-sistemi-devrimi-0>

46 Scientific and Technological Research Council of Turkey (TUBITAK). Welcome to FOSINT-SI 201, Retrieved 25/10/2013 from <http://uekae.tubitak.gov.tr/FOSINT-SI2012/>

47 See, the report of 'Cyber Security and Cyber Wars' (Siber Güvenlik ve Siber Savaşlar), presented in the Grand

2nd Quarter 2012' by APWG⁴⁸, stated that within the list of malware infected countries, Turkey is the sixth country, after South Korea, China and Taiwan, where 39,29% of computers have already suffered a malware infection. Interestingly, the report stated that countries hosting the phishing sites list started with the USA at 58.45% ... and Turkey at 1.12% in April. These figures are perpetually changing, so they should be followed. The evidence indicates that the concern is not only the national-military security anymore, at least not in the future.

“At the heart of the debate there have been attempts to deepen and widen the concept of security from the level of the state to societies and individuals, and from military to non-military issues.”(Krahmann, 2003, p.9⁴⁹)

These changes are understandable. The Government is willing to start research programs and strategies in various disciplines to raise Turkey to 'best practice' levels within its national potential and to meet national values and interests. However, is ICT effectively manageable in a national psyche? The literature indicates that it is. It is clear that these changes still cannot promise a precise 'National ICT Policy and Strategy' because FOSS is not carefully considered. Crucially, in Turkey, there is no compelling argument to attempt defining techno-political strategies on the argument of 'knowledge-based economy'. Over a decade ago, OECD (1996⁵⁰) highlighted four knowledge(s) for current and future concepts: know-what ('facts'), know-why ('scientific knowledge of the principles and laws of natures'), know-how ('skills or the capability to do something') and know-who ('information about who knows what and who knows how to do', is the crucial concept). The question should be whether or not it is possible to conceptualise 'Commoditized National ICT Policy and Strategy' within global-technological structures and orders, without defining and addressing these four knowledge(s), and moving to the next steps. Nevertheless, identifying these four knowledge(s) is challenging in a digital era because software is digital goods which are 'bitstrings, sequences of 0s and 1s,' differentiated from other goods with five features: 'nonrival', 'infinitely expansible', 'discrete', 'aspatial' and 'recombinant' (Quah, 2002⁵¹). There is no hallmark in ICT and societies. Importantly, there are know-that concepts, famously stated by Rumsfeld,

“There are no "knowns." There are things we know that we know. There are known unknowns. That is to say there are things that we now know we don't know. But there are also unknown unknowns. There are things we do not know we don't know.”

In the long run, endurance and viability of 'National ICT Policy and Strategy' must be identified with the concepts of effectiveness, fairness and public accountability by techno-political interferences from the Government. So the question is why 'the best and the brightest policy making club' (think tank) does not interiorise/incorporate FOSS, and incorrectly forces one-size-fits-all systems with PCSS? It is because of (a) the incompleteness of ICT change, (b) path dependence, (c) institutional inertia, and arguably (d) corruption in NPM. As discussed above, public institutions have allowed themselves to become 'a lame duck' due to non-existent political interference. Perhaps that is the reason why there is no Government-shared compelling attention and argument to the future concepts; cloud computing & political adequacy in ICT.

National Assembly of Turkey, on March 2012, Retrieved 25/10/2013 from

http://www.tbmm.gov.tr/arastirma_komisyonlari/bilisim_internet/toplant_takvimi.htm.

48 APWG (2012). Phishing Activity Trends Report, 2nd Quarter 2012; Unifying the Global Response To Cybercrime.

49 Krahmann, E. (2003). Conceptualizing Security Governance Cooperation and Conflict: *Journal of the Nordic International Studies Association*, Vol. 38(1): 5–26, Retrieved 25/10/2013 from <http://dcafsp.tripod.com/readings/Security%20Governance.pdf>.

50 Organisation for Economic Co-operation and Development (OECD). (1996). *The Knowledge-Based Economy*, Paris; 1996, Retrieved 25/10/2013 from www.oecd.org/science/scienceandtechnologypolicy/1913021.pdf.

51 Quah, D. (2002). *Digital Goods and New Economy*, LSE Economics Department, Retrieved 25/10/2013 from <http://econ.lse.ac.uk/staff/dquah/p/dp-0212hbne.pdf>.

The Power of a National State, No Broken Promise

As argued above, there are considered to be three legal and technical criteria, five legislative and seven administrative obstacles that make FOSS usage impracticable in public institutions. Importantly, there is no consideration for the hearing of FOSS and PCSS crucial distinctions in LAW. The Law is 'the weakest link'. So relevant questions are: Is there any tactical momentum in the law, regarding software precedents, with the exception of taxation and public procurement? Or is it more likely just a techno-privately oriented inclination in 'impassably heritaged' / centralist public institutions within the preference of PCSS friendly market sophistications for the purpose of squeezing self-motivate and self-interest markets (profit & survival)?

In ICT, technical features and components are crucial but not the only factors in innovation and implementation of a particular technology in a particular national state. There are also many other social, political, economical and cultural factors, but it does not mean that all of these factors are equally effective. As Edwards & Wajcman (2005⁵²) strongly argued, the statement of '*socially shaped*' technology does '*not*' mean to '*say*' that characteristics and features of '*social definition*' are '*equally effective*'. The key points are '*politics*' and '*negotiation*' which define/confirm proximity and orientation of technological winning merits (originality, impact, practicality, measurability and applicability) in a particular society.

Institutional economics is inevitably political and it's focus mainly a junction between economy and law. For the purpose of this, a central national state forms and forces its own legalities to determine itself in the game of economic performances and behaviours to be the ruler of 'the game' in its 'society' (North, 1990⁵³). We are in a world of 'knowledge-based economy' which is significantly different than 'traditional-based economy' (see, David Skyrme Associates, perhaps 'creative-based economy' in the future). Nevertheless, for ICT, the Government in Turkey has an embarrassing 'de facto Policy' (also called 'Informal Policy'). This de facto policy is seen as best option/practice recommendations, which are driven by a dominant position within publicly accepted and/or sectorally forced markets. Does de facto ICT policy promise to increase marketplace values (efficiency, interoperability and innovation)? That is an internationally controversial question.

It is clear that leading nations/governments cannot afford to not be a key player in the future, and it is obvious that the future is shaped by global corporations (e.g. Microsoft, Google, Apple, Samsung etc.). So, governments must have interactions/connections with global giant corporations. However, the crucial concept should be to follow or (ideally) to lead technological changes and innovations, not to purely answer and meet the current needs and requirements of a national state through dominant ICT suppliers (currently Microsoft in Turkey). The Government should perceive a birds-eye view of Turkey's capability instead of being dazzled by distinguished-looking giant corporations' offers/freebies. The Turkey-ICT RTD Technological Audit Report (2011⁵⁴) highlighted that "Turkey, in order not to lose ground, has to perform key efforts for successfully sustaining and improving her ground" (p.6) and "Turkey is performing under its potential" (p.8). Thus, there is a poor strategic plan in ICT. Nevertheless, it is still difficult to argue or conclude whether these complex interactions/connections are monopolistic or benign, but they are definitely strategic and momentous influencers.

The concept of 'Expendable 'Written' National ICT Policy' can be replicated in other leading and led national states because most nations have managed to move synchronously in ICT worldwide.

52 Edwards, P. and Wajcman, J. (2005). *The Politics of Working Life*, Oxford: Oxford University Press.

53 North, D.C. (1990). *Institutional Change, and Economic Performance*, Cambridge: Cambridge University Press

54 Pascall, S. (2001). *Turkey- ICT RTD Technological Audit*, European Commission, Information Society and Media, METU-TEKPOL, March, 2011, Retrieved 25/10/2013 from <http://stps.metu.edu.tr/sites/stps.metu.edu.tr/files/task9.pdf>.

Globally, some leading states have already taken initiatives to take over the PCSS realm in favour of FOSS (see, Government Open Source Policies Annual Report by the CSIS, 2010⁵⁵). However, some initiatives are arguably just a newspeak declaration. In reality and practice, they are not real (such as Turkey), e.g. currently the UK ICT policy (see, the report of an Open Source Strategy for Government by Cabinet Office in 2010⁵⁶) is not only in favour of FOSS but also structures public institutions to take FOSS into consideration in the first instance. Such a policy appears to be both manipulating and controlling public software markets, instead of just monitoring them. Despite this declaration, there are some counter arguments between the UK ICT policy and the actual practices. For instance, Michael Gove, the Secretary of State for Education in England, sincerely and continually states their FOSS support in the media; however, the Department for Education have coincidentally just had a new agreement with the Microsoft Corporation in 2012.

The study already diagnosed the conditions (omission/missing functionalities) behind the problem, but does not argue the best way to identify pervasive, trustworthy, flexible and transparent ICT policies in which FOSS and PCSS families are used. During the dynamic nature of ICT project management, consideration of evolving the unique characteristics of FOSS and PCSS should be made for the purpose of balancing FOSS and PCSS or, in the best scenario, taking over the PCSS realm in favour of FOSS. Valuable lessons might be highlighted from the global best practices. There is no universal truth, perception or advice for identifying the optimal level of ICT Policy in a national state, without taking into account each country's diverse realities. In this sense, all stakeholders' opinions, from national and international levels, within a socio-economic-political participatory network (interest groups' values and impacts, no forces from pressure group for synergy stemming building), should be all interlinked by a holistic vision to define a written ICT policy. So this is another research question that needs to be addressed carefully. Admittedly, societies do not change at the same speed as policy changes, and policy making does not always wait for the society to catch up. Thus, it is necessary to establish a real ICT policy, rather than declaring a 'speculative' or 'podium' policy. Is it possible?

According to Jessop (2002⁵⁷), in 'governance, governance failure and meta-governance', there are four global dilemmas: 'Cooperation vs Competition', 'Openness vs Closure', 'Governability vs Flexibility' and 'Accountability vs Efficiency'. These dilemmas should be addressed globally. These conventional antagonisms (dilemmas) add another dimension to national ICT considerations. Even the concept of ICT 'Policy' is in a national state milieu, as the study argues, and the dimension is also multilevel and complex, and the powers are not clear or positioned. There are various actors (sphinx), who have influence on a national state, such as 'Special 301 Report', 'Digital Rights Management', 'Copy-Right', etc. For instance, the US Government publishes "Special 301 Report", which indicates countries where the patent licence rights are inadequate. The report is intended to put pressure on countries that made the list and leads to applying trade sanctions against these countries. Generally, China, Canada, Italy and Russia are accused of failing to take actions against internet piracy and counterfeit goods. However, the Special 301 Report is very controversial as regards to FOSS. There are many reports and articles, such as "Copyright lobby (IIPA) demands that USTR punish governments who 'consider' mandating open source software" (KEI, 2010⁵⁸), "Special 301 Report versus Free Software: Strong-arm tactics are the only way proprietary software can compete", "When using open source makes you an enemy of the state," and so on.

55 Center for Strategic & International Studies (CSIS) (2010). The Government Open Source Policies Annual Report, Retrieved 25/10/2013 from <http://csis.org/publication/government-open-source-policies>.

56 Cabinet Office (2010). UK government ICT Strategy resources, Retrieved 25/10/2013 from <https://www.gov.uk/government/publications/uk-government-ict-strategy-resources>.

57 Jessop, B. (2002), 'Governance and Metagovernance: On Reflexivity, Requisite Variety, and Requisite Irony', *the Department of Sociology, Lancaster University*.

58 Knowledge Ecology International (KEI) (2010). Copyright lobby (IIPA) demands that USTR punish governments who 'consider' mandating open source software.

Public and private services and market considerations and criteria influence understanding of a national policy at national and international levels, within fragmented networks, by many actors and factors. In this sense, the questions might be:

- (a) How will the oligopoly of large suppliers act in the nationalised ICT policy? (b) Will they continue to monopolise their ICT provision? (c) How will leading national states (the USA, the UK, etc.) act in these complex relations?

These answers are not clear, but what is clear is that there are deliberate uncertainties created by 'imperfect markets' for economic gain. What is forgotten is that 'invention', 'innovation' and 'development' address different meanings. ICT is not a new phenomenon throughout modern history, but policy should be urgently rectified and differently addressed. That is the real challenge. It should cover all stakeholder perspectives and interests to make sure increasing marketplace values (efficiency, interoperability and innovation) are met. However, democratic powers in a national state have already shifted through using digital channels within participations of Public-Private-Partnerships, to an ambiguous space in which government bodies may not be welcome (unpowerful and unimportant). E.g. why are the Internet Treaty and Regulation and International Telecommunication Union (ITU), or PIPA, SOPA, ACTA and CISPA related arguments currently priority global concerns? If national states are welcome in a global network, it might be asked why there is still no international consensus about 'Interoperability' and, in particular, 'Software Interoperability Standards'. No agreement has been reached in a decade and it remains to be resolved in the future.

The above question leads us directly to 'globalisation'. It is crucial to underline how an understanding of globalisation can reveal an understanding of an individual nation state within the era of global change, especially the relationship between the nation state's power and its decision-making process. According to most globalisation theorists in the last few decades, an individual nation state has faced devolution of its power, its dependability and even its self-legitimation. Although a variety of perceptions exist among theorists to explain this devolution, what they have in common are ongoing technological changes and their unprecedented influence upon the individual state and its society. Nowadays, the national state is seen as a '*borderless state*' by Ohmae (1995), a '*powerless state*' by Castells (1997), a '*hollow state*' by Milward and Provan (2000) or, in a more moderate perspective, a partial state by Olssen et al. (2004) as,

"The nation-state is "too small" to be entirely effective and "too large" to be entirely irrelevant" (ibid, p.4⁵⁹).

It is clear that, for the national state, globalisation does not mean abandoning of the monopolisation power of the state. However, as the study argues that internal and external legitimacies in the state (it is also true on international level) are forced, pushed, lead or simply result in leaving and abandoning monopolisation power of the national state to international corporations regarding ICT, as

"The state is no longer the only regulator of market; we now have multiple forms of private regulation, and self-regulation. On the other hand, markets can no longer be (if they ever could) assumed to be either nationally based or nationally governed" (Dale & Robertson, 2009, p.119⁶⁰).

Although the nation state is not currently seen as the only decision maker, it must take

59 Olssen, M., Codd, J., and O'Neill, A., (2004). *Education Policy: Globalization, Citizenship and Democracy*. Thousand Oaks CA: Sage.

60 Dale, R. and Robertson, S. L. (2009). Capitalism, modernity and the future of education the new social contract, in T. Popkewitz and F. Rizvi (eds). *Globalization and the Study of Education*, Chicago, National Society for the Study of Education Yearbook, Volume 108, Number 2, 111-129.

responsibility for controlling, manipulating and/or (at least) monitoring its own system and relative concepts, as suggested by Dale (1997⁶¹), despite the ‘limits to state action’; ‘the state does not ‘go away’. What is interesting is that

“There is an important shift of *emphasis* involved (a new mix), but it is not an *absolute break with or rupture* from the previous state form; *bureaucracies continue* to be the vehicle for a great deal of state activity and *the state does not hesitate to regulate or intervene, when it is able, when its interests or objectives are not being served*” (Ball & Junemann 2012, p.134⁶²)

From this point of view, the national state dynamic changes and interventions from the Government are more like ‘experimental’, not ‘definitive’, as Jessop (2002) argued, and as in Turkey. ‘A new hybrid form or mix of ‘networks’, ‘bureaucracy’ and ‘market’ ’in the shadow of hierarchy’ exists to ‘design policy ideas’ in the national state (Ball & Junemann, 2012, p.133). Therefore, ICT Policy, in particular, a Procrustean ICT Bed Strategy in the national state, should be globally understood as an ‘experimental’ strategy, not really ‘definitive’ perhaps for ongoing negotiations and positioning the national state within the global network because of evidently nationally prioritised values and interests from national cultural survival instincts for the future. Famously, Robert B. Reich foresaw as early as in 1991,

“We are living through *a transformation* that will rearrange the *politics and economics of the coming century*. There will be no more national products and technologies, no national corporations, no national industries. *There will no longer be national economies*. All that will remain rooted within *national borders are the people who comprise the nation*.”

Although, there is no national ‘product/idea’ anymore, the national state has the responsibility to reduce squandered resources, to ensure the principle of separation of powers to eliminate vendor lock-ins (techno-politically supported (a) ICT ‘legal monopoly’ and (b) ‘economic hegemony’ towards PCSS) and to find the best way not to waste public money because

“*Markets in fact generate inequality and encourage competition* instead of co-operation as the central structuring norm of the community.... (The national state) *must in their own right be regulated and controlled by the state*” (Olssen et al., 2004, p.176⁶³)

Nevertheless, efforts of ‘politics’ and ‘negotiation’ to define/confirm proximity and orientation of technological winning merits (originality, impact, practicality, measurability and applicability) in a particular society within global networks are so clear and identifiable, as to be controlled by the dominant ICT suppliers because of evident nationally prioritised concerns which are lobbied within an imperfect market, as Edwards & Wajcman (2005) argued. The dynamic/dominant orientation of imperfect markets and inevitable failure of ICT's fate and ecosystems, within the centralist power illusion and status quo policy, lead to a state where there is no ‘forgotten’, or actually ‘no broken promise’ for ICT.

To support ‘politics’ and ‘negotiation’ concepts, the earlier examples are:

In 1984, in the scope of the Computer-Aided Education (CAE) project, the World Bank

61 Dale R. (1997). The State and Governance of Education: an analysis of the restructuring of the state-education relationship. in A. H. Halsey, et al. (Eds.) *Education Culture, Economy, and Society*. Oxford: Oxford University Press. Pp.273-282.

62 Ball, S.J. & Junemann, C. (2012). *Networks, New Governance and Education*, Bristol: Policy Press.

63 Olssen, M., Codd, J., & O’Neill, A., (2004). *Education Policy: Globalization, Citizenship and Democracy*. Thousand Oaks CA: Sage.

distractingly suggested computer as a “tool to compensate for the poor quality and persistent deficiencies of suitable teachers” (1993, p.107⁶⁴). Even within current technology, is this suggestion plausible? Controversial!

On 23rd January 2002, MP, Emre Kocaoglu asked the former Prime Minister about Microsoft Encarta CD-ROM Encyclopaedia and its associated website⁶⁵. According to Kocaoglu, in the encyclopaedia and website, there was the Kurdistan map in eastern Turkey. After two years, the map was corrected. There were also similar complaints between Chinese and Taiwanese governments for Microsoft Encarta. According to McGraw-Hill (2005⁶⁶), “Microsoft also bows to political pressure. The government of Turkey stopped distribution of an Encarta edition with the name Kurdistan on a map. Here Microsoft removed the name Kurdistan from the map. Governments frequently lobby the company to show their preferred boundaries on maps” (p.70). Additionally, there was a controversial Armenian issue, but unfortunately no formal proof was available.

There are mutual ongoing economical and political negotiations between the Microsoft Corporation and governments. It is not a new phenomenon. There are economical and political connections between national states where internationally argumentative issues exist, and international corporations which dynamically positioned themselves to take advantage of the issues to gain leverage. Although, the Microsoft Corporation claimed that Encarta Encyclopaedia had nine different versions to be certain that the Encyclopaedia did not cause any cultural clash, but, however, evidently comprehending local cultures through reflecting their histories might be perceived historically contradictory and politically conflicting, as in this case. Nevertheless, it is clear that the Microsoft Corporation used its power to mislead knowledge because of its own economic interests, and this drives the Government in Turkey. What is the consequence of this level of manipulation? Digital technology is currently everything, however, the power of a particular technology still remains with the country of technology's origin and headquarters location, in the USA in this instance. The Government in Turkey can only argue its point of view in Turkey because the raised issues are internationally controversial. Thus, political conflicts are strongly applied to the technology itself.

The latest examples are:

The Microsoft Corporation and a university in Turkey are currently in legal dispute over the use of pirated software. The Microsoft Corporation has not taken this kind of initiative for a long time in Turkey. Perhaps the Microsoft Corporation is testing its negotiation power with the Government to enable participation in the Fatih Project (\$8 billion budget⁶⁷). The Government previously has chosen the Android technology.

Additionally, an important example is from the discourse of Binali Yildirim, the Minister of the Ministry of Transport, Maritime Affairs and Communications, in the Open Academy Press Conference in January 2012. In the scope of the Fatih Project⁶⁸,

64 World Bank (1993) *Turkey: Informatics and Economic Modernization*, a World Bank Country Study. The World Bank, Washington, D.C. Retrieved 25/10/2013 from http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/1993/03/01/000009265_3970128104047/Rendered/INDEX/multi0page.txt

65 See, the parliamentary written question from MP, Emre Kocaoglu, Turkish Grand National Assembly (No.7/5728, 23rd January 2002), Retrieved 25/10/2013 from <http://www2.tbmm.gov.tr/d21/7/7-5728s.pdf>. The response to the question was published in the incoming paper due to not be answered. In other words, it was not going to be answered until the parliamentary question would be asked again.

66 McGraw-Hill. (2004). *Evaluating a Company's External Environment*, Retrieved 25/10/2013 from http://highered.mcgraw-hill.com/sites/dl/free/0070144478/617621/Cateora_03.pdf.

67 Google 'Yücel N. Microsoft'un Üniversitelerle Savaşı',

68 The Fatih Project is extremely complicated and controversial; therefore it is not included in the study. Nevertheless, all needed information is available / recorded on the internet.

[Microsoft is the best known and the most common. There is *no stop for the Microsoft Corporation. Two OSs will be in the system.* A 'wanter' uses Microsoft; a 'wanter' uses *Pardus-Linux which is such a thing developed by TUBITAK.*

Question; in other words, various OSs will be used in 14 million tablets.

Minister: *will be, it should be. In my notion, it is essential.* Nevertheless, the MoNE is liable for that, so we need to confirm it from them. *I acknowledge it as a warning.* We will argue this issue with colleagues]⁶⁹.

Additionally,

[Pardus-Linux OSs will be used in 400,000 Interactive Whiteboards (IW) in schools in Turkey.]

(Practically for 'a wanter', it is impossible to use Pardus-Linux because there is not an external keyboard to select Pardus-Linux when IWs open through Windows Boot System. The power relationship is obvious.)

Conclusion

Techno-politically and optimistically speaking: We are currently paper-based societies (not a society) in a Digital-Era. Perhaps, in the short term future, we will be digital-based societies (not a society) in a Cyber-Era in the Century of 'Singularity' (no academic definition yet).

Many national states currently argue over what gun policies should be, for instance, in the USA. In ICT, technology is as a complex 'living organism' (more than a gun); it could be used for many purposes, so it is not a simple tool (perhaps never was and never will be): not only has it great power and provides a great potential, but it also puts forward its own lameness. The crucial point is that technology always claims how its own algorithm is perfect because there is no human bias, but the point is that humans use it. Technology evidently makes us more creative, but not necessarily smarter and/or more intelligent. Robertson (2008) emphasised that "knowledge is both a new problem and panacea for our time" (p.2⁷⁰). So, the concept is more than simple (gun) policies, but is the concept really nationally and internationally welcome? It is controversial!

While old aged, new is a street ahead. Too many arguments but not sufficiently detailed action (short/long term) plans and metrics, still no milieu for 'Written' ICT Policies (obviously not a Policy).

In this paper, I first review the national ICT policy in Turkey through selecting the most appropriate and elite government documents to have a brief outline of the obstacles for the use of FOSS in public institutions, as well as a genetic perception of the Government views on FOSS that are driven by/ related to the concept of not governing 'National ICT Policy and Strategy'. To support this, I argue how FOSS is deliberately ignored in ICT projects due to obviously (a) institutional inertia, (b) path dependence, (c) ungovernable ICT changes, and, arguably, (d) corruption in new public management. I then attempted to investigate possible causal and dependency relationships of the currently established interlinks between the Government and unmanageable ICT changes to conclude that the Government has failed in making written ICT

69 ShiftDeleteNet. Fatih Projesi'nde Windows 8 de Olacak !; 2012, January 10, Retrieved 25/10/2013 from <http://shiftdelete.net/fatih-projesinde-windows-8-de-olacak-34192.html>.

70 Robertson, S.L. (2008) 'Producing' the Global Knowledge Economy: the World Bank, the KAM, Education and Development, in M. Simons, M. Olssen and M. Peters (eds) Re-reading Education Policies: Studying the Policy Agenda of the 21st Century, Rotterdam: Sense Publishers.

Policies and in establishing pervasive and trustworthy (flexible) ICT ecosystems, which recognise either a balanced development between FOSS and PCSS or a FOSS favourable system.

In the second section, the evidence indicates that the Government has taken a de-facto ICT Policy by which Microsoft dominant markets control public institutions. Whilst techno-institutional lock-ins exist politically and are irreversible in Turkey, the future of Turkey's roadmap is mistakenly defined as a Procrustean ICT Bed Strategy from 'the best and the brightest policy making club' (think tank). This study finally makes arguments that the omission of ICT Policy in a national state is globally understood as an 'experimental strategy' (not really definitive), perhaps for ongoing negotiations and positioning a national state within a global network, due to evidently nationally prioritised values and interests. Perhaps it is not really a conclusive strategy (evidently not a policy). The dynamic and inevitable failure of ICT nature and ecosystems leads to state 'no broken promise' in ICT. As Samuel Beckett's famous quote says,

"All of old. Nothing else ever. Ever tried. Ever failed. No matter. Try again. Fail again. Fail better."

Nevertheless, this argument does not normalise/impair the failure/omission of promising an ICT policy. ICT projects have always an easily corrupted nature due to their complexity, therefore, corruption in ICT projects should be conceptualised through the four accepted knowledge(s) as the OECD report highlighted. In particular, know-who should be carefully addressed for leading us (as a citizen) to know how the Government gets it right and to trust information, avoiding corruption concerns. The final report of 'Information 2020 Challenges for the EU' by IDC comprehensively argued for know-who concept and finalised,

"... we are likely to move from an economy based on those — Too big to fail to one focused on servicing the needs of those — Too small to ignore" (2011, p.91⁷¹)

Thus, in answering the introductory question...

Is there a precise 'National ICT Policy in Public Institutions' in Turkey, in particular, an official recognition of the crucial distinction and subsequent evaluation between FOSS and PCSS? No and three times no!

About the author:

Hüseyin Tolu is a PhD student at University of Bristol in the United Kingdom. The article is a part of his PhD thesis which is 'The Productions of Techno-Politics of General Purpose Computing; Its Failures in a State and Education.' He has a particular interest in 'techno-cultural brokering' to conceptualise current and future technology in social practices. He can be contacted at ht7708@bristol.ac.uk or huseyinalitolu@gmail.com or 00-44-7427157151.

Graduate School of Education, University of Bristol, Helen Wodehouse Building, 35 Berkeley Square, Clifton, Bristol BS8 1JA, UK.

71 See, European Commission, 'the EU Framework Programme for Research and Innovation', Retrieved 25/10/2013 from http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=h2020

Licence and Attribution

This paper was published in the *International Free and Open Source Software Law Review*, Volume 5, Issue 2 (December 2013). It originally appeared online at <http://www.ifosslr.org>.

This article should be cited as follows:

Tolu, Hüseyin (2013) 'Expendable 'Written' ICT Policy in Digital Era, No Broken Promise', *International Free and Open Source Software Law Review*, 5(2), pp 79 – 104
DOI: [10.5033/ifosslr.v5i2.86](https://doi.org/10.5033/ifosslr.v5i2.86)

Copyright © 2013 Hüseyin Tolu.

This article is licensed under a Creative Commons UK (England and Wales) 2.0 licence, no derivative works, attribution, CC-BY-ND available at <http://creativecommons.org/licenses/by-nd/2.0/uk/>

As a special exception, the author expressly permits faithful translations of the entire document into any language, provided that the resulting translation (which may include an attribution to the translator) is shared alike. This paragraph is part of the paper, and must be included when copying or translating the paper.



Who Owns the Project Name?

Pamela S. Chestek^a

(a) Principal, Chestek Legal

DOI: [10.5033/ifosslr.v5i2.87](https://doi.org/10.5033/ifosslr.v5i2.87)

Abstract

In the United States, ownership of trade marks can be bedevilling. A trade mark registration is not a grant of rights, only recognition of already-existing rights. A trade mark is owned by the first to use it and may only be registered by the owner.

However, there is no consistent rule or standard that courts apply when deciding disputes over ownership. Complicating matters further, U.S. trade mark law eschews the concept of joint ownership, considering it inconsistent with a trademark's role as a sole source identifier or assurer of quality. Thus, courts are in the position of having to identify a single owner of a trade mark using poorly defined law.

This article will review the various ways that courts have decided who owns a trade mark when there are two claimants. It will also provide guidance to free and open source software projects about how to best manage their project names so that a project has a clear claim of ownership and its project name is fully enforceable as a trade mark.

Keywords

Law; information technology; Free and Open Source Software; trade mark

Introduction

U.S. trade mark law is not well-suited to businesses that have decentralised decision-making models. Trade mark theory developed around the concept of a centralised process for the creation of product:

Of course, corporations, partnerships, joint ventures and marriages are combinations of individual persons. But when such an entity sells trademarked goods or services, control over quality and consistency is centralized. Someone is in control. A single decision results from internal study and discussion. Similarly, when a mark is licensed or franchised, the licensor or franchisor is a single entity controlling quality. A licensed mark indicates uniform quality. Uniform quality is produced by a single source of control.¹

Compare this concept to a free and open source software (FOSS) project, with its loose

¹ J. Thomas McCarthy, 2 McCarthy on Trademarks and Unfair Competition § 16:40 (4th ed. June, 2013 rev.).

management structure, many hands contributing to making the finished product, and generous permission to reproduce the software (that is, make a new product) granted by the FOSS copyright licence. This is a manufacturing model that traditional trade mark law has not seen.

And putting aside the difficulty created by the FOSS development model, even with traditional business models the courts have not settled on any single standard for deciding who the true trade mark owner is. A court may look for the answer strictly in transactional documents, or it may ignore the agreements and look at the question holistically.

So the wise FOSS project will take steps to ensure that, if challenged, despite the somewhat unorthodox management and product development method, under traditional legal doctrine the project name is indeed an indication of a sole source of software of a predictable quality. This article will provide advice on the steps a project can take to do that.

Note that this article is limited specifically to classic trade mark theory with respect to the fairly straightforward case of using the project name as a trade mark for software and promotional goods. A "project" is, of course, much more than software: it is members of a community acting both individually and collectively, a source code repository, a website and domain name, and many intangible assets and qualities. The ownership of these aspects of a FOSS project, as well as whether and how trade mark rights might apply to them, is outside the scope of this article.

The first part of this article reviews the legal theories that U.S. courts and tribunals have applied to decide questions of disputed ownership of trade marks. It covers the types of evidence that courts examine, then the role that the owner's business form plays. The second part of the article will give practical advice that, if followed, will well-position a FOSS project to demonstrate that it is the owner of a valid trade mark.

U.S. Law on Ownership of Trade Marks

The first section of this part will review a number of different legal doctrines that courts have applied in cases of disputed trade mark ownership. The following section will discuss the various types of legal entities that can own trade marks. We will end with a discussion of the potential for loss of trade mark rights under a theory known as a "naked licence."

Legal Theories for Deciding Trade Mark Ownership

In the United States, registration of a trade mark does not grant any substantive rights.² Instead, a registration has only an evidentiary function, serving as prima facie evidence of validity, ownership, and exclusivity of rights.³ Only the owner of a trade mark may register it⁴ and a registration can be cancelled if the registrant is not the owner of the underlying trade mark rights.⁵

So while in the United States ownership of a trade mark is not a right granted by registration, there is also no universally accepted legal doctrine for deciding who the owner of the trade mark is. Approaches can vary widely.

Some courts approach the problem as if the parties have two separate trade marks and decide who

2 *In re Int'l Flavors & Fragrances Inc.*, 183 F.3d 1361, 1366 (Fed. Cir. 1999) ("The federal registration of a trademark does not create an exclusive property right in the mark. The owner of the mark already has the property right established by prior use. The mark identifies and distinguishes the owner's goods from others. It also signifies the source and quality of the goods. These attributes are not established or granted by federal registration of the mark. The owner of a trademark need not register his or her mark in accordance with the Lanham Act in order to use the mark in connection with goods or to seek to prevent others from using the mark.").

3 Trademark (Lanham) Act of 1946 § 7(b), 15 U.S.C. § 1057(b) (2012).

4 *Id.* at § 1(a), 15 U.S.C. § 1051(a); *Chien Ming Huang v. Tzu Wei Chen Food Co. Ltd.*, 849 F.2d 1458, 1460 (Fed. Cir. 1988).

5 This is true only for the first five years after the trade mark is registered. See *infra* note 64-65 and accompanying text regarding trade marks that have become incontestable.

used theirs first,⁶ sometimes even where the parties have both submitted the same evidence as proof of first use.⁷ A court may apply several different theories to choose between the two: it may find that the losing party was a "related company"⁸ whose use was not for its own benefit but instead inured to the benefit of the winning party.⁹ It may instead find that the losing party was only an agent of the other party and thus developed no independent trade mark rights of its own.¹⁰ Or, a court might find that the losing party's use was not of a quality and scale to be considered "use in commerce" and so did not independently establish trade mark rights.¹¹

Alternatively, rather than looking at the problem as two marks and two owners, a court may instead recognise that there is a single, unitary property with two claimants to ownership. This means there are even more ways that the dispute might be decided.

A court may rely on private agreements between parties that allocate ownership of a trade mark.¹² Courts may instead look solely at who "controls" the use of the mark, that is, who is responsible for the nature and quality of the goods and services with which the mark is used.¹³

A more comprehensive approach has developed in the frequently occurring scenario of goods manufactured by one but marketed by the other.¹⁴ In this case, the doctrine is well settled. First, courts will look to any agreement between the parties regarding trade mark rights.¹⁵ There is also a

- 6 *See, e.g., Knights Armament Co. v. Optical Sys. Tech., Inc.*, 636 F. Supp. 2d 1283, 1296 (M.D. Fla. 2009) *aff'd*, 654 F.3d 1179 (11th Cir. 2011); *Lab. Corp. of Am. v. Schumann*, No. 3:06-CV-01566, 2009 WL 275859, at *4 (D. Conn. Feb. 4, 2009); *O.T.H. Enter., Inc. v. Vasquez*, Cancellation No. 9205056, 2012 WL 5196156, at *11 (T.T.A.B. Sept. 28, 2012); *Gallego v. Santana's Grill, Inc.*, Cancellation Nos. 92043152, 92043160 and 92043175, 2009 WL 4073531, at *4 (T.T.A.B. May 6, 2009).
- 7 *Knights Armament*, 636 F. Supp. 2d at 1296 (noting that both parties relied on the same documents, a purchase order, a request for quotation, and a statement of work, as proof of use); *100 Blacks in Law Enforcement Who Care, Inc. & 100 Blacks Who Care, Inc.*, Opposition No. 91190175, 2011 WL 1576733, at *2 (T.T.A.B. Apr. 12, 2011) (noting that both parties relied on the same web page as evidence of first use); *cf., Louisiana Athletics Down on the Bayou, L.L.C. v. Bayou Bowl Ass'n*, No. 11-303-BAJ, 2013 WL 2102354, at *3 (M.D. La. May 14, 2013) (noting that all materials attached to the plaintiff's trade mark application as proof of use were created by members of the defendant).
- 8 *See Lanham Act* § 5, 15 U.S.C. § 1055 (providing that use of a mark by "related companies" imputes to the owner of the mark as long as the owner is controlling the nature and quality of the goods and services).
- 9 *See, e.g., Estate of Coll-Monge v. Inner Peace Movement, Inc.*, 524 F.3d 1341, 1349 (D.C. Cir., 2008) (reversing district court decision that first use by defendant non-profit corporations was not a use by related companies for the plaintiff's benefit); *cf. Consumerinfo.com, Inc. v. Money Mgmt. Int'l, Inc.*, No. 07-04275 SJO (EX), 2008 WL 4183928, at *3 (C.D. Cal. Sept. 2, 2008) *rev'd on other grounds*, 374 F. App'x 696 (9th Cir. 2010) (in defendant's challenge to plaintiff's ownership of the mark, finding that plaintiff's parent was a related company of the its subsidiary so the parent's use inured to the benefit of the subsidiary).
- 10 *See, e.g., Asociación de Industriales de Puerto Rico v. MarketNext, Inc.*, No. 09-1122 (JAF), 2009 WL 793619, at *8-9 (D.P.R. Mar. 23, 2009).
- 11 *Louisiana Athletics*, 2013 WL 2102354, at *8 (plaintiff did not have his own separate use in commerce after he was no longer associated with the defendant); *Eat BBQ LLC v. Walters*, No. 12-71-GFVT, 2012 WL 5835679, at *5 (E.D. Ky. Nov. 16, 2012) (use of mark in email address, procurement of estimate for signs and emailing menu to other party in litigation did not establish use in commerce); *Knights Armament*, 636 F. Supp. 2d at 1296 (defendant's first public use of the mark was later than the plaintiff's); *Lab. Corp.*, 2009 WL 275859, at *4 (although the defendant thought of the mark, he did not have use independent from that of the plaintiff).
- 12 *Premier Dental Products Co. v. Darby Dental Supply Co., Inc.*, 794 F.2d 850, 854 (3d Cir. 1986) ("The ownership of a trademark as between a manufacturer and an exclusive distributor is largely determined by the parties' agreement"); *see also E & J Gallo v. Proximo Spirits, Inc.*, No. CV-F-10-411 LJO JLT, 2012 WL 273077, at *10 (E.D. Cal. 2012) (relying on an agreement between the manufacturer and distributor about ownership of the trade dress rights in a tequila bottle configuration); *Green v. Ablon*, No. 09-10937-DJC, 2012 WL 4104792, at *16 (D. Mass. Sept. 17, 2012) (deciding that an employment agreement not only vested ownership of new trade marks in the employer, but also assigned a pre-existing one to it).
- 13 *See Arredondo v. Arredondo*, No. 3:02-CV-2200 CFD, 2010 WL 4929250, at *6 (D. Conn. Nov. 30, 2010) *aff'd*, 460 F. App'x 59 (2d Cir. 2012) (citing *Liebowitz v. Elsevier Sci. Ltd.*, 927 F. Supp. 688, 696 (S.D.N.Y. 1996)).
- 14 "These relationships usually arise in one of two factual situations: either (1) the manufacturer licenses the distributor to use a trademark owned by the manufacturer, or (2) the distributor owns its own mark, sometimes called a 'private label,' which it affixes to the manufacturer's product before delivery." *Sengoku Works v. RMC Int'l*, 96 F.3d 1217, 1220 (9th Cir. 1991).
- 15 *Id. But see Premier Dental*, 794 F.2d at 854 (stating "While the parties' agreement is important in settling the question of ownership, it is not dispositive. The ownership of the product's goodwill must also be determined. The intent of the parties to create a perception that a particular firm is the legal entity standing behind the mark is not conclusive evidence of what the public actually did perceive but is circumstantial proof, absent evidence to the contrary, that what

presumption that the manufacturer owns the trade mark, but the presumption can be rebutted by considering (1) which party invented and first affixed the mark onto the product; (2) which party's name appeared with the trade mark; (3) which party maintained the quality and uniformity of the product; and (4) with which party the public identified the product and to whom purchasers made complaints.¹⁶ Although developed in the context of a manufacturer and a distributor, this approach has been extended to other types of relationships, like resellers¹⁷ and family disputes.¹⁸

Musical group names are disputed so often that this area has also developed a specialised doctrine. In these cases, quite contrary to the manufacturer-distributor arena, contracts assigning ownership of a group's name to a given party in the relationship may have little effect.¹⁹ Instead, a court will identify what quality or characteristic a group is known for, and then who controls that quality.²⁰

In an effort to create a more predictable method for deciding ownership disputes, this author has previously proposed a single framework that could be applied to all different types of ownership disputes, one that would take into account contractual expectation, responsibility for the quality of the goods and services, and consumer perception.²¹ The proposal has been acknowledged by several courts²² but has not been formally adopted.

Organisational Structure

As demonstrated, courts will apply different doctrines when deciding ownership cases, depending on how the parties frame the facts and choose which body of law they believe is most applicable. Further complicating matters, since a trade mark is an indivisible property, it means that a court must identify only one owner.²³ Any type of legally recognised organisation can own a trade mark,²⁴ but while some types of juristic persons, like corporations and limited liability companies, require an act of formation, others come into existence without any formal act at all.²⁵ Therefore, in

the parties intended to be the public perception was, in fact, their actual perception." (ellipses and brackets omitted)).

16 *Sengoku*, 96 F.3d at 1220.

17 *ZAO Grupa Predpriyatij Ost v. Vost Int'l Co.*, Opposition No. 91168423, 2011 WL 3828709, at *23 (T.T.A.B. Aug. 9, 2011).

18 *Stephen W. Boney, Inc. v. Boney Servs., Inc.*, 127 F.3d 821, 829 (9th Cir. 1997) (stating that manufacturer-distributor framework would apply to dispute between brothers each selling goods under the same brand); *Arredondo*, 2010 WL 4929250 at *5-6 (discussing factors in context of family business).

19 *Crystal Entm't & Filmworks, Inc. v. Jurado*, 643 F.3d 1313, 1323 (11th Cir. 2011) (holding that, despite three agreements stating that the promoter owned the band name, the band owned the name).

20 *Bell v. Streetwise Records, Ltd.*, 640 F. Supp. 575, 581 (D.Mass. 1986); see also *Kuklachev v. Gelfman*, 629 F. Supp. 2d 236, 254 (E.D.N.Y. 2008) (extending test to circus act); cf. *Cheng v. Dispeker*, No. 94 CIV. 8716 (LLS), 1995 WL 86353, at *4 (S.D.N.Y. Mar. 2, 1995) (describing two different tests for performance groups).

21 Pamela S. Chestek, *Who Owns the Mark? A Single Framework for Resolving Trademark Ownership Disputes*, 96 Trademark Rep. 681 (2006).

22 *LunaTrex, LLC v. Cafasso*, 674 F. Supp. 2d 1060, 1073 (S.D. Ind. 2009) (noting suggested test but deciding ownership based on corporate law principles); *C.F.M. Dist. Co. v. Costantine*, Opposition No. 91185766, slip op. at 30, n.44 (T.T.A.B. March 20, 2013), available at <http://ttabvue.uspto.gov/ttabvue/91185766-OPP-83.pdf> (noting article).

23 *Bell v. Streetwise Records, Ltd.*, 761 F.2d 67, 75-76 (1st Cir. 1985) (Breyer and Coffin, JJ., concurring) ("[W]e specify two mistakes that we believe the district court made. First, the court entered a decree that, in effect, left both plaintiffs and defendants free to use the trade name. Even if this result were fair as between the parties, it is not fair in respect to the public. It creates the very 'source' confusion that legal trademark, and tradename, doctrine developed to avoid. When arguing parties are, in a sense, both responsible for the success of a name, a court may find it difficult to decide which, in fact, 'owns' the name; the temptation may be great to say 'both own it' or try to 'divide' the name among them. The public interest, however, normally requires an exclusive award."); *Lunatrex*, 674 F. Supp. 2d at 1075 ("A trademark, however, is not divisible. If it were shared among the different splintered partners, the resulting confusion would destroy the value that each partner worked so hard to create.").

24 See Lanham Act § 45, 15 U.S.C. § 1127 ("The term 'person' and any other word or term used to designate the applicant or other entitled to a benefit or privilege or rendered liable under the provisions of this chapter includes a juristic person as well as a natural person. The term 'juristic person' includes a firm, corporation, union, association, or other organization capable of suing and being sued in a court of law.").

25 See Revised Uniform Partnership Act 1997 (stating that a partnership has been formed where there is "the association of two or more persons to carry on as co-owners a business for profit forms a partnership, whether or not the persons intend to form a partnership"); *Comm. for Idaho's High Desert, Inc. v. Yost*, 92 F.3d 814, 819-20 (9th Cir. 1996) (noting that under federal law, an "unincorporated association" is "a voluntary group of persons, without a charter, formed by

pursuit of identifying a sole owner, the court may identify an entity that the litigants never intended to be the owner of the trade mark.

For example, in *LunaTrex, LLC v. Cafasso*,²⁶ various individuals joined together to enter the Google Lunar X Prize competition to land a robot on the moon.²⁷ They collectively picked the name "LunaTrex" for their team.²⁸ Things fell apart and two of the parties each created legal entities, "LunaTrex Inc." in Nevada and "LunaTrex, LLC" in Indiana.²⁹ Both filed applications to register the trade mark.³⁰ Once X Prize Foundation learned of the falling out, the LunaTrex team was suspended from the competition.³¹ The parties then sued each other for trade mark infringement.³²

The court framed the problem this way:

*The basic problem here is one that has arisen often in trademark law: a loose and informal group of people start a new band or another new venture, establish a new and valuable trademark, and then have a falling out. In the absence of a formal agreement, how does a court decide who controls the trademark?*³³

The court's solution here was a find that the main players had created a de facto partnership and the trade mark was an asset of the partnership.³⁴ Further, the partnership had broken up and, while normally partnership assets are distributed among the partners, the court acknowledged that a trade mark is not a divisible asset.³⁵ The court therefore granted both parties' motion for preliminary injunction and enjoined all parties from using the mark.³⁶

Another common problem is where an individual files a trade mark application in his or her own name, but the trade mark is used by an entity of which the individual is the sole owner. Lines get blurry when there is a single owner of a legal entity, so it can be hard to distinguish the acts of the individual from the acts of the entity.

For example, in *Restifo v. Power Beverages, LLC*,³⁷ an individual, Paul Kidd, filed the trade mark application in his own name but had his company grant the trade mark licence. The Trademark Trial and Appeal Board held in favour of Mr. Kidd's ownership, finding that the corporation was the alter ego of Kidd and therefore the corporation's acts were done at the behest and on behalf of

mutual consent for the purpose of promoting a common objective." It may also be a "joint venture." *Shain Inv. Co., Inc. v. Cohen*, 443 N.E.2d 126, 129 (Mass. App. Ct. 1982) (describing a joint venture as "a partnership of a sort or, at least, it has many of its characteristics. It differs, however, from a partnership in that it is ordinarily, although not necessarily, limited to a single enterprise, whereas a partnership is usually formed for the transaction of a general business.").

26 674 F. Supp. 2d 1060 (S.D. Ind. 2009).

27 *Id.* at 1063.

28 *Id.*

29 *Id.* at 1067, 1069.

30 *Id.* at 1067-70.

31 *Id.* at 1069. The ban was until LunaTrex provided Google with clear evidence of the name and the team registration. It never did and so did not compete. Property, Intangible, LunaTrex Out of the Race (2011), <http://propertyintangible.com/2011/01/LunaTrex-out-of-race.html> (last visited June 4, 2013) (this author's reporting).

32 *Id.*

33 *Id.* at 1072.

34 *Id.* at 1073.

35 *Id.* at 1075.

36 *Id.* See also *Third Education Group, Inc. v. Phelps*, No. 07-C-1094, 2009 WL 2150686, at *4 (E.D. Wisc. May 15, 2009) (holding that defendant created name for use by voluntary association, not for himself personally); *Boogie Kings v. Guillory*, 188 So.2d 445, 448-49 (La. App.1966) (band was unincorporated association and ownership of the name was vested in the band, not any individual member).

37 Opposition No. 91181671, 2011 WL 5014028 (T.T.A.B. Sept. 21, 2011).

Kidd.³⁸ One treatise agrees with this approach,³⁹ however another court disagreed with the treatise and instead found that under state law, a corporation and its single shareholder remain distinct legal entities and the sole shareholder did not own the trade mark merely by virtue of her ownership of the corporation.⁴⁰

Loss of Ownership

To further complicate matters, a trade mark is vulnerable to invalidation if the trade mark owner is too lax in monitoring the quality of the goods or services with which the mark is used. The legal theory is a "naked licence," a doctrine that under U.S. law generally results in total loss of rights.

Different courts vary on the exact parameters of a naked licence, but the most unforgiving standard is that of the Court of Appeals for the Ninth Circuit as described in *FreecycleSunnyvale v. Freecycle Network*.⁴¹ The case defines a naked licence this way:

*Naked licensing occurs when the licensor fails to exercise adequate quality control over the licensee. Naked licensing may result in the trademark's ceasing to function as a symbol of quality and a controlled source. We have previously declared that naked licensing is inherently deceptive and constitutes abandonment of any rights to the trademark by the licensor. Consequently, where the licensor fails to exercise adequate quality control over the licensee, a court may find that the trademark owner has abandoned the trademark, in which case the owner would be estopped from asserting rights to the trademark.*⁴²

An individual started The Freecycle Network ("TFN") in 2003. The name comes from combining the words "free" and "recycling" and refers to the practice of giving an unwanted item to a

-
- 38 *Id.* at *4 ("Here, the corporations were essentially the alter egos of the individuals. Accordingly, we construe all relevant activities taken by the companies as having been done at the behest and on behalf of the individuals."). See also *Gaffrig Performance Indus., Inc. v. Livorsi Marine, Inc.*, Nos. 99 C 7778 and 99 C 7822, 2003 WL 23144859, at *11 (N.D. Ill. Dec. 22, 2003) (use of the mark by the corporation inured to the sole shareholder's benefit so he owned the mark); *Newton v. Brown*, Opposition No. 91174441, 2011 WL 810222, at *7 (T.T.A.B. Feb. 7, 2011) (trade mark was acquired by individual, not his company, and subsequent use by a number of companies he owned inured to his benefit).
- 39 2 McCarthy, *supra* note 1, at § 16:36 ("If a corporation is using a mark, then a principal officer and shareholder is not the 'owner.' It is presumed, however, that a real person who owns all the stock of a corporation controls the corporation so that use of the mark by the corporation inures to the benefit of the real person, who is presumed to be the 'owner' of the mark.")
- 40 *Taylor v. Thomas*, No. 2:12-CV-02309-JPM, 2013 WL 228033, at *6-7 (W.D. Tenn. Jan. 22, 2013). See also *Smith v. Coahoma Chem. Co.*, 264 F.2d 916, 919 (C.C.P.A. 1959) (holding that trade mark registered by individual was invalid when the trade mark was used only by companies of which he was part owner); *Paul Audio, Inc. v. Zhou*, Cancellation No. 92049924, 2011 WL 6780740, at *11 (2011) (holding that, "because [shareholder] Boning Zhou and [his company] Shenzhen Bao Ye Heng Industrial Development Company Limited are distinctly different entities, Baoning Zhou had never used the mark in his capacity as an individual, and the mark had always been used by Shenzhen Bao Ye Heng Industrial Development Company Limited, the company is the owner of the mark"); *American Forests v. Sanders*, Opposition No. 89370, 1999 WL 1713450, at *5 (T.T.A.B. Sept. 23, 1999) (finding that a trade mark application that was filed in the name of an individual when it was a partnership that had the bona fide intent to use the mark was void ab initio).
- 41 626 F.3d 509 (9th Cir. 2010).
- 42 *Id.* at 515-16 (Internal quotation marks and citations omitted). Note that the court says that the naked licence "may" result in the trade mark ceasing to function as a mark, but its analysis did not hinge on determining whether there had been a loss of distinctiveness. Rather, it was based on the owner's failure to perform adequate acts to control the quality of the goods and services. However, the Fifth Circuit has taken the position that a naked licence exists only where the trade mark has indeed ceased to function as a mark. *Exxon Corp. v. Oxxford Clothes, Inc.*, 109 F.3d 1070, 1079-80 (5th Cir. 1997). Some cases have also held that a naked licence is only a partial loss of rights. See, e.g., *Sheila's Shine Prods., Inc. v. Sheila Shine, Inc.*, 486 F.2d 114, 125-26 (5th Cir. 1973) (limiting abandonment through naked licensing to a specific geographic area); *Patsy's Italian Rest., Inc. v. Banas*, 575 F. Supp. 2d 427, 453 (E.D.N.Y. 2008) *aff'd*, 658 F.3d 254 (2d Cir. 2011) (limiting loss of rights to two restaurants, not all: "Realty has not engaged in conduct that necessitates a finding of total abandonment of all rights in the marks PATSY'S and PATSY'S PIZZERIA. Most crucially, Plaintiffs have failed to submit any evidence that the marks PATSY'S and PATSY'S PIZZERIA as used by the original East Harlem location have lost their significance as an indicator of the source of Defendants' pizzeria services.").

stranger, rather than disposing of it, so that the item can continue being used for its intended purpose.⁴³ Similar to many open source projects, the organisation didn't have a formal legal entity and operated through a democratic leadership structure.⁴⁴ Local volunteer groups would form through Yahoo! Groups and Google Groups.⁴⁵ The Freecycle Network had a website that provided a directory of member groups and resources for volunteers, including a section with etiquette guidelines.⁴⁶

The Freecycle Network operated under the "Freecycle Ethos" – a democratic leadership structure in which decisions were made through a process of surveys and discussions among volunteer moderators.⁴⁷ The local volunteer moderators were responsible for enforcing The Freecycle Network's rules and policies, but the moderators had flexibility in enforcement depending on the moderators' assessment of their local communities.⁴⁸ The moderators would collaborate on various matters, like whether they should limit listings to legal items only.⁴⁹

The defendant chapter FreecycleSunnyvale was licensed by email to use the Freecycle trade mark, with the instructions "just don't use it for commercial purposes."⁵⁰ Two years after FreecycleSunnyvale started, for reasons that are unclear, The Freecycle Network sent cease and desist letters to FreecycleSunnyvale.⁵¹

The Freecycle Network argued that its email prohibition on commercial use, the rule that the members "Keep it Free, Legal & Appropriate for All Ages," the "Freecycle Ethos," and the terms of use for Yahoo! Groups were an adequate exercise of control over the use of the mark, but the Court of Appeals disagreed.⁵² It found that The Freecycle Network "engaged in naked licensing and consequently abandoned the trademarks."⁵³ Note the plural "trademarks": the decision is about not only the word marks FREECYCLE and THE FREECYCLE NETWORK but also the highly distinctive design shown below:

43 *FreecycleSunnyvale*, 626 F.3d at 512.

44 *Id.*

45 *Id.*

46 *Id.*

47 *Id.*

48 *Id.*

49 *Id.* at 513.

50 *Id.*

51 *Id.* at 513-14.

52 *Id.* at 516-18.

53 *Id.* at 520.



FreecycleSunnyvale gives us a bottom threshold, an example when there is not enough control. As to how much control is enough, though, we are in the dark:

*We have stated that the standard of quality control and the degree of necessary inspection and policing by the licensor will vary. The licensor need only exercise control sufficient to meet the reasonable expectations of customers. However, because TFN did not establish any quality control requirements for its member groups, we do not need to decide what efforts to oversee a licensee's performance might meet a low standard of quality control.*⁵⁴

Further complicating matters, the validity of a mark for promotional goods may also rest on the validity of the mark for the primary goods. For uses that might otherwise be considered "ornamental," like on T-shirts, mouse pads or decals, a mark may nevertheless be considered distinctive for the promotional goods because it indicates a sponsorship relationship.⁵⁵ For example, the words "Mork & Mindy" on T-shirts was a trade mark use, understood to indicate sponsorship by a television show of the same name.⁵⁶ It therefore follows that, since the distinctiveness for promotional goods may rely on the distinctiveness for the primary goods, when the indicator fails to function as a mark for the primary goods, under the naked licensing doctrine it might likewise fail to function as a mark for the related promotional goods.

To Sum It Up

We have seen that trade mark decisions in court are fact-specific and involve the complex balancing of sometimes contradictory trademark goals. Depending on what doctrine a court may choose to apply, an agreement may matter, or it may not.⁵⁷ A registration may help, but it is not

⁵⁴ *Id.* at 519 (Internal quotation marks and citations omitted); *see also Eva's Bridal Ltd. v. Halanick Enter., Inc.*, 639 F.3d 788, 791 (7th Cir. 2011) ("Trademark law requires that 'decisionmaking authority over quality remains with the owner of the mark.' Restatement § 33 comment c. How much authority is enough can't be answered generally; the nature of the business, and customers' expectations, both matter.")

⁵⁵ *Go Pro Ltd. v. River Graphics, Inc.*, No. 01CV600JLK, 2006 WL 898147, at *4 (D. Colo. Apr. 5, 2006) (noting that marks can be both ornamental and source-indicating where they are used decoratively on T-shirts and the like but also identify a secondary source of sponsorship); *see also* Trademark Man. of Exam. Proc. § 1202.03 (Apr. 2013) (Allowing an applicant to show that a proposed mark that is used on the goods in a decorative or ornamental manner also serves a source-indicating function by submitting evidence that the proposed mark would be recognized as a mark through its use for goods or services other than those being refused as ornamental).

⁵⁶ *In re Paramount Pictures Corp.*, 213 U.S.P.Q. 1111 (T.T.A.B.1982).

⁵⁷ *See supra* notes 12 and 19 and accompanying text.

definitive.⁵⁸ A court may look solely at who "controls" the mark, or it may look more broadly at additional considerations like consumer perception.⁵⁹ A court may find that the parties themselves are in a legal relationship that they did not contemplate before the dispute arose, like agency or a partnership.⁶⁰

Sorting it out, the second part of this article will offer some guidance to open source projects that can help them maximize the likelihood that a court will be able to readily identify the project as the trade mark owner and reach a conclusion that there is a valid trade mark, no matter what doctrine is applied.

Managing the Project And the Name

Above we have discussed two topics: the acts of a trade mark owner and the organisations that perform them. But because in the United States trade mark ownership is a use-based system, a question of ownership is recursive: the entity that acts like the trade mark owner becomes, by its actions, the trade mark owner.

Nevertheless, we will separate the two topics for purposes of discussion. This next section will discuss what things a FOSS project can do to show its ownership of the mark and the following section will discuss what kind of legal entity the project might be.

The Acts of a Trade Mark Owner

As described above, courts will consider a number of factors when deciding who owns a trade mark: what the registration says,⁶¹ what any agreements say, who invented the mark, who first affixed the mark to the goods or services, which company's name appears on packaging and promotional materials with the trade mark, who exercises control over the nature and quality of the product, who paid for advertising and promotion, and to whom purchasers make complaints.⁶² Thus a project should optimise all these factors in its favour as much as possible.

The most legally significant step that a project can take is to register the trade mark. A registration is prima facie evidence of validity, ownership and exclusivity of rights.⁶³ After five years, these rights become "incontestable,"⁶⁴ which means that registration is conclusive evidence of the validity of the registered mark, of the registrant's ownership of the mark, and of the registrant's exclusive right to use the mark in commerce.⁶⁵ While, as noted above,⁶⁶ registration is only a recognition of trade mark rights rather than a grant of any substantive right, it nevertheless makes any challenge an uphill battle.

In addition, a project should adopt trade mark guidelines. They will serve as documentary evidence of many factors a court will consider, as will be described in more detail below.

The trade mark guidelines can serve the role of a written agreement allocating trade mark ownership.⁶⁷ It would be prudent to state expressly in the guidelines who the trade mark owner is

58 See *supra* notes 3-5 and accompanying text.

59 See *supra* notes 13-18 and accompanying text.

60 See *supra* notes 10 and 34 and accompanying text.

61 See *supra* note 3 and accompanying text.

62 See generally 2 McCarthy, *supra* note 1, at § 16:48.

63 Lanham Act § 7(b), 15 U.S.C. § 1057(b).

64 *Id.* at § 15, 15 U.S.C. § 1065. There are predicate conditions that must be met before a trade mark is incontestable and an affidavit of incontestability must be filed with the Patent and Trademark Office.

65 *Id.* at § 33(b), 15 U.S.C. § 1115(b). See also *Park 'N Fly, Inc. v. Dollar Park and Fly, Inc.*, 469 U.S. 189, 198, 105 S. Ct. 658, 83 L. Ed. 2d 582 (1985) ("The incontestability provisions, as the proponents of the Lanham Act emphasized, provide a means for the registrant to quiet title in the ownership of his mark.").

66 See *supra* notes 2-4 and accompanying text.

67 Courts will consider any document that might contain a trade mark grant, expressly or impliedly. See, e.g., *Lingo v. Lingo*, 785 F. Supp. 2d 443, 451 (D. Del. 2011) (looking at a will for help in deciding trade mark ownership); *Nothing*

and that the use of the trade mark by project members or unrelated parties is use that inures to the benefit of the project, to aid in forestalling a claim that a third party use is independent of the project use. If the project itself expresses this understanding about the relationship between the trade mark and those who use it, and the party using the mark has expressly or implicitly agreed to the terms, it should predispose a court to come to the same conclusion.

Next is evidence of control. Note that this concept is used both to identify the owner of a mark and to determine whether there is a naked licence.⁶⁸ Of all areas related to ownership and validity of a mark, control therefore is the most significant: the project's ability to demonstrate that it actively supervises the nature and quality of the software helps solidify its ownership of the mark and avoid a claim of naked licensing.

First note that the control relates to the nature and quality of the product, not the characteristics of the trade mark itself.⁶⁹ Design guidelines for the logo form of the mark, advice on where to use the ® and ™ symbols, and instructions to use the trade mark as an adjective, not a noun, do not demonstrate that there is an exercise of control over the quality of the product, only how the trade mark should appear.

Cases that examine control do so on a case-by-case basis,⁷⁰ so there is no fixed list of steps to take to ensure that the owner of the trade mark is active enough in its oversight. As noted above, courts have only defined what is *not* good enough, not what *is* good enough.⁷¹ A court may consider who formulated the product,⁷² who trained employees,⁷³ whether products were inspected,⁷⁴ or who was responsible for the overall image of the service.⁷⁵

Heavy Inc. v. Levinson, No. 10 CV 03466 GBD, 2010 WL 4968137, at *4 (S.D.N.Y. Dec. 6, 2010) (holding that a lease amendment addressing registration of the trade mark for the restaurant name was not an agreement on the ownership of the name); *Norden Rest. Corp. v. Sons of Revolution in State of N. Y.*, 415 N.E.2d 956, 957 (1980) (holding lessor was the trade mark owner where the lease stated "The right to use the name 'Fraunces Tavern Restaurant' in connection with Tenant's business shall be limited to the restaurant business conducted in the premises and to no other business or location, and such right shall terminate upon the expiration or earlier termination of this Lease.").

68 This is not by happenstance; at least in the Courts of Appeal for the Second and Ninth Circuit both legal doctrines find their statutory basis in the same section of the Lanham Act, § 5. Section 5 states, in the context of use by a related company (i.e., a licensee), that "If first use of a mark by a person is controlled by the registrant or applicant for registration of the mark with respect to the nature and quality of the goods or services, such first use shall inure to the benefit of the registrant or applicant, as the case may be." Lanham Act § 5, 15 U.S.C. § 1055. It therefore by its terms invokes control over the nature and quality of the goods as the hallmark of ownership. The Second and Ninth Circuits also cite § 5 as the basis for the naked licensing doctrine. See *Siegel v. Chicken Delight, Inc.*, 448 F.2d 43, 51 (9th Cir. 1971) ("The licensor owes an affirmative duty to the public to assure that in the hands of his licensee the trade-mark continues to represent that which it purports to represent. For a licensor, through relaxation of quality control, to permit inferior products to be presented to the public under his licensed mark might well constitute a misuse of the mark. 15 U.S.C. §§ 1055, 1127."); *Dawn Donut Co. v. Hart's Food Stores, Inc.*, 267 F.2d 358, 367 (2d Cir. 1959) (stating that Section 5 imposes a control requirement so that there is not an abandonment through naked licensing).

69 *CNA Fin. Corp. v. Brown*, 922 F. Supp. 567, 574 (M.D. Fla. 1996) *aff'd*, 162 F.3d 1334 (11th Cir. 1998) ("In order for its family's use of the service marks to be deemed use by CNAF, CNAF must control not only the use of its marks, but also the 'nature and quality of the ... services' associated with the marks.").

70 In the context of naked licensing, "It is difficult, if not impossible to define in the abstract exactly how much control and inspection is needed to satisfy the requirement of quality control over trademark licensees." 3 McCarthy, *supra* note 1, at § 18:55.

71 See *supra* note 54 and accompanying text.

72 *Country Fare LLC v. Lucerne Farms*, No. 3:11CV722 VLB, 2011 WL 2222315, at *1, 9 (D. Conn. June 7, 2011) (holding that company that conceived of a proprietary mulch composition and had it manufactured by another company owned the trade mark).

73 *Arredondo v. Arredondo*, No. 3:02-CV-2200 CFD, 2010 WL 4929250, at *7 (D. Conn. Nov. 30, 2010) *aff'd*, 460 F. App'x 59 (2d Cir. 2012) (exercising control by training associates and managing the day-to-day operations of the facilities).

74 *E & J Gallo v. Proximo Spirits, Inc.*, No. CV-F-10-411 LJO JLT, 2012 WL 273077, at *10 (E.D. Cal. Jan. 30, 2012) (requirement that manufacturer deliver product "of the highest quality and in good and merchantable condition" and that the distributor performed chemical, sensory, and related analyses on every production lot and every bottling run was control of the nature and quality of tequila).

75 *O.T.H. Enterprises, Inc. v. Vasquez*, Cancellation No. 9205056, 2012 WL 5196156, at *9 (T.T.A.B. Sept. 28, 2012) (registrant owned the mark because he added unique characteristics such as lighting, costumes, musical arrangement and overall sound).

Note that a trade mark owner is not obliged to provide high quality goods or services, but simply must provide a quality of goods that is consistent and predictable:

*the chief function of a trademark is a kind of 'warranty' to purchasers that they will receive, when they purchase goods bearing the mark, goods of the same character and source, anonymous as it may be, as other goods previously purchased bearing the mark that have already given the purchaser satisfaction.*⁷⁶

Nor do the goods have to be identical but instead only within a range of predictable quality, adequate to meet consumer expectation.⁷⁷

Control over the nature and quality of FOSS, or any kind of software, has never been considered by a court. Nevertheless, there are a number of ways we can speculate that a FOSS project will be able to show that it exercises control. A software project can show that there are one or several canonical repositories for the software and all copies originate with a single source.⁷⁸ Therefore, for those repositories not within the project's control, the project will want to encourage those who provide any alternative repositories to indicate they are not the authoritative repository and where one can get the original code.

A project will also want to demonstrate its control over the quality of the goods by showing that it has a systematic quality control process used for creating the software. For example, a software project could show that only a limited few individuals, the committers, have the ability to decide what ultimately goes into the final product, thus ensuring consistent quality. If it is a project that requires assignment of copyright, it may be able to argue that the ownership of the entirety of the copyright in the software shows its control over the ultimate product. It might be able to demonstrate that a new version of the software will not be released if there are critical bugs.

The project must also be able to demonstrate that it controls the nature and quality of goods produced by others to avoid invalidation by naked licence. This is another role for the trade mark guidelines.

Some FOSS advocates have suggested using a "public" licence, i.e., a licence granted to anyone who complies with the conditions of the licence and which does not require execution, meaning that the licensee may be unknown. This kind of licence, however, seems to conflict with the prohibition on a "naked trade mark licence" because existing trade mark law does not recognise the possibility that a licensee may be unknown.⁷⁹ Thus, the concept of a public licence permitting use of a trade mark carries some risk and may provoke a court challenge.

However, in the author's opinion, there is no fundamental problem with the public licence concept. As noted, the concern of trade mark law is to ensure that the goods are of consistent quality. If the

⁷⁶ 1 McCarthy, *supra* note 1, at § 3:10; see also *El Greco Leather Prods. Co. v. Shoe World, Inc.*, 806 F.2d 392, 395 (2d Cir. 1986) ("For this purpose the actual quality of the goods is irrelevant; it is the control of quality that a trademark holder is entitled to maintain.")

⁷⁷ *TMT North America, Inc. v. Magic Touch GmbH*, 124 F.3d 876, 886 (7th Cir. 1997) (citing *Kentucky Fried Chicken Corp. v. Diversified Packaging Corp.*, 549 F.2d 368, 387 (5th Cir. 1977)) (Admittedly, licensing always entails some loss of control over product quality. If a licensor maintains reasonable control over product quality, however, consumers ultimately do rely upon the licensor's quality control. Absent a significant deviation from the licensor's quality standards, a licensor does not forfeit its trademark rights through licensing agreements."); Kevin Parks, "Naked" Is Not a Four-Letter Word: Debunking the Myth of the "Quality Control Requirement" in Trademark Licensing, 82 Trademark Rep. 531, 536 (1992) (explaining that a trade mark owner that manufactures its own goods can make goods of diverse quality without risking the trade mark).

⁷⁸ Note that in *Freecycle*, discussed *supra* in notes 41-54 and the accompanying text, the FREECYCLE mark was used only for a service. In what may be a significant distinction, a FOSS project creates a product, software. Being able to point to a product with a canonical source should help a FOSS project distinguish its situation from the *Freecycle* case, even though there is some similarity in the management style of FOSS projects and the Freecycle Network.

⁷⁹ See, e.g., *In re XMH Corp.*, 647 F.3d 690, 696 (7th Cir. 2011) (noting that, as a default, a trade mark licence is not assignable because of the need for quality control: the trade mark owner "will have picked his licensee because of confidence that he will not degrade the quality of the trademarked product").

conditions described in trade mark guidelines are clear enough that a licensee complying with the terms necessarily creates a product that will be of adequate quality and meet consumer expectations, then the policy basis for the naked licensing doctrine is not implicated.⁸⁰

We have examples in currently existing FOSS trade mark guidelines showing different ways projects handle permission to reproduce, modify and distribute software using their mark. For example, Mozilla, distributor of the Firefox browser and Thunderbird email client, permits use of its trade mark for the redistribution of copies of its software only if the software is unmodified.⁸¹ The Document Foundation, distributor of the LibreOffice office software suite, permits the use of its mark only for versions of the software in "substantially unmodified form," where "substantially unmodified" is software that is built from The Document Foundation source code with only minor modifications, such as enabling or disabling of certain features by default, translations into other languages, changes required for compatibility with a particular operating system, or bundling the software with additional fonts, templates, artwork and extensions.⁸² The OpenJDK project, which develops a free and open source implementation of the Java Standard Edition Platform, permits use of its trade mark for "a substantially complete implementation of the OpenJDK development kit or runtime environment source code retrieved from [an official website], and the vast majority of the Software code is identical to that upstream Original Software," with some exceptions.⁸³ OpenStack, a cloud computing project, provides for the use of the trade mark if the software passes a test suite.⁸⁴ Some projects take the safest route, which is to require a bilateral licence with anyone who wishes to use the trade mark for software.⁸⁵ There is no way to predict whether these licences would pass muster, but they do demonstrate an effort to ensure that the trade mark is used only for goods that consumers will perceive as having the same quality and functionality as the original product.

The trade mark policy should also cover use of the trade mark for promotional non-software goods, like T-shirts, mugs, decals and key chains. The standard for control over these types of goods, however, is probably more relaxed:

If a licensee uses the trademark of a beer or soft drink manufacturer on clothing or glassware, for example, prospective purchasers may be unlikely to assume that the

-
- 80 *Doebler's Pennsylvania Hybrids, Inc. v. Doebler*, 442 F.3d 812, 823 (3d Cir. 2006) ("[L]icensing arrangements are permissible so long as the license agreement provides for adequate control by the licensor of the nature and quality of the goods or services."); *Arthur Murray, Inc. v. Horst*, 110 F. Supp. 678, 680 (D. Mass. 1953) (holding that the contract provisions that controlled licensee's method of operation were adequate to avoid a naked licence).
- 81 Mozilla Foundation, Mozilla Trademark Policy for Distribution Partners, v. 0.9 (DRAFT) (2012), <https://www.mozilla.org/foundation/trademarks/distribution-policy.html> (last visited May 31, 2013) ("You may distribute unchanged official binaries downloaded from mozilla.com to anyone in any way subject to governing law, without receiving any further permission from Mozilla Corporation. However, you must not remove or change any part of the official binary, including Mozilla trademarks.").
- 82 The Document Foundation, TDF/Policies & TradeMark Policy (2013), https://wiki.documentfoundation.org/TDF/Policies/TradeMark_Policy (last visited June 8, 2013); *see also* Sugar Labs, Trademark (2012), <http://wiki.sugarlabs.org/go/Trademark> (last visited May 31, 2013) (similar); ArchLinux, DeveloperWiki:TrademarkPolicy (2011), <https://wiki.archlinux.org/index.php/DeveloperWiki:TrademarkPolicy> (last visited May 31, 2013) (defining "remixes" as derivative works and permitting trade mark use for remixes with minor changes such as adding applications from the archives or removing default applications, but not removing or changing any infrastructure components).
- 83 OpenJDK, *OpenJDK Trademark Notice*, v.2011/11/11 (2011), <http://openjdk.java.net/legal/openjdk-trademark-notice.html> (last visited May 31, 2013).
- 84 OpenStack Cloud Software, How To License The Powered By OpenStack Logo, <http://www.openstack.org/brand/powered-by-openstack/> (last visited May 31, 2013) ("As of January 1st, 2012, your product must pass any Faithful Implementation Test Suite (FITS) defined by the Technical Committee that will be made available on <http://www.openstack.org/FITS>, to verify that you are implementing a sufficiently current and complete version of the software (and exposing associated APIs) to ensure compatibility and interoperability. Your product will be required to pass the current FITS test on an annual basis, which will generally require you to be running either of the latest two software releases." Note, however, that the test suite was not yet available at the identified website at the time of this writing).
- 85 *See, e.g.*, Perl Foundation, Perl Trademark, http://www.perlfoundation.org/perl_trademark (last visited May 31, 2013) (requiring specific permission to use trade marks for conferences and software).

*owner of the trademark has more than perfunctory involvement in the production or quality of the licensee's goods even if the manner of use clearly indicates sponsorship by the trademark owner. On the other hand, if the licensee's use is on goods similar or identical to those produced by the trademark owner, purchasers may be likely to assume that the goods are actually manufactured by the owner of the mark. Greater control by the licensor may then be necessary to safeguard the interests of consumers who may purchase the goods on the basis of the licensor's reputation for quality.*⁸⁶

There should nevertheless be some effort to have standards that will ensure consistent quality, like the use of vendors authorised by the project or specifications of level of quality for the promotional product.

The remaining facts that courts have looked at in ownership cases are of less weight, and will not save a situation where the owner has not controlled the quality of the goods and services. Nevertheless, the project can position itself to its best advantage by documenting the creation of any logos and ideally owning the copyright in the logo design.⁸⁷ It should document when the name was chosen, when the project had its first public visibility on a website or project hosting site, when the software was first made available in alpha, beta and general availability, and the users to which the software was made available.⁸⁸ A project's staffing of software support channels will also demonstrate its ownership of the mark.⁸⁹

Projects should discourage third parties from using the project trade mark in a way that might suggest that the third party has some kind of control or oversight over the project and ask them to disclaim any official relationship with the project.⁹⁰ Any in-kind contributions to the project, like placement of advertising,⁹¹ or the contribution of hardware or server space, should be documented, at least informally with an email, as a contribution for the benefit of the project. This will avoid any ambiguity about ownership, for example, because the software is hosted on hardware owned by someone else.

The author has created a Model Trademark Guidelines project⁹² that incorporates the above recommendations, and welcomes others' participation in the project.

Who is Performing the Acts

We have seen the steps a project should take to ensure that a court would reach a legal conclusion that the project owns the trade mark and that it is valid, i.e., not a naked licence. But the analysis begs the question – who, exactly, is the person or organisation that makes up the "project" that is performing these acts?

As described above,⁹³ any type of legal entity, from an individual, through partnership, unincorporated association and corporation, may own a trade mark. All are legally valid choices, so it becomes a question of what person, natural or juristic, is behaving like the trade mark owner?

86 Restatement (Third) of Unfair Competition § 33, cmt. c (1995); *see also Experience Hendrix, LLC. v. Elec. Hendrix, LLC.*, No. C07-0338 TSZ, 2008 WL 3243896 at *7 (W.D. Wash. Aug. 7, 2008) ("The type of quality control required to prevent abandonment varies with the circumstances").

87 *See supra* note 62 and accompanying text noting that who invented the mark is a factor. Owning the copyright in the logo means that the project will have full control over its use. Another option would be to take an exclusive licence, including to the exclusion of the logo designer-copyright owner, so that the owner cannot license it to others.

88 *See supra* note 62 and accompanying text noting that who first affixed the mark is a factor. What is considered a "use" in which trade mark rights first arise is a complicated legal question and outside the scope of this article. Note also that this information will be valuable if an ordinary trade mark infringement situation arises, since in the U.S. trade mark rights accrue to the first in time.

89 *See supra* note 62 and accompanying text noting that "to whom customers make complaints" is a factor.

90 *See supra* note 62 and accompanying text noting that who the packaging and promotional materials identify as the owner is a factor.

91 *See supra* note 62 and accompanying text noting that who paid for advertising or promotion is a factor.

92 Model Trademark Guidelines, <http://modeltrademarkguidelines.org> (last visited June 5, 2013).

93 *See supra* note 24 and accompanying text.

Initial Ownership

It may be that when a project starts one individual is the main decision-maker – he or she has written the bulk of the code, picked the name, and set up the source code repository and website. In this situation, the owner of the trade mark would fairly clearly be the individual.

It may be, instead, that the ownership of the mark vests in more than one person, for example, where two or more individuals collaborate equally to create the project. This, in theory, could be problematic because it may mean that the trade mark is not functioning as a mark, i.e., as a sole source identifier if there are two owners acting independently.⁹⁴ Nevertheless, where the individuals are contributing to the same codebase the risk is minimal since there is only one product.

Where individuals are acting in concert, they may, in fact, be considered a common law partnership or unincorporated voluntary association. Neither type of legal entity requires any filing or formal act to come into existence;⁹⁵ instead, they will exist because the law imposes legal structure on concerted acts.

Informal legal organisation is not uncommon. Courts have had to deal with trade mark disputes with many kinds of volunteer organisations, like church groups, charities and clubs. The typical scenario is that a group of individuals will come together to work on a common project or interest, have a falling out, and each then claim to own the name⁹⁶ – a scenario that can also arise with a FOSS project.⁹⁷

With FOSS projects, however, because there generally is some thought about project governance and perhaps documentation of it, the project may be better off than other types of organisations when a court is trying to identify the owner. A "benevolent dictator" model may mean that the so-called dictator owns the trade mark because he or she is the ultimate decision maker about the finished product.⁹⁸ A meritocracy model may indicate that it is a partnership or voluntary association that owns the mark.

But there is risk in leaving the question of who owns the mark for a court to sort out. If a FOSS project was challenged, an adjudicator may indeed find that the project (whether it is an individual, partnership or unincorporated association) is the owner of the project trade mark and prohibit the challenger from using the mark. If a FOSS project was unlucky, though, after a falling out it may find that there is a stalemate and no one will be allowed to use the name going forward.⁹⁹

⁹⁴ 2 McCarthy, *supra* note 1, at § 16:40, n.2.30 (disfavoring joint ownership).

⁹⁵ See *supra* note 25.

⁹⁶ See, e.g., *Gemmer v. Surrey Services for Seniors, Inc.*, No. 10–810, 2010 WL 5129241, at *20 (E.D. Pa. Dec. 13, 2010) (adopting magistrate's report and recommendation holding that senior centre, not the volunteer who thought of the name for and organized a charitable event, owned the trade mark for the event); *St. Denis Parish v. Van Straten*, Cancellation No. 92051378, 2011 WL 5014036, at *4 (T.T.A.B. Sept. 28, 2011) (same); *100 Blacks in Law Enforcement Who Care, Inc. & 100 Blacks Who Care, Inc.*, Opposition No. 91190175, 2011 WL 1576733, at *4 (T.T.A.B. Apr. 12, 2011) (deciding which of two factions of an organization was the owner of the trade mark).

⁹⁷ For example, Tim Fox created the Vert.x project while at VMware. When he departed VMware for Red Hat, VMware demanded he turn over the Vert.x Github project, the Vert.x Google Group, the domain vertx.io and the Vert.x blog. Google Groups, An Important Announcement to the Vert.x Community (2013), <https://groups.google.com/d/msg/vertx/gnpGSxX7PzI/uRNaMtJaJJUJ> (last visited June 8, 2013). Ultimately everyone agreed to move the project to an independent owner, the Eclipse Foundation. Google Groups, Community: Please Make Any Objections Known! (2013), <https://groups.google.com/d/msg/vertx/WluY5M6RluM/gAvWftxSegUJ> (last visited June 8, 2013).

⁹⁸ The Linux operating system is an example of a benevolent dictator model: one individual, Linus Torvalds, ultimately decides what is included in the Linux kernel. Linux Kernel Newbies, KernelDevViewpoint (2013), <http://kernelnewbies.org/KernelDevViewpoint> (last visited May 14, 2013) (describing how patches ultimately are added to the Linux kernel, with Linus Torvalds deciding what to merge). He also owns the U.S. trade mark registration. United States Patent and Trademark Office, Trademark Status Document and Retrieval, http://tsdr.uspto.gov/#caseNumber=74560867&caseType=SERIAL_NO&searchType=statusSearch (last visited June 5, 2013).

⁹⁹ See, e.g., *LunaTrex, LLC v. Cafasso*, 674 F. Supp. 2d 1060, 1062 (S.D. Ind. 2009) (finding that, in the absence of an

It is therefore best to remove as much ambiguity as possible about who owns the trade mark, although still ensuring that the owner in name is acting like the owner in fact. In practical terms, this means that the project should publicly state who owns the mark, make it clear who may act on behalf of the trade mark owner, and allow only the owner to enter into agreements regarding the marks. For example, trade mark guidelines should name the owner and provide contact information for how to reach someone with authority to permit the use of the mark.¹⁰⁰

Another tripping point may be lack of clarity about who is in the legal position of trade mark owner and who is in the legal position of licensee. FOSS project trade mark guidelines typically do not differentiate between a licensed use – which is the kind of use that puts the trade mark at risk – and a referential use, or "nominative fair use,"¹⁰¹ which does not. Further, many project participants have a sense of ownership of the project and may behave as if they are the trade mark owner by setting up independent websites or making promotional goods. But where many people are behaving like the trade mark owner, a court may find that the many uses are not inuring to the project's benefit but rather are evidence of naked licensing. Ensuring that the trade mark guidelines are clear about which uses are pursuant to a licence,¹⁰² and ensuring that the use is described with enough detail that it will be considered a controlled use,¹⁰³ will increase the odds that a court will see the relationship between the project and the trade mark user as licensor-licensee rather than uses by "legal strangers"¹⁰⁴ that invalidate the trade mark.

Changes in Organisational Structure

Like any other kind of business, the answer to the question "who owns the mark" may not be the same over time as a project evolves. Throughout the project's growth and during any transitions, such as forming a corporation or adopting a formalised governance model, the project should be re-evaluating the factors a court will consider in deciding who owns the trade mark and act accordingly. For example, if the project transitions from a situation where the person who started the project approves all the commits to a more distributed commit authority, or a formal legal entity is created,¹⁰⁵ the project should re-evaluate who owns the trade mark and ensure that succession is clear, preferably through formal written agreement whether or not the trade mark is registered.

agreement, the trade mark was developed and used by a de facto partnership or joint venture, that all members of the partnership or joint venture were equally entitled to use the mark, and that none would be allowed to use it over the objections of the others; author cited); *Liebowitz v. Elsevier Sci. Ltd.*, 927 F. Supp. 688, 696 (S.D.N.Y. 1996) (noting that if the source is not uniquely plaintiffs or defendants, but some combination of their joint efforts, then the public would be confused by either party's independent production of journals without the other's input).

100 See, e.g., GNOME Foundation, Legal and Trademarks, <https://www.gnome.org/foundation/legal-and-trademarks/> (last visited June 2, 2013) (stating "One of the functions that the GNOME Foundation provides is to act as the legal owner for such GNOME project assets as the GNOME name and the GNOME foot. We must protect these trademarks in order to keep them. Therefore, we have some guidelines for their use and a standard agreement for user groups. These cover many common situations; if you need permission to use the GNOME trademarks in other ways or have other questions, please contact licensing@gnome.org").

101 "Nominative fair use" is where the defendant has used the plaintiff's mark to describe the plaintiff's product for the purpose of, for example, comparison to the defendant's product. This is contrasted with "classic fair use," where the defendant has used the plaintiff's mark to describe the defendant's own product. *Cairns v. Franklin Mint Co.*, 292 F.3d 1139, 1150 (9th Cir. 2002).

102 The Model Trademark Guidelines, cited in note 92 *supra* take this approach.

103 See *supra* notes 76-86 and accompanying text.

104 *Midwest Fur Producers Ass'n v. Mutation Mink Breeders Ass'n*, 127 F. Supp. 217, 229 (W.D. Wis. 1954) ("Said defendant has over a substantial period of time consented to the use of such names by many who were legally strangers to it, and has and is, in effect, offering to license and licensing anyone to use said names upon the payment to said defendant of a stipulated royalty or fee. Such practice is an unlawful and improper use of a trade-mark or claimed trade-mark, and amounts to an abandonment of any trade-mark rights that might otherwise exist in any names so used, and creates an estoppel against the assertion of trade-mark rights.")

105 See, e.g., *Third Educ. Group, Inc. v. Phelps*, 675 F. Supp. 2d 916, 922 (E.D. Wis. 2009) (holding that under state law, because the parties intended the corporation to be a successor to the voluntary association, the association's property, including the trade mark, passed to the corporation).

However, just because an organisation is formed does not dictate a change of ownership of the trade mark. The new organisation must be the one now taking the actions of a trade mark owner and exercising true oversight of the software product and related promotional products and services.

Conclusion

A trade mark may be a FOSS project's most valuable asset, protecting the reputation and goodwill of the project and ensuring that users get the features and functions they desire. Courts already struggle with identifying the proper legal framework for identifying a trade mark owner. The business model for FOSS projects increases the potential for a legal decision against the project's favour because it is non-traditional, unfamiliar, and has an express grant of the right to make new copies of the product.¹⁰⁶

But a few fairly simple steps outlined above – registering the trade mark, adopting trade mark guidelines and presenting a consistent appearance as the trade mark owner – will reduce the likelihood of a challenge and a loss of rights.

About the author

Pamela S. Chestek is the principal of Chestek Legal in Raleigh, North Carolina. She counsels creative communities on brand, marketing and copyright matters.

Licence and Attribution

This paper was published in the International Free and Open Source Software Law Review, Volume 5, Issue 2 (December 2013). It originally appeared online at <http://www.ifosslr.org>.

This article should be cited as follows:

Chestek, Pamela S. (2013) 'Who Owns the Project Name?', *International Free and Open Source Software Law Review*, 5(2), pp 105 – 120
DOI: [10.5033/ifosslr.v5i2.87](https://doi.org/10.5033/ifosslr.v5i2.87)

Copyright © 2013 Pamela Chestek.

This article is licensed under a Creative Commons UK (England and Wales) 2.0 licence, no derivative works, attribution, CC-BY-ND available at <http://creativecommons.org/licenses/by-nd/2.0/uk/>

As a special exception, the author expressly permits faithful translations of the entire document into any language, provided that the resulting translation (which may include an attribution to the translator) is shared alike. This paragraph is part of the paper, and must be included when copying or translating the paper.



¹⁰⁶ For an explanation of why a FOSS copyright licence is not a trade mark licence, see Pamela S. Chestek, *The Uneasy Role of Trademarks in Free and Open Source Software: You Can Share My Code, But You Can't Share My Brand*, 7 J. Intell. Prop. Law & Prac. 126, 129-30 (2012) (doi: 10.1093/jiplp/jpr197), reprinted in 102 Trademark Rep. 1028, 1034-37 (2012).

The European Union Public Licence (EURL)

Patrice-Emmanuel Schmitz^a

(a) Legal expert – www.Joinup.eu.

DOI: [10.5033/ifosslr.v5i2.91](https://doi.org/10.5033/ifosslr.v5i2.91)

Abstract

This paper details the origin and main characteristics of the European Union Public Licence (EURL), an OSI-approved free or open source software licence, copyrighted by the European Union. It focuses on the new version 1.2 of the EURL that has been drafted in 2013, which the European Commission reports will be published before the end of the year. However, comments are relevant for the version 1.1 as well. What makes the EURL unique is its multilingual working value, specific warranties, references to the Court of Justice of the European Union and its provisions related to licence compatibility, making its copyleft “variable” for facilitating interoperability. The operation of this copyleft component of the licence is probably its most specific aspect, sometimes wrongly understood as a possibility for “relicensing”. This is therefore especially developed in this paper.

Keywords

Law; information technology; Free and Open Source Software; licence; EURL; European Union

Origin of the EURL

From 2001 to 2005 the European Commission (EC) started focusing, in particular through programmes dedicated to reinforcing interoperability and the development of the Information Society, on the advantages of adopting the free/open source (FOSS) model for sharing software resources of public bodies within the EU, based on the use of open standards. One of the conclusions was: “the Commission should lead by example, distribute its own produced software and then encourage the public sector in Member States to do the same”.¹ As a licence is needed for any software sharing (redistribution for reusing, adapting, etc.), the EC set certain requirements for this licence. It must:

1. grant all Free (or Open Source) software freedoms;

¹ “Report on Open Source Licensing of software developed by The European Commission”, 16th December 2004, online at <https://joinup.ec.europa.eu/elibrary/case/open-source-licensing-software-developed-european-commission-applied-circa-solution-20>

2. ensure protection from exclusive software appropriation (therefore be a “share alike” or “copyleft” licence);
3. have working value in all official EU languages (so there is no need for sworn translators in Court and related institutions for translations);
4. conform with European copyright law and terminology;
5. include the “communication to the public” right, including Web distribution / Software as a Service - SaaS (in such case, the software is not distributed as a downloaded package or as a CD-Rom, but as a Cloud Computing application that remote users access via Internet)²;
6. clarify the applicable law and competent court, as requested by EU institutions;
7. approach warranties and liability in conformity with “Case law” (a general exclusion of liability is not valid before most European courts); and
8. not be too long, too complex, but be comprehensive and pragmatic.

Preliminary studies carried out in 2004³, showed that no existing licence was found that complied with at least four of the key requirements (N° 3, 4, 6 and 7). Therefore, the decision to write an “EURL” was taken. After a public consultation that provided substantial improvements⁴, about 50 persons contributed to the writing of the EURL. The work from the original team was complemented by contributions from IPR lawyers from 22 Member States.

As a result, the EURL version 1.1 was certified / approved by the Open Source Initiative (OSI) in March 2009. Since then, and particularly during the last few months, the use of the EURL for licensing projects has been growing strongly. The first yearly end-of-year evaluation (2012) counted about 500 projects (some of them with up to 100 licensed files), and new projects are published every week. The European Parliament has selected the EURL for the distribution of its first FOSS project.⁵

The European Commission considers that the EURL is not a “vanity licence” (where the main motivation of the author is just to forge “its own” licence and attach its name to it⁶), but answers to a number of relevant issues, starting from the fact that governments and public sector organisations in general in Europe are often legally obliged to use instruments with a working value in their local language (requirement N° 3). At least three additional points were also important to clarify (N°4, 6, 7): terminology, applicable law / competent court, and warranty and liability disclaimers.

Other points in the list are not unique to the EURL, even if the coverage of SaaS is not frequent (the OSL 3.0⁷ and the GNU Affero General Public License built on the GPL v3⁸ presents similar characteristics on this specific point). Some licences (in particular the very permissive ones, like

² The first EURL version (1.0) was less explicit on this specific point. It has been clarified in version 1.1.

³ The Report on Open Source Licensing of software developed by the European Commission, *op cit*, considered the OSL as the best choice and proposed two options: adapting the OSL or writing a specific licence. The Commission opted for writing the EURL.

⁴ Report on outcomes of public consultation about the EURL, 30th November 2005, online at https://joinup.ec.europa.eu/sites/default/files/GPOSS_adv-06_V11%2019%20Jan%2006.doc

⁵ Online at <http://www.at4am.org/eurl/>.

⁶ This “reproach” has been addressed to institutions like the NASA, after evaluation of the impact of the NOSA (Nasa Open Source Agreement): see comments from the US Department of Defence – <http://opensource.com/life/11/3/nasa-concludes-first-open-source-summit-aims-make-openness-default>.

⁷ Online at <http://opensource.org/licenses/OSL-3.0>.

⁸ Online at <http://opensource.org/licenses/AGPL-3.0>.

the BSD or the MIT) are much shorter, but it is commonly acknowledged that the EURL is concise and comprehensive compared with some other “copyleft” licences⁹.

EURL and Licence Proliferation

In the early days of free/open source software (meaning until the year 2000) the GNU/GPL v2 licence and its LGPL “library” variant were adopted by some 90% of all FOSS projects. Since then, the number and the frequency of use of other licences have increased strongly. OSI has officially “approved” more than 60 licences¹⁰. The GPLv3 and AGPLv3 introduced in 2007 have not replaced the previous GPLv2, which still seems to be the most used licence (e.g. by GNU/Linux). Some important business projects are driven by foundations (Apache, Mozilla etc.) promoting other FOSS licences. Such licence proliferation may be considered unfortunate, because it has made the work of developers more complex as it raises the potential of legal incompatibility at the time of distribution, when an ICT solution includes multiple FOSS components. However, it looks to be a definitive fact: nearly every week, new licences are drafted¹¹. The task of “OSI licence reviewers” as described in their code of conduct¹² seems endless, even considering that only a small part of all licences that could be OSD-compliant have been submitted to them: they do not currently approve many new licences (CeCILL 2.1 is a unique exception in 2013 so far).

To compensate the issue of licence proliferation, the EURL has chosen a system to ensure legal interoperability between potentially incompatible licenses (see below). The EURL has also inspired other (non-EU) governments (e.g. Quebec in Canada), which have asked permission to adapt the EURL so as to use it as a template for their own needs (changing names and jurisdiction only). In such case, maintaining the same list of compatible licences may strongly reduce the impact of such licence proliferation.

Similarly, the new (2013) OSI approved version 2.1 of the CeCILL licence¹³ (used by the French administration) now includes the EURL and the GPL/AGPLv3 as downstream compatible licences, which looks positive for developers from both communities.

The EURL Used as a “Reference”

Another point of interest for the EURL is to be part of the European Interoperability Framework (EIF) and to be used as a reference, especially in public software requirements and procurement agreements¹⁴. In line with the EU ministerial declarations¹⁵ on the opportunity to reduce

9 In particular, some analysts were disappointed by the complexity of the GPLv3 that is nearly three times longer. For example, Ernest Park noted: The EURL v1.1 is a legal instrument, simple and clear to interpret, with less baggage than the GPL v3 in “Freedom and choice in open source licensing – Comparing the EURL v1.1 and the GPL v3”, online at <http://www.linux.com/news/biz-os/legal/18749-freedom-and-choice-in-open-source-licensing-comparing-the-eurl-v11-and-the-gpl-v3>.

10 <http://opensource.org/licenses/alphabetical>

11 <http://projects.opensource.org/pipermail/license-discuss/>

12 <http://opensource.org/codeofconduct/licensing>

13 <http://opensource.org/licenses/CECILL-2.1>

14 See the Guide for the procurement of standard-based ICT / Elements of Good Practice, European Economics 23, March 2012, available online at <http://cordis.europa.eu/fp7/ict/ssai/docs/study-action23/d3-guidelines-finaldraft2012-03-22.pdf> and the ISA standard “Sharing and reusing clauses”, available online at http://joinup.ec.europa.eu/elibrary/document/isa_share_reuse_d_2-1-standard-sharing-and-re-using-clauses-contracts.

15 In 2005, the Manchester eGovernment ministerial declaration stated: “Member States will, during the period 2006-2010, share technologies, where appropriate develop common solutions and work towards interface harmonisation of existing solutions” (in the field of eProcurement), and in 2009, the Malmö ministerial declaration on eGovernment stated: “The Open Source model could be promoted for use in eGovernment projects.” (online at

development costs by sharing and reusing software, contracting authorities should obtain from their suppliers the right, not only to use but also preserve their rights to redistribute the developed software in the future, as the case may be (e.g. in case the development is successful, interesting for other stakeholders, and if a sharing decision is taken by the authorities).

Therefore, suppliers must not only assign or license to the contracting authority the IPR of the solution (including the software code), but must also guarantee that it can be legally (re)distributed to third parties by the contracting authority, without any copyright infringement issue or licence conflicts (if several components of the solution were distributed under non-compatible FOSS licences) and royalty free (e.g. to cater for the situation in which some proprietary standard or patents were implemented).

An example¹⁶ of such provision is:

“The supplier will grant that the purchasing authority has the right to distribute the delivered application under the European Union Public Licence (EURLv1.1 or later) or any licence(s) providing the rights stated in the article 2 of the EURL.”

Such reference to the EURL is especially convenient due to its multi-lingual validity: it can be part of public procurement specifications written in any language of the EU.

Rights Granted by the EURL v1.1

The rights granted (by article 2 of the EURL) to the recipients of the covered Work are unmodified through all versions of the license. They are those required by the Open Source Definition (OSD): to use, reproduce, modify, communicate, and re-distribute the work.

In addition, it is stated (in article 2) that the exercise of such rights and the use of necessary licensor patents (if any) must be royalty free (RF). This means that one may sell software or works covered by the EURL (e.g. for a lump sum representing a contribution to the development costs of a standard or of a software solution, or a fixed maintenance fee for support services etc.), but once this is done, any further exploitation of the covered Work itself (but not necessary a larger work using the EURL software) cannot be subject to the payment of royalties (e.g. a fee – even small or reasonable – per use or per user).

This principle of RF licensing, expressly formulated in article 2 of the EURL, is in fact fundamental to any FOSS licensing. When freedom is granted to all possible recipients in the world to exploit and make derivative works and to redistribute such works to anyone, the control of the use for the charging of royalties becomes impossible to implement in practice. As highlighted in a 2012 workshop organised by the EC¹⁷, this principle has yet to be integrated by many institutions, like the standards developing organisations (SDO), for whom development costs need to be covered, which is economically legitimate. However, in so far as SDOs want their specifications to be implemented by FOSS communities and also recover their costs by adopting a FRAND (fair reasonable and non discriminating) licensing policy, they do and will have to

<http://ec.europa.eu/digital-agenda/sites/digital-agenda/files/ministerial-declaration-on-egovernment-malmo.pdf>)

16 This example is given in Appendix 1 of the Guide accompanying the European Commission communication “Against lock-in: building open ICT systems by making better use of standards in public procurement” - COM(2013) 455 / SWD(2013) 224, 25th June 2013.

17 DG Enterprise workshop, 22nd November 2012 “Implementing FRAND standards in Open Source: Business as usual or mission impossible?”, reported online at http://ec.europa.eu/enterprise/sectors/ict/standards/extended/event_open_source_en.htm .

imagine alternative solutions: global agreements with FOSS representative foundations or a dual licensing policy (RF for FOSS implementations, reasonable royalties possible in other cases and where infrastructure or base technology is concerned). This would not be discriminatory against non-FOSS (or proprietary, or infrastructure) implementations, as FOSS is not a group, a product or a technology, but a legal regime that anyone may adopt for distributing software¹⁸.

What Made the EURL v1.1 Specific?

The EURL is specific and different from other FOSS licences on a number of points:

- **Multilingualism**
This point is the most visible: like many other European Union legal instruments, the EURL is available in 22 languages. Gaelic and Croatian version have yet to be published.
- **Terminology**
The EURL is drafted to work under European Law, even if it may be used outside the European Union and submitted to third country courts. Relevant provisions include the copyright terminology (the “communication to the public”), the limitation of liability clause, and the reference to European treaties.
- **Warranty**
The covered work is licensed without warranty, except one important one: the original licensor and every subsequent contributor warrant that they are the authors (or licensees with sufficient rights) of their own contributions. This reinforces the security offered by the licence (regarding possible copyright infringements) and is in the end the type of requirement that one finds in most reasonable contributor agreements.
- **Reference to the European Court**
Taking advantage of the treaties (TFEU), the EURL will benefit from interpretation by a unique jurisdiction in case of litigation: the Court of Justice of the European Union. In addition, the 28 Member States jurisdictions may address questions and be answered by a single European Court.
- **Variable “Copyleft”**
The EURL is “copyleft” on source code and binaries, but its share-alike effect is, in the interest of license interoperability, variable¹⁹ in the case of combined derivative works, as discussed below. The fundamental purpose is to avoid exclusive appropriation of the covered software.

Changes Planned in the EURL v1.2

As from 2012, the EC’s objective is to reinforce its legal toolkit (including the EURL) for more software sharing, reuse and interoperability. Two key objectives are increased compatibility, and

18 See Italian Supreme Court decision (Corte Costituzionale, 22nd March 2010) <http://www.cortecostituzionale.it/actionSchedaPronuncia.do?anno=2010&numero=122>, commented by Carlo Piana in IFOSSLR Vol 2, No 1 (2010), DOI: 10.5033/ifosslr.v2i1.38.

19 The notion of « variable copyleft » was coined for the EURL by Rowan Wilson (Oxford University) <http://www.oss-watch.ac.uk/resources/eurl>.

updating to the European legal framework. On the one hand, if “copyleft” aims to protect against appropriation, licence conflicts may also create legal barriers between FOSS communities. Therefore the EURL includes an appendix of “compatible licences” providing interoperability with a list of similar licences (based on a 2006 study²⁰). However, by 2012 this list was outdated. On the other hand, several changes in the European legal framework (the entry in force of the Lisbon Treaty in 2009) meant that a new version of the EURL was considered, version 1.2²¹, and a working draft was submitted to public consultation²² as from mid-December 2012. The publication of the new version was planned originally by June 2013, but due to translation and organisational reasons it is now promised by the end of 2013.

The EURL v1.2 will present the following main differences with the previous v 1.1:

- Terminology is adapted in consideration of the Lisbon Treaty (this concerns the name of EU institutions and the references to the TFEU) in articles 14, 15;
- The licence now covers “the Work” – in version 1.1, it referred to both “the Work” and to “the Software”, which was confusing. The Work can be software, but also any other kind of copyrighted work: copyrighted data, specifications, documentation etc. – the modification is done in the introduction and in articles 1, 4 and 7;
- The scope of possible “additional agreements” is enlarged (i.e. they may cover jurisdiction and any other provisions, in so far as the granted rights are not restricted) – in article 9;
- The list of compatible licences is extended to licences published after the initial EURL: GNU GPLv3, AGPLv3, MPLv2, LGPL v2.1 and v3, CeCILL v2.1. The list is extended to the EURL itself (all versions as from v1.1) – in the Appendix of compatible licences according to article 5 EURL.

Software covered “by the EURL” will be automatically covered by the new license version, but licensing of software covered by “the EURL v1.1 only” will not. After publication of the EURL v1.2, it will still be possible to distribute code under the EURL v1.1 only.

As reported above, the modifications introduced by v1.2 will stay quite limited. The main change is the extension and management of the list of compatible licences. In particular, the extension to the GNU GPL v3, and to the GNU AGPL v3 were welcomed without restriction by communities²³ and on the public discussion forum implemented on Joinup.eu²⁴ Compatibility with the GPL v3 looks to be the solution for a question of principle (more than for a practical issue, as no real interoperability problem was reported so far): the EURL v1.1 has been presented by external analysts²⁵ as “incompatible by design” with the GPL v3, which was not the aim of the European Commission. Still today, as reported by Professor Moglen, there are bitter regrets that the European Commission declined (in 2006) to participate in the making of the GPLv3, on the

20 Fabian Bastin and Philippe Laurent, «Study on the compatibility mechanism of the EURL »

<https://joinup.ec.europa.eu/system/files/doc/Doc3ef5.pdf>

21 The draft EURL v1.2, with changes highlighted, is published on the European Commissions' Joinup site :

<https://joinup.ec.europa.eu/sites/default/files/EURL%20v1.2%20-%20Draft%20EN%20v15%20Mar%202013.pdf>

22 The contributions to the public consultation are published: <https://joinup.ec.europa.eu/community/eurl/topic/public-consultation-draft-eurl-v12>

23 Comments done on LWN network are illustrative <http://lwn.net/Articles/529737/#Comments>

24 See e.g. <https://joinup.ec.europa.eu/community/eurl/topic/public-consultation-draft-eurl-v12>

25 Ernest Park, Freedom and Choice in Open Source Licensing: Comparing the EURL v1.1 and the GPL v3

<http://www.openlogic.com/wazi/bid/187980/Freedom-and-Choice-in-Open-Source-Licensing-Comparing-the-EURL-v1-1-and-the-GPL-v3>

ground that it could only participate in government-to-government processes²⁶. This may be the reason why, while accepting compatibility with the GPLv2 and a “de facto” compatibility with the GPLv3, the FSF still considers the EURL v1.1 as globally incompatible with the GPL, which is the most confusing and contradictory²⁷. The publication of v1.2 should at least close this controversial chapter, and –hopefully – pave the way for greater understanding.

How is the EURL's Variable Copyleft Implemented?

Interoperability (at licence level) is the possibility to reuse the covered code in other projects, possibly in combination with code(s) covered by other licences, while keeping the freedom to distribute the resulting combination, even when considered as a derivative or composed work under copyright law.

Interoperability is a non-issue with permissive licences (as the BSD, the MIT) because – with the exception of respecting copyright notices - they establish no conditions for copying, merging and/or redistributing the covered code, even inside the software code of proprietary or non-free applications.

Interoperability becomes an issue with “share-alike” (or “Copyleft”) licenses, when a binding condition of the licence is to keep the covered code and its evolutions under inherited FOSS conditions, in order to avoid its exclusive appropriation under non-free licensing. Just how far this share-alike obligation is applied with respect to derivative or composed works based on the original covered work is often debated, in particular with regard to GPL licenses.²⁸

The EURL is one of these share-alike licences, and the following question is posed: how strong is the EURL copyleft? In other words, to what extent must any re-distribution of the work or any combination of software with the work be done under the same EURL licence, according to its share-alike terms? And therefore, is the work protected from subsequent distribution under other licensing terms, which could lead to appropriation for the benefit of a third party software vendor?

In Europe, there are still some doubts whether the concept of “strong copyleft”, whereby simply linking²⁹ the code covered by a “copyleft” licence with another source code automatically may extend the coverage of the licence to this other code, would be generally considered effective (in any EU member state and whatever the licence, GPL, EURL or any other could be). There are specific exceptions for interoperability implemented by Directive 91/250 on the legal protection of computer programs. In May 2012, the Court of Justice of the European Union interpreted Directive 91/250, “as meaning that neither the functionality of a computer program nor the programming language and the format of data files used in a computer program in order to exploit certain of its functions constitute a form of expression of that program and, as such, are not

26 Eben Moglen, An introduction to the most used FOSS licence, the GPL license, in :European Parliament – Legal aspects of free and open source software – compilation of briefing notes / p. 12

<http://www.europarl.europa.eu/document/activities/cont/201307/20130708ATT69346/20130708ATT69346EN.pdf>

27 FSF declares EURL 1.1 compatible with GPLv2 and details how – via CeCILL – the EURLv1.1 is also compatible with the GPLv3, but still categorises the EURL as GPL-incompatible (!) <http://www.gnu.org/licenses/license-list.html#GPLIncompatibleLicenses>

28 Malcolm Bain, “Software interactions and the GNU General Public Licence” IFOSSLR 2010 p. 165 <http://www.ifosslr.org/ifosslr/article/view/44/74>

29 Linking makes two software programs work in a single application without merging their source code. Generally speaking, static linking combines components through compilation, copying them into the target application and producing a merged object file that is a stand-alone executable., and dynamic linking combines components when the application is loaded (load time) or during execution (run time).

protected by copyright in computer programs for the purposes of that directive".³⁰ Although this judgement was not taken in the framework of free software distribution, it might have repercussions in this field, too. More particularly, it raises the question if, by licensing his/her work, a copyright holder can restrict or impose conditions on legitimate licensees from reproducing and distributing (under any other licensing terms of their choice, FOSS or non-FOSS) the specific portions of the code that are strictly necessary for linking / implementing interoperability between the licensed program and other works, such as data formats or APIs (application programming interfaces). The question is most probably still open³¹ and hopefully the Court will have the chance to clarify this matter in future case-law.

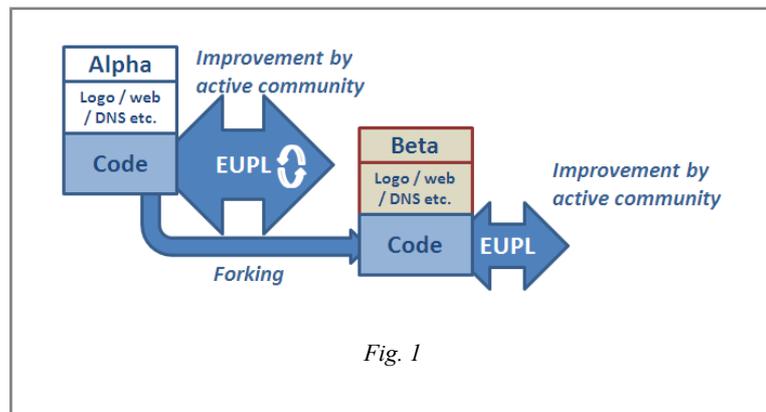
In order to understand the way the "variable copyleft" of the EURL operates, we can analyse three cases:

- a) The normal case where a copy or a derivative work is distributed
- b) The exception for interoperability, implemented by article 5 of the EURL
- c) Inside the exception, the case where a more permissive licence could be applied

a) The Normal Copyleft Reuse Under the EURL

With the aforementioned reservations, we can state that the EURL "copyleft" is as strong as possible, on source code and binaries of copies and all derivative works of the covered work (derivative within the meaning applied by a court interpreting the license), with defined interoperability exceptions.

Let's first consider the normal case with regard to the distribution of code under the EURL:



- A project "ALPHA" is more than just its software code: it is an organisation, owned by a person or a body, with an active community of developers, a web site, DNS, logo etc. Globally, this project "ALPHA" can never be "re-licensed" outside the will of its original

³⁰ Decision online at <http://curia.europa.eu/juris/document/document.jsf?text=&docid=122362&pageIndex=0&doclang=en&mode=req&dir=&occ=first&part=1&cid=564907>

³¹ For a specific discussion on linking (in the context of the GPL), Malcolm Bain, op cit. <http://www.ifosslr.org/ifosslr/article/view/44/74>

licensor (who is free, as the 100% copyright owner, to provide exceptions or to distribute the project software under various licences, which is called dual or multiple licensing).

- Re-distribution of the code of project "ALPHA", covered by the EURL, is possible inside the context of another project (e.g. "BETA"), meaning after copying and pasting ALPHA's code into BETA's software, as is or with modifications, and thus making BETA's code a derivative work according to applicable copyright law. -In all events, this redistribution must be done under the same EURL licence.

This is sometimes known as a "forking", when BETA takes all or most of ALPHA's code and distributes it as another owner (of the derivative work), brand name, logo, web site etc. Forking, as such, is rare, at least when the original licensor organises an active community around its ALPHA project: if this is the case, all improvements will normally be done and shared within the ALPHA project, without needing to create any new BETA project.

Forking may occur for 1) licensing / philosophical reasons or 2) for functional / technical reasons:

- 1) A first example, is the case where ALPHA's licensor has lost its independence (e.g. is purchased by a proprietary vendor), and the community decides to re-launch the project to preserve EURL licensing (though this is not likely to happen if the licensor is a public sector body);
- 2) A second example is the case where ALPHA's licensor does not want to integrate/support certain new functions. For example, an Indian government wants to localise/adapt software distributed by the European Parliament in local Indian languages, but the EP does not want to be involved in this process. However, the new Indian project code must also be distributed under the EURL.

The hypothesis where a portion of the covered code is merged in another project is similar: as a derivative, this project must be covered by the EURL, in case it is distributed.

b) Exception to the “Normal Copyleft” (Reuse in Other Copyleft Works)

The third paragraph of Article 5 EURL was written for interoperability reasons: to allow the covered code to be integrated with other projects' code covered by other stronger or weaker copyleft licences. “Integration” is here in its widest sense where a derivative work is produced, including mixing significant parts of the code as resulting from a copy/paste operation as described above. In other cases where the resulting work is not derivative, but a simple compilation or aggregate, this paragraph will not apply. This third paragraph reads as follows:

“If the Licensee Distributes and/or Communicates Derivative Works or copies thereof based upon both the Original Work and another work licensed under a Compatible Licence, this Distribution and/or Communication can be done under the terms of this Compatible Licence.”

In the EURL v1.2, the list of compatible licences published in the Appendix contains the following licenses (v 1.2 additions to the Appendix of v.1.1 are in bold):

- *GNU General Public License (GPL) v. 2, v. 3*

- *GNU Affero General Public License (AGPL) v. 3*
- *Open Software License (OSL) v. 2.1, v. 3.0*
- *Eclipse Public License (EPL) v. 1.0*
- *CeCILL v. 2.0, v. 2.1*
- *Mozilla Public Licence (MPL) v. 2*
- *GNU Lesser General Public Licence (LGPL) v. 2.1, v. 3*
- *Creative Commons Attribution-ShareAlike v. 3.0 Unported (CC BY-SA 3.0) - for works other than software*
- *European Union Public Licence (EURL), any version as from 1.1*

The presence in the list of weaker copyleft licences (the LGPL and the MPL) may look unnecessary for most cases of integration: these licenses permit larger works incorporating their code to be distributed under the EURL. However, in case the EURL covered code is actually mixed into the component covered by the LGPL or the MPL, the inclusion of these licenses in the Appendix is useful.

The interoperability exception of the EURL will allow licensees running a third project “DELTA”, to reuse files or source code covered by one of the above compatible licences in the DELTA project code, and to insert or merge the EURL covered code in DELTA's code: they can licence the resulting work as a whole under the compatible licence.

Notwithstanding the permission to authorise “this distribution and/or communication” of the new DELTA project software “as a whole” under a compatible licence, the EURL's provisions still apply to the part of the code that was originally covered by the EURL. In particular, it maintains the attribution obligations (article 5: the Licensee shall keep intact all copyright, patent or trademarks notices and all notices that refer to the Licence and to the disclaimer of warranties).

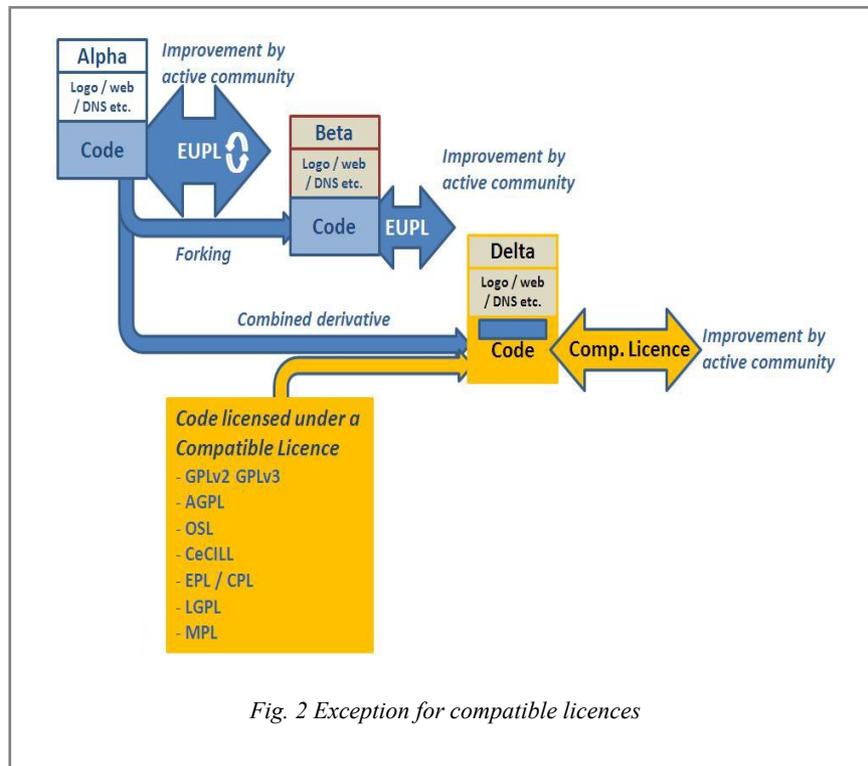


Fig. 2 Exception for compatible licences

Conditions for such “variable copyleft” are as follows:

1. Software code covered by the EURL is combined in/with another, different work.
2. The combination (larger work) forms a derivative work (i.e. the covered code was copied and pasted in another file, covered by another licence) or is otherwise covered by the other license, so that the resulting merged code must be licensed as a whole under the new license. Keeping distinct licences, like for the various parts of an aggregate work, is not an option (because the codes are mixed).
3. The other work, with which the code covered by the EURL is merged, is licensed under a Compatible Licence (according to the list).
4. The same compatible licence (according to the list) is used to license the new larger work “as a whole”.

The exception for compatible licence described above to relicensing some or all of the EURL covered “code” should not be understood as the possibility to “relicense” a “**project**”³². As said above, this is obviously not the case: the reuse of some EURL code in the project “DELTA” will not impact the project “ALPHA”, but just the code that instance of the EURL code that has been reused.

32 For example, the too brief formulation used by the Free Software Foundation may induce recipients in error: “The EURL allows relicensing to GPLv2, because that is listed as one of the alternative licenses that users may convert to”, at <http://www.gnu.org/licenses/license-list.en.html#GPLIncompatibleLicenses>

This is possible where:

1. the "daughter project" DELTA is (by decision of its own licensor and because code under these licences - EPL, LGPL or MPL - was reused) distributed under one of these more moderately copyleft licences listed as Compatible;
2. that some code from DELTA is combined or forked in a "grand-daughter" project "OMEGA", and;
3. that the OMEGA licensor decides to distribute its executable version under proprietary terms, something that is permitted, subject to certain conditions, by the moderate copyleft licenses.

Even in such a case (that has never occurred in real world so far) the portions of the DELTA code present in OMEGA will stay covered by their primary licence (EPL, LGPL or MPL) and – as stated before – the EURL covered code that is present in these files will stay covered by the EURL provisions and marked with its specific attributions. These files must stay FOSS and publicly available as source code, but the copyleft is generally limited at file level according to the provision of these licences (meaning without any copyleft impact on the rest of the OMEGA project).

This possible exception has made some analysts to declare that the EURL *"gives recipients ways to relicense the work under the terms of other selected licenses, and some of those only provide a weaker copyleft. Thus, developers can't rely on this license to provide a strong copyleft"*³³.

This point is of course – at least theoretically – founded. But we have to see it in a context, and temper it:

- The term "relicense the work" is somewhat ambiguous, as previously stated.
- Some compatible licences provide a "weaker" copyleft (LGPL, MPL, EPL): it does not mean that these licences are weak or permissive: they are copyleft, but at file level, without the aim of propagating the licence coverage by e.g. dynamic linking.
- The strict focus on "strong copyleft" may not be ideal in an interoperable world, where multiple FOSS licences coexist. Furthermore, the notion of "strong copyleft" is still unclear, debated and has not received confirmation from European case law.

Conclusion

The above series of examples illustrate that the EURL achieves several of its aims:

- It intends to protect effectively the covered code and derivative works from exclusive appropriation by a third party;
- It makes some part the covered code reusable in OTHER free software projects under other licenses (without re-licensing the original project); and
- It does not prevent the reuse of some code of these other projects by the software industry

³³ FSF – op. cit.

with a variety of business models.

The EURL is not a goal in itself. It is just a tool for facilitating the distribution of copyrighted work by new categories of FOSS licensors, including (but not exclusively) the European public sector authorities and enterprises. The tool results from searching for the best possible compromise between copyleft (with the aim to avoid exclusive appropriation of the covered work) and legal interoperability (with the aim to see the work widely used in many other projects and to facilitate the distribution of these projects).

The tool is not perfect, it has been adapted twice (v1.0 in 2007, v1.1 in 2009) and changes that are expected in 2013 (v1.2) are reinforcing interoperability aspects.

In the future, it may be that the evolution will continue with new versions of the EURL, or that a better legal instrument will eventually be adopted and implemented to replace software licences. Two directions look possible in the current context:

- More copyleft licences follow the EURL example and develop their list of compatible licence³⁴;
- The relevant licence steward organisations (despite all their differences) unify their efforts and produce a multilingual working, worldwide valid, comprehensive licence with the aim to conciliate the requirements from most FOSS stakeholders. In such case, the EURL may completely disappear or become a facet in a wider project.

However, predicting the future is hazardous; as everyone knows that yesterday is history, today is a gift, tomorrow is a mystery...

References

- The EURL v1.1 and v1.2 – text of the licence, in 22 languages – Joinup.eu.
<https://joinup.ec.europa.eu/software/page/eurl>
- Guidelines for using the EURL <https://joinup.ec.europa.eu/software/page/eurl/eurl-guidelines>
- Guidelines on public procurement of Open Source Software
<https://joinup.ec.europa.eu/elibrary/document/guideline-public-procurement-open-source-software>
- Spanish Royal decree 4/2010 (English version) see in particular article 16
http://administracionelectronica.gob.es/recursos/pae_000002017.pdf
- The EURL in Italy: www.eurl.it
- “Experience of introducing the EURL in ISTAT” (Carlo Vacari 2010) presentation slides (in Italian) : <http://fr.slideshare.net/vaccaricarlo/introduzione-eurl-in-istat>
- Malta public sector software distribution policy

³⁴ This is the way followed by the new version 2.1 of the CeCILL licence, which is now downstream compatible with the GPL, AGPL and EURL - <http://www.cecill.info/index.en.html>

https://www.mita.gov.mt/MediaCenter/PDFs/1_GMICT_P_0097_Open_Source_Software_v2.0.pdf

- Guide for the procurement of standard-based ICT / Elements of Good Practice – (European Economics 23 March 2012) - <http://cordis.europa.eu/fp7/ict/ssai/docs/study-action23/d3-guidelines-finaldraft2012-03-22.pdf>
- ISA standard “Sharing and reusing clauses”
http://joinup.ec.europa.eu/elibrary/document/isa_share_reuse_d_2-1-standard-sharing-and-re-using-clauses-contracts

About the author

Patrice-Emmanuel Schmitz is a legal expert at www.Joinup.eu.

Licence and Attribution

This paper was published in the International Free and Open Source Software Law Review, Volume 5, Issue 2 (December 2013). It originally appeared online at <http://www.ifosslr.org>.

This article should be cited as follows:

Schmitz, Patrice-Emmanuel (2013) 'The European Union Public Licence (EURL)', *International Free and Open Source Software Law Review*, 5(2), pp 121 – 136
DOI: [10.5033/ifosslr.v5i2.91](https://doi.org/10.5033/ifosslr.v5i2.91)

Copyright © 2013 Patrice-Emmanuel Schmitz.

This article is licensed under a Creative Commons UK (England and Wales) 2.0 licence, no derivative works, attribution, CC-BY-ND available at <http://creativecommons.org/licenses/by-nd/2.0/uk/>

As a special exception, the author expressly permits faithful translations of the entire document into any language, provided that the resulting translation (which may include an attribution to the translator) is shared alike. This paragraph is part of the paper, and must be included when copying or translating the paper.



Book Review: 'Thoughts on Open Innovation', edited by Shane Coughlan

Kari Kärkkäinen^a

(a) Director of Program Management, PacketVideo Corporation; Editorial Coordinator of International Free and Open Source Software Law Review; LLM, MBA, BSc

DOI: [10.5033/ifosslr.v5i2.92](https://doi.org/10.5033/ifosslr.v5i2.92)

Abstract

Kari Kärkkäinen reviews *Thoughts on Open Innovation* (ed. Shane Coughlan, 2013) which is a collection of essays discussing various topics around the concept of Open Innovation.

Keywords

Law; information technology; Free and Open Source Software; Open Innovation; OpenForum Academy, book review

The book “Thoughts on Open Innovation”¹ was launched at the Digital Agenda Summit in Dublin in June 2013. The book aims to address the challenges surrounding Open Innovation; its precise scope, its impact on daily life and the policy measures needed to sustain it continue to be heavily discussed and debated. Its predecessor was “The First Openforum Academy² Conference Proceedings”³ from September 2012 which also was a collection of essays mainly considering Open Innovation in the context of economics, society and global affairs, and this new book, on the other hand, covers openness more as it relates to software, data and access.

The introduction to the book is by Karel De Vriendt, a retired IT expert who worked for the European Commission for twenty years being actively involved in initiatives such as the Open Source Observatory and Repository (OSOR). He attempts to explain the basic concept of Open Innovation by first referring to the definition introduced by Professor Henry Chesbrough of University of California Berkeley but, however, today, the book claims, Open Innovation has a broader meaning and is part of the other “open” concepts, including Open Knowledge, Open Data and Open Source Software. The basic idea, the introduction continues, is that “by collaborating with others, by re-using (and by being allowed to re-use) the results of the efforts of others and by allowing others to use and improve the results of our efforts, we all get better.”

The book is introduced as attempting to address the following questions: “[H]ow can we balance openness with the need of companies to stay competitive and to make a profit ... and to provide

1 http://www.openforumacademy.org/library/ofa-research/Thoughts_on_Open_Innovation.pdf

2 According to its website, OpenForum Academy is an independent programme established by OpenForum Europe and its broad aim is to examine the paradigm shift towards openness in computing that is currently underway, and to explore how this trend is changing the role of computing in society. Link to OpenForum Academy's home page: <http://www.openforumacademy.org/>

3 <http://www.openforumacademy.org/research/the-first-openforum-academy-conference-proceedings>

enough incentives to bright spirits to continue to innovate? Is openness an absolute good: should all knowledge, all data, all software, all standards etc. be open or are there situations where openness should be avoided...? How do we organise the involvement of as many individuals or organisations as possible in efforts to solve societal issues using Open Innovation? How do we organise Open Innovation projects and ensure that such projects are, and remain, 'Open'?"

The author also explains the structure of the book, which is the following: It consists of an introduction and nine essays. The first two essays give the big picture. The two following essays describe examples on how Open Innovation works in practice. Then the next three essays deal with some of the most widely debated topics in the world of Openness: Openness and Intellectual Property Rights (IPR) in Information and Communication Technologies (ICT) standardisation, Open Source Software in public procurement, and Open Source Software in the commercial world. The book then concludes with two more essays which are of a more philosophical and visionary nature. The review of the essays below is organised based on these groupings.

“Context”

In this section of the book there are two essays that are there to give the bigger picture, as mentioned above.

In the first one, “*Openness and the Pursuit of Knowledge*” by Andrew Updegrave, a co-founder and partner of the Boston law firm Gesmer Updegrave LLP and a legal counsel to numerous standards development organizations and open source foundations, in the author's words, he “review[s] some of the many ways and domains in which this revolution [towards openness] is occurring, highlight[s] some of the legal tools that innovative individuals have created in order to facilitate this process and offer[s] thoughts on how these important developments in the acquisition and sharing of knowledge can best be encouraged to thrive in the future.” Basically the author first covers historical developments going back to the time of Thomas Jefferson and claiming that then there was no need for a legal system to protect IPR because the benefits to the creator were often low. He explains that the acquisition of knowledge was a linear process and that the laws and legal tools evolved to reflect this “insular process of creation” and to mainly protect the rights of the creators. Now, especially in the wake of the Internet, it is argued, these limitations have disappeared and the creators are relaxing their ownership rights to mutually enjoy the benefits of collaboration. Over the years the laws that evolved to reflect this balancing of interests have become more uniform throughout the world through various treaties, e.g. the Berne Convention, but, according to the author, there is still debate over whether the existing IPR laws need to evolve further, and he continues by suggesting areas where legislative change could be used (e.g. fair use and software patents). The characteristic of this, what he calls a revolution in thinking, is the concept of “openness”, including such “open” methodologies and rule sets as Free Software/FSF, open content (e.g. Creative Commons), and even open hardware. In his view, the Internet has changed the way for creating and sharing knowledge and that the trend towards openness is fundamental and sustaining, which also requires a fundamental change in legal tools and laws, of the benefits of whose liberalisation he provides some examples. He concludes by stating that “[w]hile this experimental process continues, restraint on the part of legislatures, and a willingness to be open-minded on the part of the courts, may provide the best route to eventually settling on a new balance between the IPR of creators and inventors, on the one hand, and re-users and end-users on the other.”

The second essay is called *Open Innovation in the Real World* and it is written by Shane Coughlan,

who, besides also being the editor of this book, is the Global Director of Licensing at Open Invention Network and a former Editorial Coordinator of this very law review. The essay discusses what Open Innovation actually is and how it works in real life, and starts, in a way repeating what was discussed in the Introduction of the book, by describing Professor Henry Chesbrough's definition of Open Innovation: "Open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as firms look to advance their technology." The author suggests that this is then mainly about reducing research and development costs by acquiring third-party innovation and, thus, the opposite of Closed Innovation and strict control of IP, and that this positioning as opposite IP management techniques is fairly limited. The essay proposes that there is, in fact, value in considering the broader picture instead of simply focusing on IPR strategy and it, therefore, describes Open Innovation as an umbrella term for approaches to openness in many fields, the unifying concept being "to share ideas in a way that helps stakeholders obtain useful solutions today and a fertile ground for developing solutions tomorrow." Free Software, according to the author, has been one of these first fields of which simple rules that allowed developers to use, share and improve software have been gradually expanded to numerous other fields through e.g. Creative Commons, Wikipedia and OpenStreetMap (which is discussed in more detail in another essay of this book). The essay also talks about "network effect" and how "no company can employ all the minds that can potentially contribute to solving a problem," and, thus simple and fair broad collaboration is needed, regardless of potential challenges described in the text, especially since the pooling of knowledge and development of common platforms enable fast deployment of advanced solutions. At the end, for Open Innovation, in the author's view, the real questions are whether the existing measures, mainly devised for the Closed Innovation approach, are still suitable in today's broader marketplace, and "how do modern societies address the challenge of ensuring that Open and Closed approaches to innovation are allowed free, fair and complete competition in this context."

"Examples"

The next two essays of the book provide examples on how Open Innovation works in practice.

In *Bottom-Up Creation of Open Scientific Knowledge* Peter Murray, a contemporary chemist who has held various professional and academic positions and who campaigns for Open Data and is on the advisory board of the Open Knowledge Foundation (OKF), who had already published a chapter in the previous OpenForum Academy book, together with his colleagues from the OKF cover examples from diverse areas. According to the essay, Open Science is too big and multifaceted a term to be defined precisely, but it "covers at least the spectrum of materials, process, culture, formal specification and activities," and, therefore, instead of summarising it, it was decided to bring together stories, four in total, under the umbrella of "bottom-up Open Science." It is stated that all stories have the core belief that individuals and small groups working together can make a difference by exchanging ideas, setting up tools and content, and by growing communities.

The first story (Bottom-up Open Chemistry – the Blue Obelisk, by Peter Murray) is about a group of "chemical hacker activists" who agreed to loosely coordinate their efforts under the name "Blue Obelisk" for creating software components for most of the chemical infrastructure and algorithms for pharmaceuticals and materials since almost all chemical software and data is typically closed. According to the story, their main challenges included that chemistry prefers to buy its solutions (not engineer its own), that academics producing software often get little credit, that it is difficult to get funding, and that the commercial domain is very fragmented making semantic

interoperability difficult.

The next intriguing story (*Sample Size of One*, by Bastian Grashake) is about the Quantified Self (QS) movement which is a community of people most of whom collect different kinds of data about themselves, including, for example, dietary composition, physical exercises and sleep habits. QS participants use their data to perform experiments with the sample size of one, the story explains, but many of them, on the other hand, also openly share their data with others thus allowing for experiments that overcome the limitations of the sample size of one and “show how science can be performed in a bottom-up fashion.”

The third story (*A new role for libraries in open access information management*, by Tom Olihjoek) argues that libraries are suffering from an identity crisis and are forced to re-assess their role as suppliers of information because, despite the introduction of the Internet and modern digital reproduction and distribution, publishers, who had built up a monopoly on the production and distribution of knowledge through printed scientific journals and books, have continued to increase their prices and shield most publications from free access online, and because many scientists are reading and publishing works in open access journals which do not require library subscriptions. But, the author sees a new role emerging for libraries as the organisers of open access content in a way that the public and scientists can use it best, e.g. by starting to organize information around topics, which is envisaged as being a first step in the collaboration between scientists, libraries and communities and the creation of an Open Science society.

In the last story (*The rebirth of the citizen scientist*, by Rayna Stamboliyska) it is claimed that, in recent years, the term “citizen science” has emerged to define public involvement in genuine research projects but is actually a new make-up for an old idea already suggested by Thomas Jefferson, examples being birdwatching and mapping roadkill accidents. According to the author, citizen science is becoming more popular, especially as the concept is modular enough to reach the humanities and social sciences, i.e. studies of human nature at large, but the critical questions are stated as being whether citizen science is ethical and whether the related review and approval by an Institutional Review Board (IRB) is too big of a hurdle for citizen scientists.

In the other essay of this section, *Bringing Geographic Data Into the Open with OpenStreetMap* by Coleman McCormick, who is a geographer and software developer at Spatial Networks Inc. and an active contributor to the open mapping ecosystem, the author discusses citizen participation in OpenStreetMap (OSM)⁴, “the wiki of world maps,” and claims that it is an exemplary model for how to build community and engagement around map data, and that lessons can be learned from its model. According to him, simply publishing map data through online portals still leaves a gap between the data provider and the community and closing this gap is key to bringing open geodata to the same level of growth as e.g. Wikipedia. Although open sources of map data are not new, in his view, OSM is an innovative approach to open geodata and basically an effort to build a free and open map of the entire world; “to do for maps what Wikipedia has done for the encyclopaedia.” The difference to other open data initiatives, the author claims, is its ability to incorporate user contribution and to invite engagement and a sense of co-ownership on the part of the contributor. It is explained that his combination of contribution and engagement for OSM is enabled by an impressive stack of technology that powers the system, all driven by several open source software projects under the hood. And, in fact, he believes that the roadblocks to adoption of open models for creating and distributing geodata stem primarily from technology and implementation. It is emphasized that with geodata, openness and accessibility enable a level of direct interaction between publishers and contributors that has not been possible with traditional unilateral data sharing methods. The author concludes by saying that OSM “provides a mature and

4 Link to the OpenStreetMap wiki: <http://www.openstreetmap.org/#map=5/57.669/22.039>

real-world example of why engagement is often that missing link in the success of open initiatives.”

“Application”

The Application section includes three essays discussing some of the widely debated topics on Openness.

The first one is titled *Getting Requirements Right – Towards a nuanced approach on standardisation and IPRs*, and it is written by Jochen Friedrich, a member of IBM's Technical Relations Europe team and responsible for coordinating IBM's software standardisation activities in Europe and the chair of the standardisation task force of OpenForum Europe, and he talks about the heavily debated intersection of IPR and standardisation by formal standards bodies (e.g. ISO, IEC and ETSI) and others (e.g. IETF, W3C and IEEE). In the author's view, these standards bodies need to have an IPR policy with rules on how IPR that are critical for standards are handled. Apparently, in ICT, standards bodies have chosen two models for patent licensing: FRAND (fair, reasonable, non-discriminatory) and royalty-free, and it is argued that they both have their roles for getting base technologies into standardisation and for software interoperability, respectively. It is stated that diversity in standards bodies and in IPR regimes successfully serves the marketplace, and allows to apply policy approaches and rules in relation to specific markets and a market need, which is claimed to be the most important factor for a strong standard. All the innovation of the internet, according to the author, is based on so called Open Standards which are available royalty-free, and also allow implementation of FOSS, which is important for software interoperability standards creating a level playing field and wide acceptance for open source technologies. Standards also support public policy by ensuring interoperability and, thus, promoting openness, innovation and growth, but, it is emphasized, government rules need to be flexible and allow for standards which have been developed in open processes. Regardless of such a general framework, “it is up to specific policies ... to set their specific requirements to Open Standards” to best support policy objectives. According to the author, such a “nuanced approach” is the most effective way for promoting openness and innovation. Although a relevant topic was nicely covered, apparent lack of proofreading of the essay hampered the reading experience.

The next essay, *Public Procurement: Free Software's Wild Frontier*, which is by Karsten Gerloff who is the President of the Free Software Foundation Europe and has conducted extensive research on the economic and social effects of Free Software e.g. for the European Commission, which, although a bit list-like, offers an interesting insight into FOSS procurement issues, starts by stating that even with current procurement practices FOSS is already delivering significant savings and strategic benefits to the European economy. Still, most European public bodies continue to rely heavily on non-free software mainly because, the author claims, public procurement practices are a major hurdle. Related to this, the essay lays down a very interesting fact: According to Directive 2004/18/EC of the European Parliament and of the Council⁵, it is obvious that procuring authorities must not refer to a trade mark unless it is impossible to describe the desired product or service otherwise, but still roughly one in seven tender notices for software violates this Directive. Then the author goes through some examples as a basis for assessing common problems and potential solutions in the public procurement of software, including a bad example from Helsinki and good examples from Munich and Sweden. It is also mentioned in the essay that some countries have published policies relating to procurement of FOSS in the public sector but that their

⁵ Link to Directive 2004/18/EC of the European Parliament and of the Council: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004L0018:en:NOT>

implementation is still in its early stages. Cases from the Netherlands and the UK are described as unsuccessful public policy examples related to the procurement of FOSS and the use of Open Standards. On the other hand, it is argued that, in Europe, Portugal has gone the farthest in terms of adopting Open Standards and Italy in terms of FOSS procurement public policies, and that France has demonstrated success as well. At the end, the author offers some suggestions on how to improve the situation, i.e. by public authorities ensuring effective supervision of procurement practices, by supervisory authorities providing clear guidelines and training on procurement related issues, by defining incentives for good procurement practices, by having strong political support, and, as a rather innovative way, by public sector organisations contributing a part of the savings achieved through FOSS back to the developers of the software. In the author's view, most of these measures are easy to implement but the main issue is that political will is missing.

In the third essay, *Understanding Commercial Agreements With Open Source Companies*, Amanda Brock, a Director at Origin Ltd and a member of the Editorial Committee of this journal, starts by providing a condensed overview of the history of FOSS, including both FSF and OSI and their ideological and practical differences, that takes up almost half of the entire essay. Why? She realised “that the only way to explain [FOSS commercialisation issues] is to work through this thought process. So, understanding where the players of FOSS have come from is important.” The essay then proceeds to discuss how organisations make money through FOSS, e.g. by providing related or specialist services for development or support (Red Hat⁶ mentioned as a successful example), or by providing cloud computing services based on FOSS without the need to distribute the code. However, she points out, the latter one is creating a market place where users may not be able to properly review the applicable terms and conditions. Further, search engines (e.g. Google) that generate revenue from advertising also contribute to the commercialisation of FOSS by sharing the revenue throughout the ecosystem. It is argued that commercialisation of FOSS on the device side, where the User Interface is visible, may face trade mark issues, or issues with other IPR such as design patents. FOSS is also causing market disruption, e.g. with Android mobile phone operating system, and the author sees this type of disruption increasing. App stores are mentioned having become a big part of software distribution but potentially infringe various FOSS licences if they don't comply with relevant licence requirements (e.g. no source code provided), but it is also contemplated whether they will be a transient model due to the emergence of web apps. On software patents the author's view is that the nature of them and the possibilities for patentability e.g. in a smart phone are such that it is easy for patent owners to sue and be counter-sued. (And she agrees that only the lawyers are the winners in all this!) In general, according to the essay, patent litigation creates a risk to FOSS in two ways: royalties owed to patent holders creating a premium on the cost of FOSS usage, and fear of litigation creating a barrier to entry. However, she believes that at the end this will not prevent commercialisation of FOSS. Overall, the essay is interesting and relevant but the title of it would appear to be slightly misleading.

“Things to Come”

In this final section of the book there are two essays which are somewhat philosophical and visionary in nature.

No One Speaks For Me – The Legislative Disconnect Of The Meshed Society by Simon Phipps, currently running his own management consulting company Meshed Insights Ltd and serving as a Director on the boards of the Open Source Initiative, the Open Rights Group and the MariaDB

⁶ Link to Red Hat Inc's home page: <http://www.redhat.com/>

Foundation and on the advisory board of Open Source of America, defines “Meshed society” as “people, joined together by the Internet, able to interact – to collaborate, to create, to transact and to relate directly with each other – without the need for another person to mediate.” The author also talks about “creator-consumers” referring to individuals who at various times create new things and improve existing things (make) and collaborate with others to “make” or consume what others “make.” He claims that these creator-consumers have ended up voiceless and proceeds to describe the industrial society and the roots of our existing processes to help in understanding his stance. At the end the ubiquity of the Internet has changed the rules and roles, and he has “been struck by the absence of any voice within the legislative process itself that speaks for my needs as an individual citizen in the meshed society of the 21st century.” One example the essay brings up is the pressure from content industries to further extend copyright which starts to sound reasonable if it is viewed as property in the industrial society frame of mind. The author’s main message appears to be that all this evolutionary change and the emergence of the meshed Internet society have caused hardly any changes in the legislative process or the law in any country; tweaking of the rules is not enough, they have to be fully refactored.

And the very last essay of the book is written by Peter Langley who is the founder and Managing Director of Origin Ltd, a Solicitor of the Supreme Court of England & Wales, and a Patent Attorney and a Trade Mark Attorney. The essay, *Forking the Patent System: Pollyanna in Patent-Land?*, examines “how patent law might be in the process of forking in ways not only favourable to FOSS but that excise the tensions between patent law and FOSS as systems for driving innovation.” The proposed forks of the patent system reflect two modes of innovation: Laborious and costly single innovation, and cheap and rapid incremental innovation (e.g. FOSS). The author then suggests that these two modes are treated differently in legal terms, i.e. that for the latter injunctions are harder to obtain and damages are much lower. As it is important in US patent litigation to prove the causal nexus between the alleged harm and infringement, he then claims that one fork is starting to emerge for the first mode where it is possible to establish the causal nexus and enable injunctions, and for the second mode, which is especially relevant for software, the causal nexus will be much more difficult to prove and injunctions are not available. It is also noted that the developing jurisprudence to protect the public interest will support this fork. Besides injunctions, the other key issue in patent litigation, as stated in the essay, is the definition of the royalty base for damages: For example, should the percentage be applied only to the relevant component, or to the entire market value of a mobile phone? The text demonstrates that the US position is for the former. In addition, in favour of FOSS, the mentioned case law suggests that any compensation should be calculated based on the design-around costs, which for FOSS could be close to zero.

In Conclusion

“Thoughts on Open Innovation” is an interesting collection of essays on, you guessed it, Open Innovation. At least for a reader such as myself, who is mostly involved with openness in the context of open source software, the book is an eye-opener to the other “open things” and offers many perspectives. On the other hand, some of the essays at the beginning of the book appear to discuss quite similar issues. Also, it might have been interesting to read about open education (e.g. Coursera⁷, edX⁸) as well, which seems to be a growing phenomenon at the moment, but maybe that can be a topic in the next OpenForum Academy book. Overall, the impression is that the quality of writing and contents in the essays has been good. And in the spirit of openness, the book is available as a free download (or as a printed copy for a fee), and at 164 pages is “comfortable”

7 Link to the homepage of Coursera: <https://www.coursera.org/>

8 Link to the homepage of edX: <https://www.edx.org/>

in size.

About the author

Kari Kärkkäinen works for PacketVideo Corporation as a Director of Program Management and is also the Editorial Coordinator of *International Free and Open Source Software Law Review*. He has an LLM in IT & Telecommunications Law from University of Strathclyde (UK), MBA from Durham University (UK) and B.Sc. in Computer Science from California State University Bakersfield (USA).

Licence and Attribution

This paper was published in the *International Free and Open Source Software Law Review*, Volume 5, Issue 2 (December 2013). It originally appeared online at <http://www.ifosslr.org>.

This article should be cited as follows:

Kärkkäinen, Kari (2013) 'Book Review: Thoughts on Open Innovation', *International Free and Open Source Software Law Review*, 5(2), pp 137 – 144
DOI: [10.5033/ifosslr.v5i2.92](https://doi.org/10.5033/ifosslr.v5i2.92)

Copyright © 2013 Kari Kärkkäinen.

This article is licensed under a Creative Commons UK (England and Wales) 2.0 licence, no derivative works, attribution, CC-BY-ND available at <http://creativecommons.org/licenses/by-nd/2.0/uk/>

As a special exception, the author expressly permits faithful translations of the entire document into any language, provided that the resulting translation (which may include an attribution to the translator) is shared alike. This paragraph is part of the paper, and must be included when copying or translating the paper.



Advancing the Software Package Data Exchange: An Update on SPDX

Phil Odenice,^a Scott Lamons,^b Jilayne Lovejoy^c

(a) Vice President of Corporate and Business Development, Black Duck Software; (b) Program Manager, HP Open Source Program Office; (c) Corporate Counsel, OpenLogic, Inc.

DOI: [10.5033/ifosslr.v5i2.89](https://doi.org/10.5033/ifosslr.v5i2.89)

Abstract

Since 2010, the Software Package Data Exchange, a Linux Foundation work group, has made great progress. This article provides an overview of advancements on the specification itself, survey results on use, adoption by corporate users and FOSS communities, and future plans and initiatives.

Keywords

Law; information technology; Free and Open Source Software; SPDX; Software Package Data Exchange; software licensing; copyright; bill of materials.

Introduction

SPDX[®] (or Software Package Data Exchange[®]) is a specification for exchanging package content, copyright, and licensing information between software supply chain partners. Organized under the Linux Foundation, the SPDX work group introduced SPDX to the international legal community in an article in the *International Free and Open Source Software Law Review* Vol. 2, Issue 2 when the specification was going through beta testing.¹ This article is an update on the current state of the work and future direction, focusing on a look at current attitudes regarding SPDX adoption, tooling, and plans for version 2.0.

While the specification has evolved since the original publication, the work group's mission has remained constant:

Develop and promote adoption of a specification to enable any party in a software supply chain, from the original author to the final end user; to accurately communicate the licensing information for any piece of copyrightable material that such party may create, alter, combine, pass on, or receive, and to make such information available in a consistent, understandable, and re-usable fashion, with the

¹ Stewart, K., Odenice P., Rockett, E. (2010) 'Software Package Data Exchange (SPDX[™]) Specification', *IFOSS L. Rev.*, 2(2), pp 191 – 196 DOI: 10.5033/ifosslr.v2i2.45

aim of facilitating license and other policy compliance.²

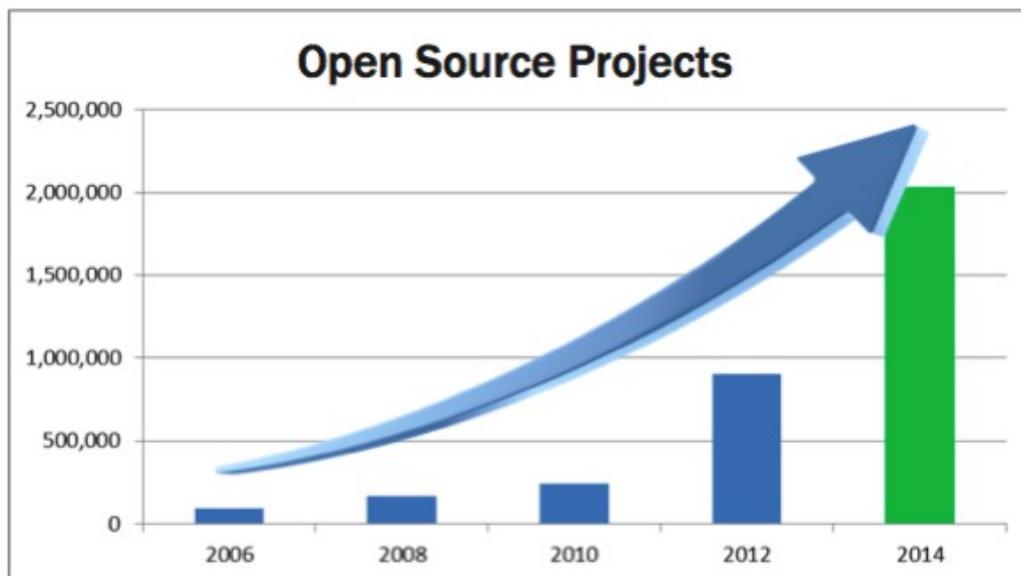
Establishing a common data format enables producers and consumers of software (and the tool vendors that support them) to build processes and tooling that reduce the initial effort and rework involved in understanding and communicating what is in a software package. Thus, a standard format allows more effort be expended on licence compliance. After all, license compliance can only begin once all software and associated licenses have been identified in a particular code base.

The content of an SPDX document comprises, among other things, information definitively identifying the software package, and package level and file level licensing and copyright information. It also provides metadata about the analysis itself: who created the file, when, and how.

The SPDX work group consists of representatives from companies and organizations who use or are considering using the SPDX standard. The work group operates much like a meritocratic, consensus-based community project; that is, anyone with an interest in the project can join the community, contribute to the specification, and participate in the decision-making process.

State of the System

Free and open source software (FOSS) projects continue to multiply at an accelerating rate. Since 2010, the number of freely available software projects on the Internet has climbed from about a quarter of a million to over a million and is projected to top two million in 2014.



Source: Black Duck Software

At the same time, while the overall awareness of the need to manage open source software and licensing is clearly on the rise, adoption of some kind of governance program lags far behind. In a late 2012 study of the European automotive industry, BearingPoint found that while 85% of

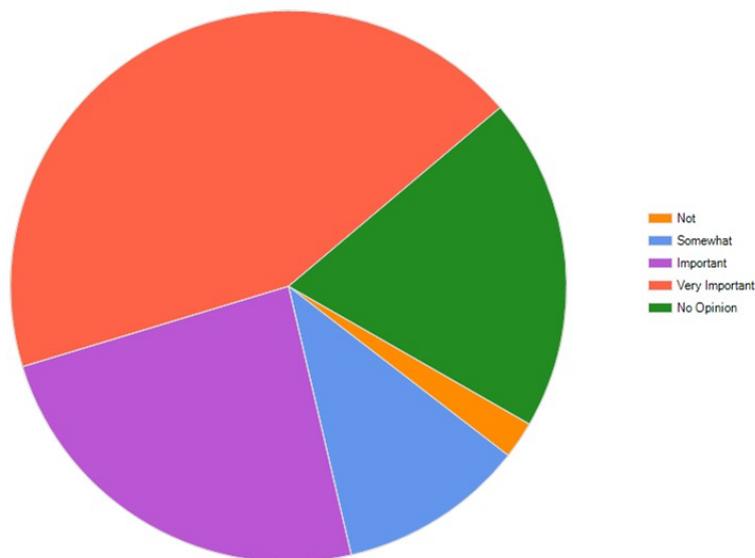
² <http://spdx.org/about-spdx>

respondents reported that their companies were deploying FOSS, only 2.3% had open source compliance tooling in place.³ The SPDX work group's hypothesis is that at least part of the problem is the lack of an industry standard. A standard would allow for the consistent and common exchange of license information, protect tooling investments, spur a broader range of tools, and allow tooling to interoperate with each other.

Survey of SPDX Awareness and Adoption

The SPDX work group conducted a survey in spring of 2013 to collect information regarding understanding and adoption of SPDX by corporate and community members and organizations. The survey was publicized via posting online (with the link provided on the SPDX website), Linux Foundation events, various open source mailing lists, and word of mouth. About 100 people completed the survey with a majority of responses coming from technical resources at a mixture of small and large companies worldwide.⁴ Most notably, about two-thirds of the respondents said that "an industry standard for exchanging software bill of materials (BoMs)" was *very important* or *important*, thus validating the over-arching goal of SPDX.

How important is an industry standard for exchanging software BoMs?



Source: SPDX Survey⁴ conducted during May 2013

More notable points from the results of the survey are discussed in the subsequent sections of this article.

Adoption

As with other standards, adoption is often slower than expected, but interest is recently on the rise from both open source projects and companies. The SPDX survey cited above revealed that as of

³ <http://www.bearingpoint.com/en-uk/7-5601/study-foss-management/>

⁴ See http://wiki.spdx.org/view/Business_Team/Surveys for a summary of the responses and download of complete survey.

yet only a handful of organizations are producing or requiring SPDX documents from suppliers and most were, at best, experimenting internally. On the other hand, the need was clear; many more were intending to use SPDX in the future and only a tiny fraction expected to use another format. The longest journey starts with a single step, however, and SPDX is clearly beyond that.

Corporate Adoption

Companies tend to be private about their contractual arrangements, which makes it hard to comprehensively track who is using SPDX, planning to use it, experimenting internally, and so forth. As to date, only a few companies have come forward publicly regarding their adoption or use.

Wind River, a supplier of a Linux-based embedded systems platform, has been a proactive advocate and early adopter of SPDX. Wind River Linux 5, a commercial grade version of Yocto, ships over 700 SPDX files, one for each of the packages in its distribution. Wind River also asks all ISVs to include SPDX files with their software deliverables and have assisted several ISVs in creating an SPDX file for their offering. Additionally, the company uses SPDX data in its IP Compliance Review process and distributes SPDX files to its customers to meet any open source disclosure requirements. Taking this all one step further, Wind River hosts a website that provides free high quality samples of SPDX files, as well as a free cloud service to enable anyone to generate an SPDX file for any uploaded package. The main purpose of these efforts is to promote the adoption of SPDX among Wind River customers and the software community at large.⁵

At LinuxCon North America in September 2013, an engineer from Samsung Electronics delivered a talk titled, *Piloting SPDX in Samsung: Case Studies and Experiences*, which discussed Samsung's internal experimentation and development around the use of the SPDX standard and provided feedback to the work group.⁶ Texas Instruments and Alcatel-Lucent are also using SPDX for internal communications.⁷ Other large companies like HP and Cisco are heavily involved in the development of the specification, presumably with adoption on the horizon.

While few companies are yet taking a public position, the survey indicates that a number of companies have plans to both require and offer SPDX documents to accompany exchanged software packages. Discussions held under the Chatham House Rule⁸ at LinuxCon Japan and the Linux Collaboration Summit this past year, as well as inquiries to the work group, indicate increasing interest and experimentation. Interest regarding adoption has come from company representatives in a wide variety of industry sectors. One large auto manufacturer has started requiring SPDX documents from suppliers and a large telecom company is doing the same.

Community Adoption

The SPDX survey reinforced the “chicken and egg” nature of starting a standard; that is, adoption breeds adoption. Upstream FOSS projects are one of the keys to getting the cycle rolling in the right direction. Working with them provides an opportunity to improve the reach of the standard, fostering a broad adoption base with downstream consumers.

The SPDX work group is communicating with a number of projects and foundations about adoption of the standard. Recent collaboration with the Yocto Project is focused on integrating the

⁵ See spdx.windriver.com and http://spdx.windriver.com/pkg_upload.aspx

⁶ <http://linuxconcloudopenna2013.sched.org/event/2faecbb5c51ea6089cdc5eb5159bc154#UfAYgGO6U4Q>

⁷ See http://wiki.spdx.org/view/Business_Team/Adoption

⁸ <http://www.chathamhouse.org/about-us/chathamhouserule>

production of SPDX documents into the Yocto build process. The joint project utilizes the FOSSology SPDX plug-in⁹ developed at the University of Nebraska Omaha¹⁰ to identify licenses in Yocto project packages, prepare package and file level license information, and produce and archive SPDX documents. In addition, discussions with the Apache Software Foundation and OpenMAMA both offer potential upstream projects where SPDX could impact broader adoption of the standard.

The SPDX License List

Perhaps the best starting point for adoption is the SPDX License List, which is a standardized index of over 200 of the most common open source licenses.¹¹ Every license on the list contains a short identifier (e.g., Apache-2.0), a long name (Apache License 2.0), a url to the license text, and the official header for labelling source code files, if the license designates one. In 2011, the Open Source Initiative (OSI) announced that it was adopting and standardizing on the SPDX short names, which was a big step in helping the industry move toward using a consistent set of names for open source licenses. As of DEP5, Debian supports the SPDX short identifiers as does OpenSUSE.¹² The SPDX legal team continues work to ensure the SPDX License List includes licenses found on other community lists, such as FSF and Fedora.

For tool providers this will make detection of open source licensing much more reliable, leading to more accurate generation of SPDX data files. As of version 2.1.1, FOSSology, the open source license scanner, adopted the SPDX License List short identifiers.¹³ Likewise, Ninka supports SPDX identifiers.¹⁴ Commercial tools from Black Duck Software and NexB also use the SPDX License List to reference licenses. Known companies using the SPDX License List include Texas Instruments, Siemens, Micro Focus, and Wind River.

Besides the obvious advantage of having a reliable and common way to accurately report a given open source license, the SPDX License List also has the potential to be used as a license declaration.¹⁵ The SPDX License List short identifiers provide an easy and concise way to identify the license for a particular file in the source code.¹⁶ Already, Composer, a dependency manager for PHP, and npm, a package manager for node, have adopted or encourage the use of the SPDX License List short identifiers.¹⁷ U-Boot, a popular open source boot loader for embedded devices, is using SPDX short identifiers as its standard for specifying licensing in files.¹⁸ This enables unambiguous license information in a single line and eases automated processing. This kind of adoption by open source projects greatly simplifies the creation of SPDX documents.

Tooling

While the aforementioned survey pointed to a number of factors that are important to broad

9 <http://ocrl.unomaha.edu/organizational-participation-in-open-communities/tooling/>

10 <http://www.ist.unomaha.edu/>

11 <http://spdx.org/licenses/>

12 <http://dep.debian.net/deps/dep5/> and http://en.opensuse.org/openSUSE:Packaging_guidelines; also see: <http://www.linuxfoundation.org/news-media/announcements/2011/08/widespread-industry-support-spdx-10>

13 http://www.fossology.org/projects/fossology/wiki/Release_Notes#220-Released-June-28-2013 and <http://lwn.net/Articles/556850/>

14 <http://www.linuxfoundation.org/news-media/announcements/2012/08/supporting-comments-spdx-11>

15 See http://wiki.spdx.org/view/Technical_Team/SPDX_Meta_Tags for a working draft proposal.

16 Indeed, the SPDX work group members are not the only ones who think so, as evidenced by this post:

<http://hakre.wordpress.com/2012/07/25/using-the-spdx-license-list-for-tagging-and-linking/>

17 <http://getcomposer.org/doc/04-schema.md#license>; <https://github.com/isaacs/npm/pull/3673>

18 <http://spdx.org/news/2013-10-22/spdx-releases-version-1.2-of-the-specification>

adoption of such a standard, tooling for producing SPDX files was considered very important by the most survey participants. In the past six months there have been some great advances along this dimension.

The SPDX group hosts a handful of open source tools for validating, reading, and translating SPDX documents. Now several FOSS and commercial tools have added the ability to produce SPDX documents.

At the 2013 Linux Collaboration Summit, the SPDX work group hosted a “bake off” or interoperability testing session to compare the output of several tools as well as some manually generated SPDX files. The testing analysed output from two open source tools (FOSSology, hosted by the University of Nebraska Omaha and Ninka, from University of Victoria) and one commercial tool (Black Duck). SourceAuditor has driven development of the SPDX open source tools, and Wind River also shared results from their internal processes and tooling. The extensive analysis uncovered the need for further clarity in the specification in order to ensure more consistency among differently-generated SPDX documents. This sharing represents significant progress against what is considered one of the biggest impediments to adoption. As these tools advance, it will become increasingly practical for organizations to use SPDX to exchange software BoMs information.

The Future

As with any open source project, the future will emerge from the activities of all the companies and individuals involved. But there are some clear directions for the project. As tools implementing the specification have become a reality, the group has been able to begin a cycle of testing the tools and at the same time, essentially testing the specification. Comparing the output of a variety of tools has enabled the group to identify some limitations and ambiguities. The work group recently released version 1.2 of the specification, which addresses these issues.

Beyond that, there are two areas where SPDX needs to be enhanced: hierarchy and signing. In regards to hierarchy, the current specification provides a fairly “flat” structure for licensing and copyright information with package and file level views. In other words, there is no explicit way to identify files for one package (and associated licenses) contained within other packages. Based on internal and outside input and due to license compliance requirements that are dependent on how software interacts, the work group has identified a requirement for accommodating the hierarchical nature of software. Because applications are made up of components, which can in turn be made up of other components, this suggests the desirability of a similar structure for SPDX documents to be able to describe the contents of those packages, and for SPDX documents to comprise other SPDX documents of lower level components.

The idea of signing is to allow creators of SPDX documents to associate their name with the work as long as the document isn’t modified. This provides the ability for a SPDX document recipient to make a judgement call as to the reliability of the information provided therein. It is related to hierarchy in that in a hierarchy signing should be maintained by a branch such that if pieces get combined or modified it remains clear who did what.

Beyond the technical evolution of the specification, the SPDX legal team continues to evolve the license list and process around it, with the latest developments being around guidelines for matching to license text. Such guidelines will help ensure consistent matching among tools and SPDX document creators so that when any SPDX document identifies a license using a SPDX

License List short identifier, it can be relied upon to be consistent with the identification of that same license in other SPDX documents. There already exists a glossary of synonyms, for example to allow matching the American “license” to the English “licence,” and some other guidelines about handling spaces, punctuation, and copyright notices. Recent work focuses on handling variable text like the copyright holder names in the BSD licenses, as well as the overall implementation for the license matching guidelines.

Conclusion

There is clearly a need for a standard format for exchanging software bill of material information. SPDX is viable today for all open source projects and several early adopter companies. The specification will continue to improve and evolve, especially as more users and potential users from corporations to community groups become involved in shaping the standard.

About the authors

Phil Odence is the Vice President of Corporate and Business Development at Black Duck Software where he is responsible for all corporate and business development activities. A frequent speaker at open source industry events, Phil chairs the Linux Foundation's Software Package Data Exchange working group and participates on the GENIVI marketing team. Phil has over 20 years of software industry experience. He earned an AB in Engineering Science and a MS in System Simulation from the Thayer School of Engineering at Dartmouth College.

Scott Lamons works in HP's Open Source Program office which is responsible for the companies' open source policy, review process, and compliance related activities. He has been a member of HP's Open Source Review Board (OSRB) since 2005. Over this time he has reviewed over 3000 open source proposals from teams across HP and has been involved in delivering company-wide training and consulting on a variety of open source activities. He also works closely with HP's vendors and partners in the open source community and currently co-lead's the SPDX business team.

Jilayne Lovejoy participates in open source industry groups including co-leading the SPDX legal team. Jilayne is also a frequent speaker and writer on topics related to open source licensing and compliance. Previously, she was the corporate counsel at OpenLogic where she helped ensure that OpenLogic's scanning and compliance software met the needs of users and assisted customers with understanding open source license compliance and policy considerations to reduce barriers to open source software adoption. She earned her BA from the University of Colorado, Boulder and her JD from the Sturm College of Law at the University of Denver.

Licence and Attribution

This paper was published in the International Free and Open Source Software Law Review, Volume 5, Issue 2 (December 2013). It originally appeared online at <http://www.ifosslr.org>.

This article should be cited as follows:

Lovejoy, Jilayne; Odence, Phil; Lamons, Scott (2013) 'Advancing the Software Package Data Exchange: An update on SPDX', *International Free and Open Source Software Law Review*, 5(2), pp 145 – 152

DOI: [10.5033/ifosslr.v5i2.89](https://doi.org/10.5033/ifosslr.v5i2.89)

Copyright © 2013 Jilayne Lovejoy, Phil Odence, Scott Lamons.

This article is licensed under a Creative Commons UK (England and Wales) 2.0 licence, no derivative works, attribution, CC-BY-ND available at <http://creativecommons.org/licenses/by-nd/2.0/uk/>

As a special exception, the author expressly permits faithful translations of the entire document into any language, provided that the resulting translation (which may include an attribution to the translator) is shared alike. This paragraph is part of the paper, and must be included when copying or translating the paper.



Free and Open Source Software Across the EU

Gijs Hillenius^(a)

(a) Journalist, contributor to Joinup

DOI: [10.5033/ifosslr.v5i2.90](https://doi.org/10.5033/ifosslr.v5i2.90)

Abstract

Across the EU, there is a groundswell of public administrations that use open source for their ICT solutions. Evidence of its benefits as well as practical examples are steadily piling up at the European Commission's Open Source Observatory. The areas where this type of solution can be found most include, in random order, content management (CMS), document management (DMS), database applications, all kinds of online e-government services, geo-information systems (GIS) and in most if not all publicly provided applications built to use open data.

Keywords

Public administrations; European Union; Joinup; Free and Open Source Software Policies; implementations.

When it comes to free and open source software (FOSS), many public administrations will have stumbled across it. These days, their IT dealer tells them that their proprietary system for managing citizen records will function just as well with the open source database management system PostgreSQL, yet the subscription fee is much lower than when combined with the previously required proprietary alternative.¹

For others, switching to free and open source is increasingly a conscious decision. This is because city administrations such as that of Germany's Munich, the Spanish cities Zaragoza, Bilbao and Badajoz, Portugal's Vieira do Minho, Denmark's second-largest city Århus, the Dutch city of Ede, the towns of Grygov and Jihlava in the Czech Republic, the village of Arles in the south of France, Poland's Poznan and Italy's Bologna are grokking open source. To encourage these clever public administrations, the past few years several EU member states have adopted laws and guidelines giving preferential treatment to this type of software.

A list of country's with the best policies on free and open source must begin with France. It produced a thorough review of the benefits of free software, the so-called "Ayrault Circular" which was adopted by the French government in September 2012. The circular provides a roadmap helping ministries create their free software strategy. The guideline came to existence by virtue of the Adullact network of civil servants involved in free software IT development and its many, many

¹ <https://joinup.ec.europa.eu/community/osor/news/dutch-town-switches-postgresql-open-source-database>

ministries already doing amazingly much with open source.²

It is thanks to a question by a member of France's parliament, Isabelle Attard (Europe Ecology - The Greens), that we are beginning to learn how normal open source has become in France's ministries.³ In May, MP Attard asked all ministries about their implementation of the Circulaire Ayrault.

Policy Hitparade

This summer, the 37 ministries and ministerial departments have slowly begun to respond. Their answers range from enthusiast to subdued and downright aloof.

One of the more electrifying replies is by France's education ministry. It reveals that it has over 23,000 servers based on Ubuntu Linux that since 2001 are used in schools across the country and used for network and system security as file servers, backup servers, for VPN and for serving applications to thin clients. The ministry itself has been using Linux "for over a decade": its service departments host over 4,000 Red Hat Linux servers, and "the OpenOffice and LibreOffice office suites are widely used by teachers as a tool to work and share with students."

Unruffled, the Ministry of Economy and Finance responds to Attard that it has been using open source for over a decade, with Linux now used for most servers and email based entirely on open source. This includes the use of these types of solutions on workstations: "By 2003, all workstations of the General Directorate of Customs and Excise migrated to a free office suite."

The most distant is the Ministry of Defence – criticised earlier this year by parliament over its renewing of a proprietary licence contract, bypassing public procurement⁴. The ministry curtly explains Attard that it does not distinguish proprietary software from free software in its accounting systems. Software purchases are included in contracts that focus on development, integration or maintenance. That makes it hard to exclude the purposes from the cost of the licences. The assessment is complex, the ministry writes, as software is included in so many electronic devices, including phones, radios and even satellites.

Issues with Interoperability

Contender for first place on the list is Spain. It has appealing region policies, such as that adopted by the Basque region (see side bar 'A EU directive for future benefits'). But, nationally, it is the Royal Decree 4/2010 on the National eGovernment Interoperability Framework that is supporting open document formats and that is emboldening a growing number of administrations. A good illustration is the city of Zaragoza which is using the law to remind others that the government wants them to use open formats.⁵

The capital of the autonomous community of Aragon has been using OpenOffice, a suite of office productivity tools, on all of the city's 3200 PCs since 2007. Recently, Zaragoza started to also use LibreOffice. As Eduardo Romero, the IT specialist leading the desktop migration project for the city administration, points out, since both suites use the Open Document Format, there are no interoperability problems between the two. Such issues do arise when communicating with

2 <https://joinup.ec.europa.eu/community/osor/news/ministries-france-detail-use-and-plans-free-software>

3 <https://joinup.ec.europa.eu/community/osor/news/ministries-france-detail-use-and-plans-free-software>

4 <https://joinup.ec.europa.eu/news/french-advocacy-group-decries-defences-ignoring-procurement-law>

5 <https://joinup.ec.europa.eu/community/osor/news/spains-zaragoza-continues-gradual-switch-open-soure>

organisations that do not support open formats, he says. "We have to remind these organisations that there is a very clear law prescribing the use of open formats."

A side effect of this is that Zaragoza is pointing others the way. "When we began using OpenOffice we were one of the few", says Romero. "Now, there are many public administrations and companies that switched and we have helped quite a few to take their first steps."

An EU Directive for Future Benefits

The European Union should start working on a directive on openness and reuse of software applications, says Serafín Olcoz Yanguas, a former chief information officer of Basque Country. Governments that switch to free and open source software contribute to the economy and improve productivity, he argues. "It is a more efficient business model than that of the proprietary software industry."⁶

Governments using open source create future benefits (CAPital EXpenditures), as part of their OPerational EXpenditure, argues Olcoz. "It creates a virtuous loop between the public and private sector, with a recurring public contribution."

Olcoz launched his proposal during the Libre Software World Conference, which took place in Santiago de Compostela on 18 and 19 October 2012. He would prefer the EU directive to be based on the decree proposed by the Basque government in July and approved as a policy in September that year. That law says that all software developed for the government publicly must be made available as open source.

Third comes Italy, which made open source the preferred choice in its Digital Administration Code in 2012. How to compare incomparable open and closed source IT solutions; that has been parked in a committee that will, duly, take its time. In May, lawyer Ernesto Belisario, professor at University of Basilicata in the city of Potenza, reported that the discussion in the working group is stalling. "Some of the members think the law stipulates a technical and economical assessment, instead of reading it as a statement supporting open source."⁷

So, maybe this third place should actually be for Sweden. Here a dexterous public procurement plan, written by the Kammarkollegiet, organises support for public administrations procuring open source.⁸ It is growing faster in amounts of turnover than any other procurement framework contract has ever done before. Although, to be honest, all the Swedes seem to do is buy support for Drupal, Alfresco and Red Hat.⁹

Upstream Developments

This example deserves a second look as the procurement framework includes terms and requirements never seen before. If an open source solution is customised by a public administration, or a subcontractor adds some lines of code, the lead software firm is made responsible for delivering this code to the upstream project.

⁶ <https://joinup.ec.europa.eu/news/basque-country-wants-european-directive-reuse-software>

⁷ <https://joinup.ec.europa.eu/community/osor/news/governmental-working-group-stalling-italys-switch-open-source>

⁸ <https://joinup.ec.europa.eu/elibrary/case/public-open-source-software-procurement-models-next-generation>

⁹ <https://joinup.ec.europa.eu/news/se-framework-agreement-increases-use-open-source>

The framework also takes away the perceived risks for public administrations by making the software company responsible for distribution. They have to make sure they have the rights to do that and to deal with potential royalties, if any.

The framework contracted five suppliers that potentially provide software and services to the central government, the public educational sector, and all twenty county councils. Of all 290 Swedish municipalities, 225 are participating in this framework. These five firms, in turn, are allowed to subcontract for a total of 75 companies to provide required competences and services. The Swedish framework is therefore a tree, branching to include many open source specialists. These are not the typical companies fulfilling government contracts. It includes two one-man shops and a firm with about 180 employees, so both Sweden's smallest and biggest open source companies.

This procurement approach is now available in German.¹⁰ They were translated on the request of the Swiss government's Federal IT Steering Unit FITSU. The Swiss public administrations are considering a similar approach. Maybe this is a good idea for Germany to mimic.

Slow Execution

For completeness sake, one has to mention the Netherlands. Here a slew of government organisations are continuing to push the same open standards and open source plans that were advocated by the now-defunct NOiV government programme. Advocates include the 'Standardisation Board and Forum', which "supports the Dutch government in the use, development and establishment of open standards for electronic exchange", and KING, an umbrella organisation to assist the country's municipalities with their e-government services.

Taxing Citizens

It is the taxes, stupid. It is not surprising that Germany comes tenth and the Netherlands is first on the United Nation's e-government ranking for Europe (2012).¹¹ The Dutch government simply cuddles their taxpayers: to pacify even the most rebellious, the Tax Authorities are since 2006 making available a Linux-client to allow these to file their annual income tax. In Germany, in 2013 Elster continues to ignore the vocal Linux-citizens.

Jokes about the open source tax solutions aside (see side bar 'Taxing citizens'), when surveying the EU member states on free software policies, it seems that the public administrations in Germany and in the United Kingdom are still frightened by open source. Why? At least in Germany they can turn to well-organised commercial support. There is, for example, the OSB Alliance, offering a stack of open source solutions that they assure can be combined seamlessly. This business network contains plenty of German and German-speaking ICT service providers, offering their assistance for groupware, customer relationship management, enterprise resource planning, document management, business intelligence and access management. The stack includes middleware, operating system, backup and archive solutions.

One big difference between Germany and the United Kingdom is that Germany lacks national political support for open source. The country does have an Open Source Kompetenzzentrum, but it

¹⁰ <https://joinup.ec.europa.eu/community/osor/news/swiss-government-consider-re-use-swedish-open-source-procurement-program>

¹¹ <http://www.un.org/en/development/desa/publications/connecting-governments-to-citizens.html>, page 45

is in a zombie state. Over the past two, three years it has never answered any of the questions fired at them in spite of some talk of it being revamped. Likewise, the Ministry of the Interior must be under a gag order since its civil servants over the same period have never ever responded to any query concerning open source. Here, as well as in most other EU member states, the only politicians that drum up the courage to speak out are on the left side of the political spectrum. To quote Dutch politician Femke Halsema: “Odd that parties on the left have to explain the liberals about competition.”¹²

On the other hand, the United Kingdom has dressed up an impressive ICT policy, complete with an “Open Source Procurement Toolkit”.¹³ The UK's current coalition government decided in 2011 that “where appropriate, government will procure open source solutions.”¹⁴

However, whether or not to include the United Kingdom in the list of countries with policies favouring free and open source, that is the question. The islanders seem very hesitant in the execution of this policy. The well-known example of Bristol aside,¹⁵ the only two recent examples are Leeds Teaching Hospitals,¹⁶ implementing an open source hospital information system, and the country's central site for government services and information, Gov.uk, built on Drupal.¹⁷ It is also impossible to get the spokespersons of the Department for Work and Pensions to say anything on their open source pilot even though it was announced way back in December 2011. In the UK, as in all other EU member states, the ICT sector public administrations find it particularly difficult to make unencumbered technological choices.

Comparing Made Compulsory

There are three more countries that have plans involving open source worth mentioning. First, the government of Portugal in September 2013 announced that it wants to increase its use of open source ICT solutions and open ICT standards aiming to rationalise its IT and reduce costs. The new IT direction was unveiled by André Vasconcelos from the Agency for Administrative Modernisation (AMA) speaking at the Evento Linux Conference in Lisbon on 26 September. “To allow comparing open source and proprietary solutions, we'll make it compulsory to calculate the Total Cost of Ownership over 4 years, including for maintenance, licences, migration and productivity.”¹⁸

Second, in 2012, the government of Iceland famously announced it would start switching to open source. “The goal of the project is not to migrate public institutions to free and open source software in one single year, but to lay a solid foundation for such a migration which institutions can base their migration plans on”, Tryggvi Björgvinsson, the project leader, told Joinup.¹⁹

And third, Estonia is creating modern e-government services mainly by using free and open source software. “All our key projects become open source, including the systems for health care, police, business portals, document exchange, the software for e-Justice, a citizen portal and software for e-Procurement and e-Invoicing”, Siim Sikkut, ICT Policy Adviser for the government, said at an e-

12 Quoted in an article by the author, in the Dutch Linux Magazine #1, 2008

13 <https://www.gov.uk/government/publications/open-source-procurement-toolkit>

14 <https://www.gov.uk/government/publications/open-source-procurement-toolkit>

15 <http://www.slideshare.net/zaizild/changing-bristol-underpinning-the-creation-of-a-future-council-with-open-source-and-open-standards>

16 <http://www.chealthopensource.com/case-studies/leeds-teaching-hospitals-nhs-trust/>

17 <https://www.gov.uk/>

18 <https://joinup.ec.europa.eu/community/osor/news/portuguese-government-set-increasing-use-open-source>

19 <https://joinup.ec.europa.eu/news/all-icelands-public-administrations-moving-towards-open-source>

government conference taking place in Singapore on 22 May 2013.²⁰ The country also by default makes all of its software solutions available using the European Public Licence, EUPL.

Guidance on Standards-Based ICT

And the European Commission? The EC says that it has set out to tackle the problem of IT vendor lock-in at its root.²¹

To help public administrations to get their ICT procurement right, the Commission in 2011 started a project as a part of Action 23 of the Digital Agenda for Europe. This action is "committed to providing guidance on the link between ICT standardisation and public procurement, to help public authorities to use standards to promote efficiency and reduce lock-in."

The European Commission finally published its 'Guide for the procurement of standards-based ICT' in June 2013.²² The guide is meant to be a practical tool to help procurers, IT managers, strategists and architects decide which standards are relevant and useful.

ICT systems based on standards boost interoperability, innovation and competition while lowering costs, EC wrote in its announcement of the guide. Such ICT solutions will also improve interaction with citizens. "Making better use of standards allowing competitors to provide alternative solutions will diminish lock-in and increase competition."

The guide warns public administrations to ensure that the standards they select do not contain barriers to implementation by all interested parties. The examples mentioned in the guide are interesting. It starts, for example, with SQL (Structured Query Language); this is a database querying language created in the seventies, and standardised by ISO in 1987 (ISO 9075). "However, interoperability problems between major products still exist due to different interpretations of the standard, due to room for interpretation and the complexity of the standard. There remains the possibility of lock-in for suppliers using this standard."

Unexpected Warning

A fascinating exercise is comparing the draft guide (available already in late 2012) with the version published in June. Contrasting the earlier version, the latter now also warns public administrations to be careful with ISO/IEC 26300 (Open Document Format) next to the two already signalled in the draft texts ISO/IEC 29500 (Microsoft's OOXML) and ISO 32000 (PDF). All three standards for document formats "reference information that is not accessible by all parties."

Startled, the Open Document Foundation in August asked the EC why it had in the last minute included ODF. The EC replied that it had discovered a dead link in the specification at the section 17.7.3²³ of the ISO standard. Interestingly, ODF's standard setting organisation OASIS had already fixed these links three years ago.²⁴

Whether or not an update will reflect this, the guide alone will probably not be enough for public administrations to get rid of IT vendor lock-in, says Jutta Kreys, introduced as Munich's IT architect

20 <https://joinup.ec.europa.eu/community/osor/news/estonias-government-relies-strongly-open-source>

21 <https://joinup.ec.europa.eu/news/kroes-replies-munich-standards-it-procurement-will-tackle-problem>

22 <https://joinup.ec.europa.eu/community/osor/news/ec-calls-use-ict-standards-battle-it-vendor-lock>

23 <http://www.isi.edu/in-notes/iana/assignments/media-types/media-types>

24 <https://www.oasis-open.org/apps/org/workgroup/office/download.php/49989/OpenDocument-v1.1-errata01-wd09.zip>

speaking to the European Parliament's Committee on Legal Affairs: "Standards alone are insufficient for any non-simple IT project. To get out of the vendor-lock in, one has to use standards and open source."

The IT architect told the parliamentarians that even if the same SQL standard was used in database systems, that does not make it possible to switch easily from one proprietary database management system to another. "The EC thinks demanding the use of IT standards will fix this? It is not true."

Kreys told the Committee members that the EC is one of the big inhibitors to public administrations like Munich. "We often have to deal with requests from the EC that force us to use a proprietary operating system and office suite. And that is not just expensive. The European Commission should accept and work with the open document format ODF."

Dark Clouds

Across the EU, public administrations are using open source solutions in their IT. They do not talk about it much, but call them and they will point out a tool or two that they use daily that is open source, or based on open source.

Examples are steadily aggregated by the Open Source Observatory, a project by the European Commission. Here, in the International Free and Open Source Software Law Review space restrictions prevent to describe them all in detail, but for those that want examples on how to organise this, read up on Sweden's Kivos, Norway's Frikomport and Belgium's Mimio. Also worth a good look are the many projects in France developed by OpenMarie, or by the Danish municipalities working together on Drupal (OS2Web) and Library solutions (T!ng). There are many encouraging examples in every country, including Italy, Greece, Cyprus, Portugal and Ireland.

However, there are three problems. First: as readers will know, there is one particular area where this type of software lacks visibility and that is the desktop. This is the part of the government software market that suffers much from vendor lock-in and this is where user habits make it difficult to change. See, for example, Freiburg, or Amsterdam, or Helsinki, or the German ministry of Foreign Affairs.

Second, public administrations are moving their ICT to the cloud. And the way they are doing that will not at all solve the conundrum of IT vendor lock-in. It is a good thing that the next European OpenSource & Free Software Law Event, this December, will be considering "Open Source in Cloud Strategies". Recent examples featured on Joinup show that public administrations are moving to using cloud-based open source solutions.

Reporting Problems

The Norwegian free software association for municipalities, Friprogforeningen, in January 2013 started offering cloud-based open source applications. This means municipalities can use open source tools such as the Redmine project management and bug-tracking tool and the OTRS service management and helpdesk software without having to install and maintain the applications²⁵.

Other examples of this would include Kivos, with the national roll-out this summer of Fixa min

²⁵ <https://joinup.ec.europa.eu/news/norways-municipalities-run-open-source-apps-open-source-cloud>

Gata.²⁶ This is Sweden's version of the UK's Fix My Street, a web and smart-phone solution to allow citizens to easily report problems with streets and roads, including potholes, broken side-walks, graffiti and non-functioning lampposts. It is now also employed in the Brussels Region in Belgium²⁷, and in Ireland where Local Government Management Agency is using it to lure municipal administrations to trying out open source.²⁸ The question is, do all these public administrations realise they are using an open source solution, or will it to them be just like any other web-service? If the latter, will they lose the incentive to contribute to future versions of the code?

And third, sticking to the IT procurement continues to be problematic. Almost one in every five procurement requests makes illegal references to specific brands or products. According to OpenForum Europe,²⁹ a UK-based advocacy group lobbying the UK and EU governments: "Almost one in five, 19 per cent, includes technical specifications with explicit references to trademarks. That is the highest in the last three years."

Even the European Commission makes such errors.³⁰ Possibly even worse, the EC could be showing public administrations the way. In a speech in October 2012 at the European OpenSource & Free Software Law Event, in Paris, Mathieu Paapst, a legal researcher at the University of Groningen in the Netherlands, lambasted the EC for breaking its own rules.³¹

According to Paapst, in 2011 the EC tricked the rules when it purchased proprietary Windows licenses for the workstations used at the Commission and 41 other European agencies. He argues that the EC evaded proper procurement by, first, claiming exceptionally that it had no alternative but to specify the proprietary Windows brand name to describe what it wanted, and then, second, organising a negotiated procurement procedure with the one and only Windows vendor. "When there is an alternative, the second, the negotiated procedure does not allow the use of the first, the exception to specifying brand names."

So far, Paapst says, he has approached his EC contacts in vain with his message. "We know that there are alternatives, such as Linux or Apple's Mac OS X. Even the European Court knows there are alternatives."

Tip of the Iceberg

The desktop may be the most problematic to change, but there are fearless public administrations. The top three of public administrations that use open source, not just for websites and servers but also across the majority of their desktop PCs, are the French Gendarmerie, the government of Spain's Extremadura region and the city of Munich.

The French Gendarmerie are migrating 85,000 PCs in 45,000 police stations. They are converting 10,000 PCs per year. The project is foreseen to be completed in 2015, with 90 % of the PCs switched to free and open source. That is a similar percentage as in Munich, coincidentally.

Why did the Gendarmerie switch? Well, in the end it happened because of protests from a proprietary vendor to one of the Generals about an IT staffer that was experimenting with an open

26 <https://joinup.ec.europa.eu/community/osor/news/fix-my-street-proves-benefit-open-source-swedish-towns>

27 <https://joinup.ec.europa.eu/news/swedish-municipalities-re-use-uks-fix-my-street-web-application>

28 <https://joinup.ec.europa.eu/community/osor/news/ireland-agency-helps-local-governments-beat-open-source-fear>

29 <https://joinup.ec.europa.eu/news/openforum-europe-procurement-law-fails-address-discriminatory-practices>

30 <http://www.computerweekly.com/blogs/public-sector/2012/07/-the-european-commission-has.html>

31 <http://eolevent.eu/ca/node/429>

source³² spreadsheet. At least, that is what Lieutenant-Colonel Xavier Guimard told the attendees of a Dutch open source conference in 2006.

He also said that move to open source has helped to reduce maintenance costs. Keeping GNU/Linux desktops up to date is much easier, he says. "Previously, one of us would be travelling all year just to install a new version of some anti virus application on the desktops in the Gendarmerie's outposts on the islands in French Polynesia. A similar operation now is finished within two weeks and does not require travelling."

In October 2013, the Gendarmerie again made headlines in IT trade publications around the world, following Joinup's report on a presentation by Major Stéphane Dumond, at the Evento Linux conference in Lisbon. The Major reported that using an open source desktop lowers the total cost of ownership by 40%, in savings on proprietary software licences and by reducing costs on IT management.³³ "Using Ubuntu Linux massively reduces the number of local technical interventions."

For the French police force, the industrialised open source desktop is a powerful lever for IT governance, Major Dumond says. "The direct benefits of saving on licences are the tip of the iceberg."

Low Budget

The government of Spain's Extremadura autonomous region has 70,000 PCs running Linux (based on Debian, translated into Spanish and with some local tweaks and applications included) in schools (mostly dual-boot). The same distribution runs on 15,000 PCs in local hospitals. And, if all is well, there is a switch under way to Ubuntu Linux or something similar for 40,000 PCs in all the offices of the regional administration.³⁴

This desktop migration project is titled 'Challenge'. Extremadura's CIO Theodomir Cayetano explained that moving to open source will allow the administration to unify all the desktops, make the desktops easier to manage, make the desktops more secure and less prone to viruses and to make it easier to manage the desktops (centrally).³⁵

There could be trouble, says Cayetano, as the administration does not have a lot of budget to spare for the migration.

Political Support

The achievements of the city of Munich are well known. The city has migrated close to 14,000 desktops and along the way created several interesting open source solutions, including the template management tool Wollmux,³⁶ one of the most popular projects on Joinup. It helps manage forms and templates and, for example, makes creating procurement requests much easier. It runs only on LibreOffice and OpenOffice and, according to one of the Munich developers, some of the civil servants in Freiburg love it so much that they are regretting having to switch back to the tired proprietary office suite.

32 <http://joinup.ec.europa.eu/news/fr-gendarmerie-saves-millions-open-desktop-and-web-applications>

33 <https://joinup.ec.europa.eu/community/osor/news/french-gendarmerie-open-source-desktop-lowers-tco-40>

34 <http://joinup.ec.europa.eu/community/osor/news/spains-extremadura-starts-switch-40000-government-pcs-open-source>

35 <http://joinup.ec.europa.eu/news/extremadura-move-all-its-40000-desktops-open-source>

36 <https://joinup.ec.europa.eu/software/wollmux/description>

The Linux project is probably the world's most well-known example of a public administration moving to open source. That is in a major part thanks to Munich's mayor, Christian Ude. "The main reason for such a project to fail is the lack of political support", Jutta Kreyss, IT-architect for the German city of Munich, told the European Parliament Committee on Legal Affairs, in Brussels in July 2013.

Munich's switch took a decade, involved a centralisation of 22 IT departments and the standardisation of applications and IT management which affected all 33,000 employees in the 51 locations across the city. Of course there were conflicts. Yet, Kreyss told the EP, these meetings were convened in the office of the mayor. "You can imagine how helpful that is, in getting it done."

"Freedom from What?"

Europe has few politicians like Ude that can take credit for making a stand on using free and open source. In June, when the city hosted a two-day conference to celebrate the completion of the project, the mayor recounted his main motivation to push for free and open source. The ubiquitous proprietary desktop vendor had rudely demanded the city updates its operating system, he said, as the then-used version was no longer being supported. "No other sector suffers from this kind of vendor lock-in", Ude said. "Not even an industry specialised in the construction of tunnels."

The confrontation clearly hardened his resolve. He even discussed the switch with Bill Gates, at a time when he was still the chairman of Microsoft.

Ude, who was on his way back from a speech at an IT conference in California, was offered a ride to the airport by Gates. The chairman showed up with a big van with tinted windows and had hoped to have a long talk about this Linux project, Ude said.

Gates: "Why are you doing this?" Ude, remarking aside that he has trouble speaking in English, punctuated: "To gain freedom!" Gates had to think about this for a bit, Ude said, but then asked: "Freedom? From what?" Ude: "From you!"

The rest of the trip to the airport passed in silence.

European Initiatives

There are plenty of examples of open source to be found in the European institutions. One interesting example would be the European Citizen's Initiative. The project is proving quite a challenge, involving the Commission, the European Parliament and many influential NGOs from across the EU, including from Berlin. The project could be suffering from feature creep,³⁷ but should slowly become one of the first examples of how a large-scale public administration successfully interacts with the open source community.

A second example is Open e-Prior,³⁸ an open source solution to manage e-(electronic) invoicing. The application is used by the European Commission, and recently the Belgian federal IT services decided they too will now begin to use it.³⁹

37 https://en.wikipedia.org/wiki/Feature_creep

38 http://ec.europa.eu/isa/actions/01-trusted-information-exchange/1-7action_en.htm

39 <https://joinup.ec.europa.eu/software/epriortools/news/belgium-adopts-european-commission-system-e-invoicing>

But so far the nicest example of an open source software solution developed by a European institution is AT4AM. This is software for authoring and management of amendments on parliamentary texts used by the European Parliament. AT4AM makes its texts instantly available in 23 languages. This means that users can submit amendments in their own language, but it also helps translators to quickly find the relevant parts of the documents. It uses an OASIS open standard, LegalDocML (previously known as Akoma Ntoso),⁴⁰ which started the development, by the United Nations, for use in the IT systems in several of the parliaments in Africa. It defines "a machine readable set of simple technology-neutral electronic representations (in XML format) of parliamentary, legislative and judiciary documents". AT4AM is available as free and open source software since March this year, published under the European Union's public licence, the EUPL.⁴¹

About the author

Gijs Hillenius is an independent Dutch journalist. Since 2007, he has written over 1500 news items on public administrations and open source for the Open Source Observatory, a community on the European Commission's Joinup platform for sharing and re-use of ICT solutions.

The platform also hosts several tens of case studies (adding one per month) and now counts 4,400 software projects tailored to public administration and attracts some 80,000 visitors per month.

Joinup is also where you can find the EUPL. That is the licence used primarily by the European Commission. You could call it a fork of the GPL, to better fit the copyright laws in all the EU member states. The one really nice thing about the EUPL is that it is legally identical in all the 22 languages in which it is available.

⁴⁰ <http://www.akomantoso.org/>

⁴¹ <https://joinup.ec.europa.eu/news/european-parliament-releases-its-amendment-software-open-source>

Licence and Attribution

This paper was published in the *International Free and Open Source Software Law Review*, Volume 5, Issue 2 (December 2013). It originally appeared online at <http://www.ifosslr.org>.

This article should be cited as follows:

Hillenius, Gijs (2013) 'Free and open source software across the EU', *International Free and Open Source Software Law Review*, 5(2), pp 153 – 164
DOI: [10.5033/ifosslr.v5i2.90](https://doi.org/10.5033/ifosslr.v5i2.90)

Copyright © 2013 Gijs Hillenius.

This article is licensed under a Creative Commons UK (England and Wales) 2.0 licence, no derivative works, attribution, CC-BY-ND available at <http://creativecommons.org/licenses/by-nd/2.0/uk/>

As a special exception, the author expressly permits faithful translations of the entire document into any language, provided that the resulting translation (which may include an attribution to the translator) is shared alike. This paragraph is part of the paper, and must be included when copying or translating the paper.



Volume 05 }

Issue 02 } December 2013

Thanks to our Sponsors

IFOSS L. Rev. is published by its Editorial Committee. The Committee gratefully acknowledges the sponsorship of its many supporters and donors, including those who have permitted the upstart of the review with their contribution :



Available online at: <http://www.ifosslr.org>