



Free and open source software in Argentina

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1. INTRODUCTION

As in other parts of the world, free and open source software (FOSS)² has been gaining acceptance in Argentina over the past years.

FOSS differs from proprietary software. A proprietary software company devotes substantial monetary and human resources to develop computer programs. The “core” of those programs is the source code, its “written” part, which may be read by the human user³. Under a proprietary scheme, rights to the source code -which are protected under trade secret statutes, and copyright laws and treaties-, may only be modified by the author or rightholder, or with their consent. The rationale behind this business model is that monetary gain results from selling the software because, if users had access to the source code (or if they could freely reproduce it), they would not buy it from the software developer, who would not recoup its investment. Under the proprietary scheme, the software user acquires a license to use the program for only one computer terminal (as a general rule), and must pay for additional licenses for further use of the software. Moreover, the user may not access the source code in order to study how it works and/or to detect flaws.

On the contrary, under the FOSS model, users may access the source code in order to see how it works and/or to improve it. In addition, any improvements to the source code

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² Even though in this work I shall refer to free and open source software as “FOSS”, I will sometimes treat them separately as “free” and “open source” software”, taking into account the differences between both movements explained below.

³ The “object code”, instead, can only be read by the computer. Object code is the code produced by a compiler (a program that translates source code into object code). As expressed, programmers write programs in source code, which consists of instructions in a particular computer language. Computers, however, can only execute instructions written in a low-level language called machine language. To get from source code to machine language, the programs must be transformed by a compiler. The compiler produces an intermediary form called object code, which is often the same as or similar to a computer’s machine language (see: http://www.webopedia.com/TERM/o/object_code.html and <http://www.webopedia.com/TERM/c/compiler.html>).

must be given back freely (as we will see, not freely in the sense of “no compensation”, but freely in the sense of freedom to access, study, improve and modify the software). At first glance, it may seem that no monetary gain results from the FOSS model. However, nothing could be further from the truth, because the “free” element in FOSS only means that access to the source code must be free, but it does not prevent commercial enterprises from providing paid ancillary services such as software development, implementation, training and support.

For a developing country like Argentina⁴, avoiding the cost of proprietary software licenses may represent substantial savings for a budget-constrained public sector, also furthering broader access to education, in an era when digital learning should certainly form part of any curriculum.⁵

It has been further underlined that FOSS implies savings in the development of non-differentiating factors, such as operating systems. Software is made up of a series of components, non-differentiating and differentiating. Only the latter represent a competitive advantage for the software developer. While in an open model such as FOSS competitors may collaborate in the development of non-differentiating factors, in proprietary settings competitors shall work separately on non-differentiating factors, which may result in an unnecessary duplication of efforts. In the case of FOSS, collaborative work on non-differentiating factors may reduce the total cost of ownership (TCO) of computer programs. In developing countries (like Argentina), where labor costs are comparatively lower, the TCO would otherwise be allocated to payment of proprietary software royalties. In addition, for developing countries it may be more advantageous to build on existing open software platforms as a means of encouraging budding companies (Rizk / El-Kassas: 2009).

Moreover, the adoption of free software may contribute to programs of digital inclusion carried out by national and local governments in developing countries. Considering that free software costs less, it may provide a much greater outreach for those programs. Moreover, free software represents an easily sustainable model for the dissemination of information and communication technologies in developing countries (UNCTAD: 2004).

⁴ See page 376 of the United Nations Human Development Report 2007/2008, where Argentina is classified as one of 137 developing countries; available at: http://hdr.undp.org/en/media/HDR_20072008_EN_Complete.pdf.

⁵ It is noted that the dissemination of information technologies depends on three basic conditions: (i) *access* to certain equipment, software and digital information on the part of users, (ii) the *acquisition* of the necessary equipment and software, and (iii) the creation of *efficient* information technology use capabilities (Correa: 1999). It could be argued that the cost savings generally resulting from FOSS use enables broader access to information technologies, particularly crucial for developing countries such as Argentina. Furthermore, on July 24, 2009, the MERCOSUR summit held in Asunción, Paraguay, issued a declaration favoring free software, proposing MERCOSUR governments to adopt policies fostering free and open technologies such as free software (which guarantee “digital inclusion”), as well as information and communication technology policies in public education that protect regional technological sovereignty, through the use of applications based on free software and non-paid access to web-based resources (see: <http://www.solar.org.ar/spip.php?article617>). The MERCOSUR is a common market formed by Argentina, Brazil, Paraguay and Uruguay (see: <http://www.mercosur.int>).

Under the TRIPS Agreement, software is copyright-protected. Section 10.1 of TRIPS establishes that “*Computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention (1971)*”. The consequence of assimilating software to literary works under the Berne Convention is that it will be subject to the bundle of exclusive rights classically recognized to authors or right holders under copyright or authors’ rights⁶ laws, including the right of reproduction, public communication and transformation. FOSS proponents (the free software movement in particular) consider that software should not be subject to those exclusive rights (basically expressed in practice as control over the source code) because software progresses more efficiently when created collaboratively, that is, when one or more programmers work on a computer program, then make available the results with no access restrictions, other programmers improve the work and, in turn, give those results back (again with no access restrictions) to the original programmer(s) and to the community in general.

Argentina only introduced software protection into Law 11,723 in 1998, before the end of the transitional period established for developing countries in Section 65.2 of the TRIPS Agreement. Prior to that, there were only limited rules available for software protection, as explained below.

In order to address the topic of this paper, I will first make a general introduction about FOSS (in particular, the difference between “free” and “open source” software). Next, I will analyze provisions included in the Argentine Constitution and in human rights instruments ratified by Argentina, which may be helpful for the furtherance of FOSS. I will then turn to the Argentine legal regime applicable to software in general (which mainly addresses proprietary software, but does not pose any explicit obstacles on FOSS), and I will also mention FOSS legislation in Argentina indicating that, even though the national Congress has not adopted specific FOSS legislation so far, some Argentine provinces have adopted laws and administrative resolutions, which may serve as a background for future federal legislation. I shall also refer to civil law provisions that may, despite the absence of FOSS-specific legislation, enable the enforcement of FOSS viral licenses (an element without which the growth of the FOSS movement would be seriously hampered). Finally, I will refer to what I call a “buoyant third sector” – the civil society groups which are behind much of the use of FOSS in Argentina today. In my conclusions, I reflect on the obstacles that FOSS legislation may encounter, particularly if the Argentine Federal Government adopts an official FOSS procurement policy.

2. FREE OR OPEN SOURCE?

Even though they are usually dealt with together, “free” and “open source” software are not synonyms.

⁶ “Copyright” and “*droit d’auteur*” (or “authors’ rights”) should not be considered strictly equivalent expressions. Important differences exist, for example in the field of moral rights or in the attribution -in the copyright system- of original authorship to entities which are not a physical person (Lipszyc: 1993). Consequently, I will sometimes use “authors’ rights” when pointing out the differences between both systems.

Free software⁷ is software that may be studied, run, copied and distributed freely. According to the Free Software Definition by the Free Software Foundation (FSF)⁸, “free software” refers to the following freedoms:

“-The freedom to run the program, for any purpose (freedom 0).

-The freedom to study how the program works, and adapt it to your needs (freedom 1). Access to the source code is a precondition for this.

-The freedom to redistribute copies so you can help your neighbor (freedom 2).

-The freedom to improve the program, and release your improvements (and modified versions in general) to the public, so that the whole community benefits (freedom 3). Access to the source code is a precondition for this.”⁹

The FSF principles further state that a program “is free software if users have all of these freedoms. Thus, you should be free to redistribute copies, either with or without modifications.”¹⁰

Therefore, free software is truly “free” when it guarantees all of these freedoms. In particular, the software is not free if the whole community does not benefit from improvements made to the program, in accordance with freedom 3.

In English, the term “free” is ambiguous because it may either mean free as in *gratis* or free as in *freedom*. Free software refers to the second sense of the word. This semantic ambiguity does not occur in a Spanish-speaking country like Argentina where the word *libre* (free) means free as in “freedom” and *gratis* means free as in “no payment”.¹¹

According to the free software philosophy, any improvements made under a free software license must be shared with the rest of the software community. The rationale is that, if the software was freely obtained, any improvements thereon must also be given back with no access restrictions.

The FSF’s legal strategy in order to make sure that all free software remains free is the GNU General Public License (commonly referred to as the “GNU/GPL” or “GPL”),

⁷ “The free software movement was started in 1983 by computer scientist Richard M. Stallman, when he launched a project called GNU, which stands for “GNU is Not UNIX”, to provide a replacement for the UNIX operating system — a replacement that would respect the freedoms of those using it. Then in 1985, Stallman started the Free Software Foundation, a nonprofit with the mission of advocating and educating on behalf of computer users around the world.”; <http://www.fsf.org/about/what-is-free-software>.

⁸ “The Free Software Foundation, founded in 1985, is dedicated to promoting computer users’ right to use, study, copy, modify, and redistribute computer programs. The FSF promotes the development and use of free (as in freedom) software -- particularly the GNU operating system and its GNU/Linux variants -- and free documentation for free software”; <http://www.fsf.org/about/>.

⁹ Available at the FSF’s website: <http://www.fsf.org/licensing/essays/free-sw.html>.

¹⁰ Idem.

¹¹ Similar considerations apply when referring to FOSS in Brazil: “*The semantic battle between ‘free software’ and ‘open source’ has less resonance in Brazil than in the English-speaking world. Although the concept of freedom is as hard to define in Portuguese as it is in English, there is no ambiguity in the word livre- it always means ‘free as in freedom’, and never ‘free as in gratis’*” (Mizukami – Lemos: 2008). FOSS is sometimes also referred to as FLOSS (Free / Libre Open Source Software) in order to avoid the ambiguity of the word “free” in English.

a free (as in freedom) copyleft license for software and other kinds of works. According to its preamble “the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users.”¹²

The GNU’s Preamble further states that, in order to protect the rights of users of free software, it is necessary to prevent others from denying those rights to users or asking them to surrender the rights. Therefore, any user of free software who distributes copies of the software or modifies it has the responsibility to respect the freedom of others. For example, any user who distributes copies of such a program, whether *gratis* or for a fee, must pass on to the recipients the same freedoms that the user received, making sure that they, too, receive or can get the source code. And the user who distributes the software must show them those terms so they know their rights.¹³

The foregoing is known as the “viral effect”. A software program released under the GPL “transmits” the GPL’s provisions to all other software it comes into contact with. A software developer may not make a proprietary derivative work based on GPL’d software. Any derivative work must remain free, like the original. Moreover, the GPL does not allow for the combination of free and proprietary in order to turn free software into proprietary software. In other words, the “spirit” of the GPL is that any software published as “free” by its author, as well as any derivative works based thereon, must at all times remain free.

The viral effect is guaranteed with copyleft, which may be defined as a restriction to restrictions¹⁴. In the same manner that copyright enables restrictions imposed by the right holder, copyleft prevents those who improve, update, study or in any manner use free software, from imposing any restrictions affecting the original “free nature” of that software at the time of its distribution or redistribution. If copyleft licenses were not viral, it would be very easy to override viral licensing provisions simply by combining free with proprietary software (Ríos Ruiz: 2003).

In the case of open source software, the source code is released so as to make it possible for programmers to run, study, modify and improve the software; those improvements may or may not be proprietary: the programmer who made the improvement may give the improvement back freely or make it proprietary, depending on what the programmer (or company which made the improvement) believes is more desirable.¹⁵

¹² <http://www.gnu.org/licenses/gpl.html>.

¹³ Idem.

¹⁴ Wikipedia defines “copyleft” as “a play on the word copyright to describe the practice of using copyright law to remove restrictions on distributing copies and modified versions of a work for others and requiring that the same freedoms be preserved in modified versions. Copyleft is a form of licensing and can be used to modify copyrights for works such as computer software, documents, music and art.”; <http://en.wikipedia.org/wiki/Copyleft>.

¹⁵ Principle # 9 of the Open Source Definition: “The license must not place restrictions on other software that is distributed along with the licensed software. For example, the license must not insist that all other programs distributed on the same medium must be open-source software.”; <http://www.opensource.org/docs/osd>.

In other words, the free software movement takes an *ethical* approach to free software (where freedom tends to prevail over other considerations), while the open source movement takes a *pragmatic* approach to free software (where freedom may in some cases not be desirable, but that is left to the discretion of the author of the improvement) (Carranza Torres: 2004).

Whether free or open source, in FOSS settings the source code is made freely available. Therefore, one wonders why should someone who has devoted time and resources to the development of a computer program make it available for free.

Scholars identify different types of motivations to explain why programmers voluntarily put time and effort into open source projects. These motivations may be categorized as “technological”, “sociopolitical” and “economic”. A technological motivation could be that an individual realizes that there is a need for certain software which he/she may not develop alone (FOSS is essentially a collaborative endeavor). A sociopolitical motivation could be that the programmer believes in a social movement (such as the “software should be free” philosophy espoused by the FSF). Economic explanations include building human capital through learning by reading existing software code and through the process of peer review for code submissions, or signaling one’s ability as an expert, which might then lead to future job opportunities (Schweik: 2007).

The idea behind FOSS is that, when a program is studied and developed by various individuals, they are able to provide valuable input into software development, while at the same time programmers or other users may identify and address flaws, which would take longer to address than if only one company or individual were left to solve them on their own, as is the case in the proprietary context.

Like proprietary software, FOSS is software protected under authors’ rights and copyright laws, with the difference that FOSS creators *voluntarily* relinquish the exclusive exploitation rights recognized to them under laws and treaties. As expressed, this relinquishment occurs as a result of philosophical, social or economic reasons. Attribution rights (known as the “right of paternity” under authors’ rights laws) are never relinquished in FOSS settings.

In principle, there should not be any controversy over FOSS: a group of people freely and voluntarily devote their time and expertise to make available to society technological solutions which may streamline all sorts of projects and, why not, make their lives easier in general. Under that view, FOSS is unobjectionable. However, as discussed below, controversy arises mainly around two issues: (i) whether or not “viral licensing” may be enforced and (ii) the mandatory use of FOSS in government.

3. IS ACCESS TO SOFTWARE A CONSTITUTIONAL / HUMAN RIGHT UNDER ARGENTINE LAW?

Certain legal provisions in Argentina recognize authors’ rights as a constitutional / human right. In addition, some of those provisions also recognize its counterpart: access to culture. In other words, while the right of an author to his / her work has the status of

a constitutional / human right¹⁶, so does access to the cultural commons resulting from those works.

When adopted in 1853, the Argentine Constitution set forth in Section 17 (adopting language similar to the one included in the United States Constitution) that “...*authors and inventors are the exclusive proprietors of their work, invention or discovery, during the time period established by law*”.¹⁷

In 1994, the Constitution was amended introducing -among several other provisions- Section 75, subsection 19 which provides that Congress shall “*take the necessary actions so as to make possible...scientific and technological research and development, as well as the dissemination and enjoyment thereof...to pass laws...enabling the free creation and circulation of authors’ works, of the artistic heritage and cultural and audiovisual spaces.*”¹⁸

In the 1994 amendment, Section 75, subsection 22 granted “constitutional hierarchy” to some international instruments. Among these instruments are the Universal Declaration of Human Rights (UDHR), the American Declaration of the Rights and Duties of Man and the International Covenant on Economic, Social and Cultural Rights (ICESCR), which recognize authors’ rights as a human right, also recognizing access to culture and scientific advancement as human rights.

¹⁶ It should be noted that “constitutional” rights and “human” rights are not equivalent terms. Their philosophical foundations differ. “Constitutional” rights derive from the Enlightenment. The rationale is that citizens and inhabitants of a nation enjoy rights enshrined in a Constitution, which results from State action. Under constitutionalism, the ultimate guarantor of the rights is the State. The constitutionalist movement paved the way for constitutions adopted worldwide, mainly during the 18th and 19th centuries. However, the National-Socialist party which governed Germany between 1933 and 1945 not only was not the ultimate guarantor of citizens’ constitutional rights, but its ultimate violator. After the end of World War II, the United Nations adopted the Universal Declaration of Human Rights. The new rationale, after the Nazi experience, was that a power higher than the State (the international community of nations) should be the ultimate custodian of those rights, which are inherent and inalienable, and recognized (not granted) to all human beings, regardless of citizenship or nationality (Russo: 1999). Notwithstanding the foregoing, the status of author’s rights as “human” rights has been contested, because the construction of author’s rights under human rights instruments has important differences with the scope of intellectual property rights in laws and treaties (see footnote # 19).

¹⁷ All translations of constitutional norms herein by the author. The original section 17 (relevant part) establishes: “*Todo autor o inventor es propietario exclusivo de su obra, invento o descubrimiento, por el término que le acuerde la ley.*” The Argentine and U.S. Constitution treat author’s rights in a different manner. Article I, Section 8 of the U.S. Constitution grants Congress the “power” “*to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries*”. While the Argentine Constitution includes the author’s rights clause in Chapter I (referred to Declarations, Rights and Guarantees) the U.S. Constitution includes the copyright provision in Article I, Section 8, which mentions the “powers” of Congress. This indicates a difference: for the Argentine Constitution the author has a right, whereas in the U.S. Constitution Congress has the power to vest those rights onto authors.

¹⁸ In the original “*Proveer lo conducente...al desarrollo científico y tecnológico, su difusión y aprovechamiento....Dictar leyes...que protejan ...la libre creación y circulación de las obras del autor; el patrimonio artístico y los espacios culturales y audiovisuales.*”

The UDHR's Section 27 establishes "(1) everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits. (2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."¹⁹

The ICESCR's Section 15 provides that "the States Parties to the present Covenant recognize the right of everyone: (a) To take part in cultural life; (b) To enjoy the benefits of scientific progress and its applications; (c) To benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."

In light of the above, in Argentina the right of an author to his / her work is recognized as a constitutional / human right²⁰, and so is access to culture, and software may arguably qualify as "culture" in the digital age. Is it possible therefore to conclude that access to software is also a human right²¹, included in the aforementioned "access to culture" provisions?

¹⁹ It has been suggested that the inclusion of the "access" and "protection" provisions side by side indicates that they were meant to be understood as interrelated. The UDHR's framers observed that technological innovations did not inevitably make their way to the masses, realizing that access to essential goods such as electricity, vaccines and books was crucially shaped by law and policy. Consequently, from the very first UDHR draft they included language declaring access to science and culture as a right to be assured to all. The controversy over the "protection" element (Section 27.2) reflects the two existing conceptions of copyright law: the common law tradition, pursuant to which the exclusive rights of authors to control publication of their works are considered solely in economic terms (as providing incentives for creativity) and the civil law tradition, according to which the natural law concept of *droit d'auteur* recognizes additional, inalienable rights, considering the creative product as an extension of the creator's personality. From the civil law perspective, authors' rights have the same basis as other human rights, so they should be included in the Declaration. From the common law perspective, the "protection" provision risked introducing an element that more appropriately belonged to the area of trade law. The historical context thus suggests that the "protection" element should be understood to refer only to the creator's right to obtain a decent standard of living from their work, and to preserve their moral rights of attribution and integrity. Indeed, as human rights can only be possessed by individuals, and may never be bought or sold, it would make little sense to think of intellectual property as a human right (Bishop Shaver: 2009).

Section XIII of the American Declaration of the Rights and Duties of Man, adopted in April 1948 –even before the UDHR (adopted in December 1948)- includes similar language concerning the right to participate in cultural life and authors' rights.

²⁰ It should be noted, however, that for the United Nations Committee on Economic, Social and Cultural Rights, only the rights of authors who are physical persons are human rights, which means that not every "rightholder" under intellectual property laws and treaties is vested with human rights, which are understood as fundamental, inalienable and universal entitlements belonging to individuals. Pursuant to the U.N. interpretation, "authors' rights" safeguard the link between authors and their creations, as well as their basic material interests necessary to enable them to enjoy an adequate standard of living. Conversely, intellectual property regimes primarily protect business and corporate interests and their investments, so it is important not to equate intellectual property rights with the human right recognized in the ICESCR's article 15.1.(c) [U.N. Doc. E/C.12/GC/17 (2006); available at: <http://www1.umn.edu/humanrts/gencomm/escgencomm17.html>].

²¹ On the one hand, it could be argued that access to certain software –such as software purely for entertainment (for example, videogames)- may not qualify as a human right. On the other hand, establishing a distinction as to software for education and software for entertainment may not be easy in all instances. For example, many multimedia works combine entertainment and educational features.

Considering the date of its adoption, the drafters of the original Argentine Constitution could not have had software in mind. However, the drafters of the 1994 amendment probably did. And even if the UDHR / ICESCR “access to culture - scientific development” language is not specifically directed to software (and it was probably not considered taking into account that the UDHR and ICESCR were adopted in 1948 and 1966, respectively) they are broad enough so as to consider that access to software forms part of the “access to culture - scientific development” concept.²²

Given that knowledge is ever-increasingly distributed over the Internet -which implies the use of computers and software in general- access to hardware and software should be treated as forming part of the right to participate in cultural life contemplated in the Argentine Constitution and international instruments ratified by Argentina. Moreover, Section 13.1 of the ICESCR sets forth that “*The States Parties to the present Covenant recognize the right of everyone to education*”. Again, while the Covenant probably did not envisage software specifically, the broad formulation of the right to education should certainly allow software to be considered included within the “right to education” provisions.

It is noted that the participatory dimension of the right to participate in cultural life as provided for under the ICESCR’s Section 15.1(a) requires the ability to share and transform culture. Individuals take part in cultural life as consumers and creators. Because cultural life is a product of community interaction, the right to participate in cultural life includes being able to share cultural goods with others. Another crucial point is transformative use. Considering that culture does not exist in a vacuum, but rather develops and evolves as it is shared and transformed, creating cultural works often involves building on existing material (Beutz Land: 2008).

Under this light, FOSS could easily be regarded as a way of guaranteeing the right to participate in cultural life, as mandated by the ICESCR. FOSS projects are in essence a way of “sharing” and “transforming” and FOSS is a cultural product based *per se* on the concepts of “interaction” and “transformative” use. The essence of FOSS is sharing code, which may then be transformed by other programmers, who interact and transform the works. While FOSS-based interaction would probably be accessible only for computer-conversant individuals, it is potentially open for anyone with computer knowledge, that is to say, there are no legal barriers for participation.

If we conclude that access to software is a human right, then the question follows whether the state should take active steps in guaranteeing that human right. In my opinion, the answer is yes: the State should take positive steps towards guaranteeing that all citizens have access to education, including access to software, because -in the digital age- access to education would not really be complete without access to software.

4. LEGAL REGIME.

In 1998, the Argentine Congress passed Law 25,036, which incorporated the protection of software into Section 1 of the Copyright Act (Law # 11,723) providing that “*For the*

²² As noted by Lea Bishop Shaver “*Indeed, the very nature of statements about a right to scientific progress assumes things that are not yet in existence.*” (E-mail to the author dated July 13, 2009).

purposes of this law, scientific, literary and artistic works comprise writings of all types and scope, and include source and object computer programs....”

Prior to Law 25,036, there had been a debate as to whether or not computer software was subject to authors’ right protection. In 1994, presidential Decree 165/1994 had included computer software in the list of works protected under Law 11,723, providing registration rules. A discussion as to the constitutionality of the Decree ensued because Law 11,723 includes criminal sanctions, which meant that criminal liability could be imposed for software infringement as a result of a president’s order, when -according to Sections 75, subsection 12 and Section 99, subsection 3 of the Argentine Constitution- criminal sanctions may only be established by Congress (Lipszyc / Villalba: 2001).²³

Law 25,036 also incorporated the following amendments into Law 11,723:

- Section 4, subsection d), which sets forth that the owner of the intellectual property right over a computer program is the entity or individual whose employee has developed the program in the course of the employment relationship, except as otherwise provided.²⁴

- Section 9, second paragraph, providing that users of computer programs who have obtained a license from the author or the rightholder may make one back-up copy, which must be properly identified and may not be used other than for replacement of the original copy, if lost or damaged.

- Section 55 *bis*, establishing that the exploitation of intellectual property rights over computer programs shall include, among other aspects, license contracts for the use and reproduction therefor.

- Section 57, final paragraph, providing that the registration of computer programs shall consist of the deposit of the elements and documents provided for in applicable regulations.

It is therefore clear that the Argentine software regime protects proprietary software. At the national level, no legal provisions contemplate FOSS (although some provinces

²³ Section 6, subsection c) of the Patent Act, Law # 24,481 excludes software from patentability. However, the Argentine Patent Office grants software patents in cases where the software has a “technical effect”. In a 1984 decision (*International Business Machines v. La Nación* (Dirección Nacional de la Propiedad Industrial s/ denegatoria de patente), handed down under the former Patent Act (Law # 111), the Buenos Aires Federal Appellate Court for Administrative Matters held that a patent application claiming a method for the transfer of data was patentable because it was aided by a circuit, which produced a tangible result, thus meeting the “industrial applicability” threshold necessary for patent protection. Other than the IBM case, there are virtually no judicial decisions in Argentina dealing with the patentability of software (Wegbrait: 2002).

²⁴ The general principle that the rights to the software program belong to the employer is arguably at odds with the consideration of authors’ rights as human rights. However, it should be borne in mind that the UDHR and the ICESCR recognize authors’ rights over all sorts of works; put differently, the automatic assignment provision does not apply -at least under Argentine law- to works other than software. Moreover, even in the case of software, the moral rights of attribution and integrity are never assignable. It has been expressed that the very nature of the software program requires, in many instances, for programmers to hire other programmers, and software companies dedicated to the creation of computer programs require programming teams and periodical updates. These special circumstances make the assignment provision for programmers more justifiable than for other types of works (Lipszyc / Villalba: 2001).

have adopted FOSS legislation, as we will explain below, and there are two draft bills pending with the Argentine Congress).

Considering that software in Argentina is protected under copyright, software users may in principle only use the purchased copy in one computer terminal (except for the above-mentioned “back-up” copy exception). The user must pay for other licenses in order to install the program in additional computer terminals²⁵. In addition, as already expressed, under the proprietary scheme, access to the source code is denied. However, under FOSS, access to the source is not only not denied, but encouraged, so FOSS should not be regarded as contradicting the Argentine software regime, because the source code in the FOSS context is *voluntarily* released by the author, who relinquishes the economic exploitation rights recognized to him/her under copyright law.

Moreover, the final paragraph of Section 19 of the Argentine Constitution establishes that “*no inhabitant of the Nation shall be obliged to do what the law does not mandate, nor shall be prevented from doing what it does not forbid.*”²⁶ Put simply, one can do what the law does not expressly prohibit. Consequently, although no nationwide legal provisions contemplate FOSS, it should be regarded as a lawful enterprise under Argentine law.

5. FOSS IN THE ARGENTINE GOVERNMENTAL SECTOR.

Considering that no money is paid for FOSS licenses, FOSS proponents argue that governments should preferably (some proponents argue, exclusively) use FOSS. According to this view, governments should not use public funds to pay for software available for free.

Naturally, in the case of FOSS, even though the program is generally obtained royalty-free, software suppliers still charge for development, training, support and maintenance. However, the cost of those services, when provided, are expected to be significantly lower than those arising in a proprietary context, where a large software user such as the government would be expected to pay one license per computer terminal, *in addition to* training, support, maintenance and updates. Notwithstanding the foregoing, FOSS advocates point out that the issue is not only price but that, as a matter of principle, the government should not use proprietary software because the source code is kept secret, namely, the government should not use technological solutions if it does not know entirely how they work.

Under this view, it is argued that FOSS better guarantees national security. Because FOSS makes it possible to investigate how the source code works, users may determine whether the program includes intentional or unintentional vulnerabilities, which could allow undue access to information by third parties. By enabling access to the source code, the

²⁵ While the law requires payment of one license per computer, piracy rates are high. The Business Software Alliance (BSA) reports a 65% piracy rate in Latin America for 2007 and 2008 (see. <http://www.bsa.org/country/~media/D02B5A4B60444B0AAF6CFDD598C72CBC.ashx>). Even though the BSA figure is not official, public perception is that software piracy in Argentina is significant.

²⁶ In the original “*Ningún habitante de la Nación será obligado a hacer lo que no manda la ley, ni privado de lo que ella no prohíbe.*”

program is constantly scrutinized by qualified professionals, which makes it much more likely for vulnerabilities to be detected (Heinz: 2001).

Although the prospect of intentional vulnerabilities sounds somewhat conspirative and, if discovered, could expose proprietary vendors to claims for damages and criminal liability, unintentional vulnerabilities could occur and, even if they do not take place, citizens should nonetheless have access to the way in which their digital data are managed by government agencies.²⁷

Other advantages of FOSS use in government have been signaled (Maresca: 2005), including:

(i) **Better allocation of resources.** FOSS used in government may then be used by society as a whole, which benefits from broader access to software. Furthermore, the resources saved when using FOSS may be invested in public education. In addition, there is room for the argument that government funding should go to a public good, such as FOSS, rather than to a private company in the form of software license payments.

(ii) **Development of local providers.** The government may retain local providers in order to implement and maintain FOSS solutions, thus fostering local companies, instead of transferring funds (generally to foreign companies) in payment of copyright royalties.

(iii) **Independence from providers.** In the case of proprietary software, there is usually only one company providing certain software. Consequently, when acquiring a certain product, the State is also deciding which vendor will be retained. In the case of FOSS, any company may provide the software, as well as any associated services.

(iv) **Adaptation to specific needs.** Government agencies may choose a particular FOSS solution and adapt it to their specific needs, by choosing the software company they see fit. The same might be carried out with a proprietary company, but the government would be tied to that vendor, which reduces its bargaining power and, in case of a disagreement, the government would have to change the software, thus generating substantial migration costs.

(v) **Information security.** The State must be able to preserve and maintain the confidentiality and integrity of the information that it processes and handles. In the case of FOSS, which enables complete access to the source code, the State (and the community in general) knows how government and citizens' information is stored and maintained.

(vi) **Immediate and long-term availability.** Government-held information must be available for public access and scrutiny when required and for a long time thereafter. A proprietary software company could go out of business, and not knowing the source code may pose obstacles to information retrieval and access. If a FOSS company goes out of business or is unwilling to accomplish the task, the government could always turn to other vendors.

²⁷ Although probably only computer experts would access the source code of government software, the argument still holds true because, when the source code is open, anyone is potentially able to examine how the program works.

The maintenance and preservation of digital records is clearly related to FOSS governmental use. Digital data stored in proprietary formats may require citizens to acquire the software sold by a particular vendor. In addition, accessing a certain proprietary format may not be possible over time if the company which created the format no longer exists. In this regard, it is noted that the archiving of documents is a fundamental responsibility of democratic governments, because access to state records is essential for holding governments accountable and for deliberation over the effectiveness of government institutions and policies. Digital standards can raise problems of backward incompatibility, non-interoperable proprietary formats, and software and media obsolescence, all of which could prevent government agencies from guaranteeing that digital public records will remain accessible in the future. In other words, electronic information accessible today may become inaccessible in ten years because previously dominant proprietary formats are no longer supported (De Nardis - Tam: 2007).

Even though no nationwide laws in Argentina have adopted a FOSS governmental procurement policy, some provinces already have.²⁸

On November 18, 2004, the Province of Santa Fe²⁹ adopted Law 12,360 laying down the provincial government's FOSS policy. According to Section 1 of Law 12,360, "free software" is the one which guarantees the following:

1. Running the program with no restrictions for any purpose;
2. Unrestricted access to the source code;
3. Free and comprehensive inspection of the program's functioning mechanisms;
4. Absolute freedom to modify the program in order to adapt it to the user's needs;
5. The ability to freely copy and distribute copies of the program, whether in its original or modified version, under the same conditions than the original program;
6. That the cost of obtaining a copy of the program's source code shall not be significantly greater than the usual market value for the making of such a copy.

According to the law, software is proprietary when it does not meet the foregoing criteria.

The Law also defines "open format" as any mode of codification of information presenting (i) publicly available complete technical documentation, (ii) publicly available source code, and (iii) absence of restrictions for the creation of software which stores, transmits, receives or accesses data codified in this manner.

²⁸ Argentina is a federal country. The 1853 Constitution (with several amendments) essentially follows the U.S. Constitution. Pursuant to Section 121 of the Constitution "*The provinces keep all the powers not delegated by the Constitution to the federal Government...*", ("*Las provincias conservan todo el poder no delegado por esta Constitución al Gobierno federal...*"). The foregoing means that Argentine provinces may adopt legislation in different areas, for example, laying down the information technologies to be used in the provincial government.

²⁹ Located in Argentina's central Eastern region.

Section 2 further states that the executive, legislative and judicial branches of government, decentralized bodies³⁰ and companies where the provincial government is a majority shareholder shall prioritize the use of free and open source computer programs in their information systems and equipment.

However, Section 4 provides that the Ministry of Economy and Finance may authorize the use of proprietary software in some cases, and the different agencies of the provincial government may request a special permit for the use of non-free software, for cases where the task to be performed directly depends on the program in question.

In October 2005, the Province of Santa Cruz³¹ passed Law # 2787, favoring FOSS. Section 1 sets forth that the legislative, executive and judicial branches of the Province of Santa Cruz, as well as state companies or companies in which the province is the majority shareholder, shall prioritize the use of free and open source computer programs in their information systems and equipment.

Section 2 defines “open programs” as those whose industrial or intellectual property license in no manner place a limit on the assignment, distribution or use of their original features, ensuring for the user unrestricted access to the source program -at no additional cost- allowing the program’s partial or total alteration for the improvement or adaptation thereof.

Section 4 establishes that open program licenses used by the provincial government shall in all cases expressly allow modifications and applied work as well as the unrestricted distribution of those applications in identical terms than the original license.

Section 7 provides that, after a transition period, the provincial government may only acquire proprietary software if there is no FOSS available contemplating the needs of the relevant governmental sector.

On December 21, 2006, the Province of Misiones³² adopted Resolution # 175/06, establishing in Section 1 that any electronic document created and issued by any instrumentality of the Province of Misiones, with the purpose of storing and distributing information among bodies and officials of the provincial government, will have to be codified in OpenDocument open format. The provincial government adopted the OpenDocument format for documents which must eventually be modified by the recipient, and the PDF/A format for read-only documents. The Resolution rejects the use of any proprietary formats and further states (Section 2) that the government of Misiones, its depending instrumentalities and companies and bodies wherein the Provincial Government is a majority stakeholder, will have to use open format OpenDocument files for the creation, storage and exchange of information of electronic files among bodies and individuals.

³⁰ Under Argentine law “decentralized bodies” (*organismos descentralizados*) are institutions to which the federal or provincial governments delegate juridical and administrative powers so that they may carry out their functions and services. These bodies have two characteristics, which may operate jointly or severally: autarchy, that is to say, the ability to decide as to the bodies’ relationship with its staff and financing resources, and autonomy, namely: the ability to elect their own authorities. <http://www.sagpya.mecon.gov.ar/new/0-0/nuevosito/institucional/descentralizados/descentralizados.php?fondo=descentralizados>

³¹ One of the Patagonian provinces, in the south of the country.

³² Located in the northeast of Argentina.

The Resolution further defines “open format” as those documents containing public specifications, allowing free use thereof. In other words, the definition understands that, for a document to be considered open format, all information necessary to treat any document in that format must be public, whether in order to read, create, modify or store the document, without the application of any patent or author royalties.

As expressed, the provinces of Santa Fe and Santa Cruz have adopted legislation favoring FOSS, whereas Misiones has adopted a resolution (which ranks lower than a law) excluding all use of proprietary software. However, the legislation adopted in these three provinces understands “open format” in similar manners. This legislation could well serve as background for a federal statute.

In fact, since 2006 there is a draft bill with the Argentine Congress (File # 0490-D-08³³), concerning the Federal Government’s Software Licensing Policy.

According to the bill’s recitals, there are two types of software: free and proprietary. Software is free when there are no restrictions to its use, dissemination and modification. Proprietary software restricts user rights to the mere use of the software’s functionality under conditions determined at the rightholder’s sole discretion. Pursuant to the bill, user rights under a proprietary license are insufficient for the State’s operational needs and free software offers economic, social operational and national security advantages which make its use imperative and exclusive in all areas of government.

According to Section 2 of the draft bill, the executive, legislative and judicial branches, decentralized bodies and companies where the state is the majority shareholder shall only use -in their information systems and equipment- programs whose terms allow the user to:

- a) Use the program for any purpose, in its original or modified version;
- b) Study the program’s operation;
- c) Adapt the program to the user’s needs;
- d) Prepare and distribute copies of the program, whether in its original or modified versions.

To make possible the exercise of the powers granted under b), c) and d), the complete source code of the licensed software must be available at a cost not significantly higher than the usual market value of the materials, workmanship and logistics necessary for the making of a copy.

The bill states that the Federal Government should *only* acquire FOSS.

There is a second draft bill pending with the National Congress (file # 0603-D-08), labeled “Implementation of Free Software by the Federal Government”, substantially similar to Law # 2787 of the province of Santa Cruz.

³³ This bill was originally filed under # 7228-D-06 on December 1, 2006. Because the term for the bill to be approved would have expired on December 1, 2008 (pursuant to Section 1 of Law # 13640 which sets forth a two-year deadline for the approval of draft bills), it was resubmitted for consideration by Congress on March 11, 2008.

Section 1 of the draft bill sets forth that the three branches of the federal government, autarchic and decentralized bodies, as well as companies wherein the federal government is the majority shareholder, shall prioritize the use -in their information systems and equipment- of free and open source computer programs, not subject to any ownership rights, whether concerning their assignment, modification or distribution. The migration processes to such effect will be initiated gradually and progressively.

A difference between bill # 0603-D-08 and the Santa Cruz law is that the bill sets forth that the executive branch, through the body created to such effect shall: (i) provide open software training programs for public officials and educators, (ii) be responsible for the distribution of open software programs for the federal government, and (iii) encourage the inclusion of open software programs in information technology curricula in all educational establishments dependent on the federal government, or which receive the federal government's support.

Finally, on November 22, 2007, the Argentine Chamber of Representatives adopted a declaration favoring technological neutrality. Pursuant to the declaration "*Congress would be pleased if the Federal Government, through the corresponding body, promoted support for the Information and Communications Technology sector and if it recommended that, in the acquisition of those technologies in the public sector, a case-by-case evaluation and decision be made taking due account of objective cost and quality criteria of the solution to be retained (technological neutrality)*".³⁴

Naturally, the draft bills are not yet in force and the Congressional declaration is, at best, soft law. However, they draw attention to conflicting values when government use of FOSS comes to play: should the State be *compelled* to use FOSS because there is no cost for the acquisition of licenses and because the information stored using the software is not dependent on the source code controlled by a private company? Should a principle be established for the *preference* of FOSS over proprietary software? Or should the State be free to retain the technological solution it sees fit, because ruling otherwise would discriminate against companies who do not want to disclose the source code they have developed?

³⁴ Although there are several definitions of "technological neutrality", and it may be considered an evolving concept, the expression is mainly used to describe the attitude expected of the public sector *vis-à-vis* its suppliers, particularly in the field of information technology goods and services. For some, technological neutrality means equality of suppliers in government dealings. From the citizen's standpoint, especially in the realm of e-government, technological neutrality implies that citizens must be able to deal with the government without the imposition of any specific technology, whether *de facto* or explicitly (see: http://es.wikipedia.org/wiki/Neutralidad_tecnol%C3%B3gica). For FOSS advocates, the concept of "technological neutrality" hides a euphemism espoused by proprietary software companies, pursuant to which the latter appear to be "technologically neutral", when in fact they are attempting to perpetuate the proprietary business model in the public sector (see: <http://www.danielcoletti.com.ar/2009/06/25/me-tienen-harto-con-la-neutralidad-tecnologica/>; <http://docs.hipatia.net/neutro/>; <http://pillateunlinux.wordpress.com/2009/03/11/microsoft-quiere-ahora-neutralidad-tecnologica/>; and <http://www.vialibre.org.ar/2007/12/06/piedra-libre-neutralidad-tecnologica/>).

6. ENFORCEABILITY OF FOSS VIRAL LICENSES UNDER ARGENTINE LAW

Considering that a key element for many FOSS projects is viral licensing, we should consider whether the viral element in FOSS licenses is enforceable under Argentine law.

Section 12 of Law 11,723 establishes that “*Intellectual property shall be governed by the provisions of general civil law, subject to the conditions and limitations set forth in this Law.*” Considering that software (and FOSS is a type of software) is included in Law 11,723, rights over FOSS should be regulated under copyright or authors’ rights principles. Notwithstanding the foregoing, Law 11,723 does not contemplate FOSS; therefore, based on Section 12, it seems that Argentine general contract law should be relied upon in order to regulate FOSS-based rights, at least until a specific statute is adopted.

The general principles of contract law are contained in the Argentine Civil Code.

Section 1137 of the Argentine Civil Code states that “*a contract exists when several persons agree upon a declaration of a common will, destined to regulate their rights.*” In other words, a “contract” is formed when one or more parties agree that their contractual rights will be regulated in a certain manner.

Section 1143 establishes that “*contracts are denominated or non-denominated, depending on whether or not the law specifically contemplates them under a special denomination.*” It is evident that the Civil Code (Law # 340 adopted by Congress in September 1869) did not intend to regulate software license agreements. However, Section 1143 is broadly formulated so as to include all sorts of contracts, whether or not specifically contemplated in the law. Everyday agreements such as distribution contracts have so far not been statutorily regulated, which has not prevented case law from recognizing their validity.³⁵ Consequently, FOSS licenses may be considered valid contracts under Argentine law. The question is whether FOSS *viral* licenses are valid.

We now have to turn to another problem. Section 1137 says that a contract exists when there is a declaration of a “common will”. May we conclude that there is a “common will” in the FOSS context, where a software user who, for example, downloads source code from a website has had no prior dealings with the software developer? And further, may we conclude that the viral effect may be imposed on the downloader or other entity or individual who acquires or uses FOSS?

In this regard, section 1145 of the Civil Code sets forth that “*consent may be explicit or implicit. It is explicit when expressed verbally, in writing, or through unequivocal signs. Implicit consent shall result from facts or actions allowing presupposing or presuming that it exists...*”

Based on Section 1145, we may express that, by downloading software (which would be the most frequent way of accessing FOSS), the downloader validly expressed his consent.

³⁵ In the case of distribution contracts, case law has set forth principles to regulate the relationship between the parties indicating, for example, when the agreement may be terminated with or without notice (Marzorati: 1995).

And if the software in question was subject to a viral license, it could be argued that the downloader agreed to freely give back any improvements made on that software.

Pursuant to Section 1197 “*conventions agreed upon in contracts represent for the parties a rule to which they must submit as they submit to the law itself*”. If we conclude that a FOSS license is a valid contract, and that the downloader validly expressed consent when downloading the software, we may conclude that the downloader is subject to the terms of the license as to the law itself. It may even be said that a *viral* license consented to by the user or downloader is a valid contract.

Another view could contend that it would be against copyright law to force the author of a derivative work to give the improvement back. We should not forget that authors’ rights are constitutional rights, also included in human rights treaties. The author of a derivative work is no less an author than the one who originally creates a work. Consequently, one could put forth that, no matter the terms of a license, if a derivative work is created, the author should be free to dispose of that work as he/she sees fit, because a private agreement may not override constitutional or human rights law.³⁶

With regard to the foregoing, one thing is clear: no private agreement may oblige the author of a derivative work to relinquish his attribution rights: he/she will always have the right to be identified as the author of the derivative work. With regard to economic rights, the matter is different: in the first place, authors may contractually assign all or part of their rights (although limitations to this rule apply in collective management³⁷). There is room for the idea that, if a programmer accepted to create a work which did not allow making it proprietary, that programmer should not have started with the work altogether. Ruling otherwise would be unfair to the original creator, who -for whatever reason- believed it was best to not make the work proprietary.

So far, no decisions dealing with the enforceability of viral licenses in Argentina have been reported, and the matter has so far not been addressed by many courts elsewhere.

In 2004, the civil Court of Appeals in Munich, Germany, confirmed an injunction issued on April 2, 2004 by the Munich District court in the case Harald Welte v. Sitecom Deutschland GmbH. Plaintiff was a member of the open source project “netfilter/iptables”. On the Internet platform www.netfilter.org, “netfilter/iptables” was offered for download in source-code form and made available -under the GPL- to members of the project and others for further development. Plaintiff detected that, on Sitecom’s website, “netfilter/iptables” was made available free of charge, but without indicating that the software had been made available under the GNU/GPL and without providing access to the source code.

³⁶ In this regard, section 2 of Law 11,723, establishes that “*the right of ownership of a scientific, literary or artistic work shall include, for its author, the entitlement to dispose of, publish, perform and publicly exhibit, alienate, translate, adapt or authorize the translation of, and reproduce the work in any form*”. However, Section 2 could also be used to justify the opposite position, as we shall see below.

³⁷ For example, section 7 of the by-laws of ARGENTORES (the Argentine collective management society for authors of dramatic works) sets forth that no members may totally or partially assign or sell the right of representation over their works.

Plaintiff unsuccessfully demanded Sitecom to cease violating the GPL, as a result of which he moved for a preliminary injunction.

The Court of Appeals expressed that, since defendant had used the software “net-filter/iptables” in violation of the GPL’s licensing conditions, in particular by not giving a reference to the GPL and making the source code available, defendant had infringed plaintiff’s copyright.

The Court considered that it was irrelevant to consider if the GPL’s licensing conditions had been effectively agreed upon between plaintiff and defendant because, even assuming that the GPL had not been agreed upon by the parties, defendant would notwithstanding lack the right to copy, distribute, and make the software publicly available. The Court also expressed that the distribution without reference to the GPL, and without making the source code available, had also infringed plaintiff’s personal rights as an author.³⁸

Last year, the matter was also addressed in the U.S. case “*Robert Jacobsen v. Matthew Katzer and Kamind Associates, Inc. (doing business as KAM Industries)*”. Jacobsen held a copyright to computer programming code and he managed an open source software group called Java Model Railroad Interface which, through the collective work of many participants, created a computer program called DecoderPro, allowing model railroad enthusiasts to use their computers to program decoder chips controlling model trains. The defendants created derivative works based on DecoderPro, but failed to make those works publicly available pursuant to the conditions of the Artistic License³⁹.

Jacobsen moved for a preliminary injunction and, on August 7, 2007, the District Court for the Northern District of the State of California denied Jacobsen’s motion arguing that, because the license under which Jacobsen had made the program available was intentionally broad, a violation of the license constituted breach of contract but not copyright infringement. Because Jacobsen could not show a likelihood of success on his copyright claim, he was not entitled to a presumption of irreparable harm, which meant that the injunction based on copyright infringement could not be granted.

The case was appealed and, on August 13, 2008, the Ninth Federal Circuit Court expressed that, pursuant to the terms of the license under which DecoderPro had been made available, the user was required to place the user’s modifications in the public domain or otherwise make them freely available.

The Court also expressed that the conditions set forth under the DecoderPro license were vital so as to enable Jacobsen to retain the ability to benefit from the work of downstream users. According to the Court, Jacobsen had expressly stated the terms pursuant to which the material could be modified and distributed and had proposed direct contact if a downloader wished to negotiate other terms, concluding that copyright holders who engage in open source licensing have the right to control the modification and distribu-

³⁸ “The German GPL Order - Translated” (unofficial translation; available at <http://www.groklaw.net/article.php?story=20040725150736471>). (See also Dietrich: 2005).

³⁹ “*The Artistic License refers most commonly to the original Artistic License (version 1.0), a software license used for certain free software packages*”; see. http://en.wikipedia.org/wiki/Artistic_License

tion of copyrighted material. For the Circuit Court, the heart of the argument concerned whether the terms of the Artistic License were *conditions of*, or merely *covenants to*, the copyright license. If the terms were conditions, the case could be decided under copyright law. If they were held to be covenants, the case had to be decided on the basis of contract law. The Court noted that the rights under the Artistic License are granted provided that the license's conditions are met and, under California contract law, "provided that" typically denotes a condition. Consequently, the case had to be decided pursuant to copyright law which -under the U.S. system- provides broader remedies than contract law. The district court's decision was vacated and remanded for further proceedings consistent with the Circuit Court's decision.

In other words, the Circuit Court upheld Jacobsen's right to enforce the terms of the open source license. The implicit reasoning in the Court's decision is: if a programmer makes the software available under an open source license (under terms which do not allow making the work proprietary), and a party makes a derivative work on the basis of that license but refuses to make the source code available, the author of the original work has a legal remedy to have the author of the original work make the source code available, as intended by the author of the original work. Even though the author of the original work is not the "author" of the derivative work, he originally made the work available under the *condition* that derivative works would not be made proprietary; consequently, making derivative works proprietary violates the "intent" under which the work was "published".⁴⁰

Notwithstanding the above, in Argentina the Jacobsen discussion would not have necessarily taken place in the same manner. This is because in the U.S. contracts are enforced under contract law (state by state) and there are certain necessary elements to qualify as a valid contract. Licenses, instead, are enforced under copyright law at the federal level. A "license" is a permission to do something otherwise not allowed (for example, a fishing license). Conversely, in a contract there are reciprocal obligations. The GPL is defined as a copyright "license": a unilateral permission, in which no obligations are reciprocally required by the licensor. If distribution of GPL'd software violates the GPL's terms, the permission to distribute is withdrawn (Jones:2003).⁴¹

In Argentina, however, not much attention is given to the difference between license, contract and / or covenant. As explained above, section 55 bis of Law 11,723 refers to software license contracts. Section 38 of the Patent Act (Law # 24,481) also refers to license contracts.⁴² Therefore, the Jacobsen discussion as to whether the violation of the license constituted a breach of contract or copyright infringement would probably not play

⁴⁰ It has been expressed that "because Jacobsen confirmed that a licensee can be liable for copyright infringement for violating the conditions of an open source license, the original copyright owner may now have standing to sue all downstream licensees for copyright infringement, even absent direct contractual privity." (Moskin / Wettan / Turkel: 2009); See: <http://www.law.com/jsp/legaltechnology/pubArticleLT.jsp?id=1202429618746>.

⁴¹ Jones, Pamela "The GPL is a License, not a Contract" December 3, 2003. Available at: <http://lwn.net/Articles/61292/>.

⁴² See Marzorati (1993) defining software license "contracts" as agreements wherein a property right is retained by the supplier of the software package, who authorizes the use thereof to a third party.

a major role under Argentine law, considering that contracts are defined as “declarations of a common will” and that contractual consent may be “implicit” (Sections 1137 and 1145 of the Argentine Civil Code, respectively) for example by downloading GPL'd software from a website. Consequently, enforceability of a viral license could be possible under Argentine law without entering into the contract / license distinction. The foregoing in no way is intended to imply that Argentine law is better suited for these issues than U.S. law. Argentine contract law has not undergone a major revision since 1869 (when the Civil Code was adopted) so amendments would certainly be desirable to cope with issues resulting from digital technology. However, it could be argued that the broad definitions in the Civil Code could make remedies available for the enforceability of a viral license even before the law is amended.

On January 5, 2009, the District Court for the Northern District of the State of California issued its opinion on remand, holding that the claim for breach of contract failed to state the damages that could be caused to Jacobsen as a result of the breach of the Artistic License. Further, the Court analyzed the requirements for the grant of an injunction: (i) likelihood to succeed on the claims, (ii) likelihood of irreparable harm, (iii) balance of hardships tipping in Jacobsen's favor, and (iv) that the injunction should be in the public interest, and it denied the injunction against Katzer expressing that Jacobsen had failed to show that these requirements were present.

Moreover, on December 11, 2008, the FSF filed a lawsuit against Cisco Systems, Inc. (a company specialized in Internet network equipment) for copyright infringement, alleging that Cisco had distributed programs under the GPL and LGPL⁴³ without respecting the licenses' terms. In 2003, the FSF learned that a wireless router produced by Linksys (a Cisco company), used a GNU/Linux system, but customers weren't receiving all the source code they were entitled to under the FSF licenses. Settlement attempts failed, so the FSF filed suit⁴⁴ with a New York District Court.⁴⁵

On May 20, 2009, the FSF announced that it had withdrawn the lawsuit and reached a settlement whereby, among other aspects, Cisco agreed to (i) appoint a Free Software Director for Linksys to supervise compliance with free software licenses such as the GPL, (ii) notify previous recipients of Linksys products including FSF programs of their rights under the GPL and other applicable licenses, (iii) make the complete and corresponding source code for versions of FSF programs used with current Linksys products freely available on its website⁴⁶.

The Cisco case was settled before a decision was handed down, but -together with Jacobsen and Sitecom⁴⁷- it shows that litigation over the enforceability of viral licenses

⁴³ Lesser General Public License. As explained by the FSF “*We use this license for certain libraries in order to permit linking those libraries into non-free programs.*” (see: <http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html>).

⁴⁴ Lawsuit available at: <http://www.fsf.org/licensing/complaint-2008-12-11.pdf>.

⁴⁵ See <http://www.fsf.org/blogs/licensing/2008-12-cisco-complaint>.

⁴⁶ See <http://www.fsf.org/news/2009-05-cisco-settlement.html/view?searchterm=cisco%20settlement>.

⁴⁷ See: <http://opensource.openmirrors.org/node/360.html>, <http://www.law.com/jsp/legaltechnology/pubArticleLT.jsp?id=1202429618746>, http://en.wikipedia.org/wiki/Jacobsen_v._Katzer, and <http://news.cnet>.

is likely to occur in the future. Even though these cases have occurred outside Argentina (and a final decision has not even been reached in *Jacosben*), they could be taken into consideration in a case of first impression filed with Argentine courts.

Another argument for the enforceability of viral licenses could be the “destination right”. It could be argued that not recognizing the right to have the work remain FOSS violates the “destination right” of the author.

The theoretical justification of the destination right -a French and Belgian jurisprudential construction- is the exploitation of the work pursuant to the will of its creator. It may be considered a derivation of the reproduction right (Hickey: 2000).

The destination right developed as a result of technological evolution. The new possibilities for dissemination of works exploded during the 20th century: cinema, photography, television, videotape recorders, photocopiers, computers and, more recently, the Internet. These means of reproduction of works led to more problems concerning the circulation of works. Consequently, the destination right is a response by scholars and case law to the curtailment of the author’s rights in light of the rise of secondary uses of copyrighted works (Hickey: 2000).

Even though Argentine Law does not expressly recognize the destination right, it may be considered included in the broad formulation of economic rights included in Section 2 of Law 11,723 which -as already mentioned- establishes that “*the right of ownership of a scientific, literary or artistic work shall include, for its author, the entitlement to dispose of, publish, perform and publicly exhibit, alienate, translate, adapt or authorize the translation of, and reproduce the work in any form*”.

Therefore, the authors’ rights regime could be used to justify viral licensing. If we conclude that the author is entitled to a destination right, which determines the manner in which the work is used, it would infringe upon that right to not recognize viral licensing, insofar as it violates the right of the author to “*dispose of the work in any form*.”

Viral licensing also has to do with the basic concept of freedom, as generally understood in current democratic societies. One could argue that, if the author of a derived work of software willingly agreed to work from a computer program made available under a free software license, it betrays the intent of the author to not uphold the license’s viral effect. Therefore, if the decision to make a derived work was “free” (as in freedom), then the effect of viral licensing should be upheld.

The position rejecting the enforceability of viral licenses in Argentina contends that the GPL⁴⁸ is an “adhesion” contract, namely, a contract in which one of the parties proposes the conditions and the other simply adheres or rejects (in other words, the bargaining power of one of the parties is reduced). Considering the foregoing, the law may on some occasions not recognize effects to certain contractual clauses. Even though, in a contract / license⁴⁹

com/2100-7344-5198117.html indicating, indicating that *Sitecom* and *Jacobsen* are novel cases.

⁴⁸ As expressed, the GPL is the FSF’s legal strategy to ensure that all free software be and remain free, whether in its original or modified versions. <http://www.gnu.org/copyleft/gpl.html>.

⁴⁹ For the reasons previously explained, we refer to the GPL as a “contract” under Argentine law, although in U.S. law the correct term would be “license”.

like the GPL, the licensee consents to each and every one of the contractual provisions, he is not truly “free” to express his will. The licensee certainly waives the right to make the software proprietary, but he is obliged to make that waiver by the licensor. In the same way that the author of the original version is the only one who made a personal effort to develop the original version -and is therefore entitled thereto- the only one who made an effort to make a derivative work is the author of that derivative work. Therefore, it is contended that copyleft and the GPL are not legally valid strategies because they make it possible for the author of an original version of FOSS to force authors of derivative works to relinquish the rights recognized to them, concluding that -even though it is valid- the GPL’s provisions forcing licensees to waive the exclusivity over derivative works should be considered null and void (Carranza Torres: 2004).

According to the FSF, it is a misunderstanding that the GPL can’t be enforced because users have not “accepted” it, since the license does not require acceptance in order to use, inspect or modify GPL’d software. Considering that the foregoing activities are either forbidden or controlled by proprietary software companies, they require users to accept a license, including contractual provisions beyond copyright. However, the free software movement thinks all those activities are rights, which all users ought to have, so they do not consider necessary to cover those activities under a license. The GPL only carries an obligation when software made from GPL’d code is distributed, so it only needs to be accepted when redistribution occurs. Considering that redistribution is not possible without a license, the FSF contends that anyone redistributing GPL’d software intended to accept the GPL, because the GPL requires each copy of covered software to include the license text.⁵⁰

It could be argued that refusing to enforce viral licensing would be equivalent to deciding that the author of a derivative work based on proprietary software could turn it into FOSS. This situation would violate the author’s original intent: so does not extending to derivative works the viral licensing terms under which certain FOSS may have originally been made available⁵¹.

7. A BUOYANT THIRD SECTOR

Several non-governmental groups advocate for FOSS use in Argentina, which shows that the issue is definitely present among sectors of civil society.

Below is an outline of some FOSS groups in Argentina:

- GrULiC – *Grupo de Usuarios de Software Libre de Córdoba*⁵² (Córdoba Free Software User Group) founded in 1999, GrULiC is a not-for-profit group whose goal is to

⁵⁰ Text by Eben Moglen; available at <http://www.gnu.org/philosophy/enforcing-gpl.html>

⁵¹ Naturally, in my opinion, nothing could prevent private parties from reaching a special agreement for specific derivative FOSS works subject to a viral license, overriding viral licensing provisions (as hinted by the court in *Jacobsen*, when noting that Jacobsen had proposed direct contact if a downloader wished to negotiate “other terms”).

⁵² A province in the center of Argentina.

offer services to free software users, showing the advantages of the philosophy of sharing and bringing free software users together.⁵³

GrULiC is organized as follows: (i) the GrULiC list, of which all “grulicos” are members. It is a list containing technical questions, answers and discussions in general about free software, (ii) The “GrULiC meta list” (“meta” means goal). It is a subscription list for GrULiC members, not only interested in free software, but also in participating in the group, volunteering and providing feedback as to the group’s ideological stand and functioning, (iii) weekly meetings, which are used to reach decisions affecting the group through face-to-face contact with other group members, and (iv) the “GrULiC-adm list”, for the coordination of operational tasks, whose subscribers are only those persons with specific tasks to be carried out⁵⁴.

- SOLAR – *Asociación Civil Software Libre Argentina* (Civil Association Free Software Argentina). Founded in December 2003, it is a non-governmental organization involved in FOSS promotion. Section 2 of the Association’s by-laws establishes that the association’s purpose shall include generating a space for the representation and public visibility of individuals and communities using free software, promoting its technological, social and political advantages, and helping individuals, groups, governmental and non-governmental institutions who adopt decisions concerning software use and/or replacement.⁵⁵

- MiSoL (Misiones Software Libre) is a free software non-governmental organization from the Province of Misiones whose purpose is the “*struggle for knowledge and free culture considering free software as a tool common to all members*”. MiSoL is made up of free software enthusiasts, activists and users, including communication and information technology professionals, educators, mass media professionals, anthropologists, designers, engineers and artists. Through talks and events, MiSoL promotes free software’s technical, social, political and philosophical advantages⁵⁶.

- neSLa – *Nordeste Software Libre Argentina* (Northeast Free Software Argentina), whose motto is “For all, Everything” is a non-governmental organization located in the northeastern region of Argentina⁵⁷. On November 21-22, 2008, neSLa -jointly with SOLAR and MiSoL- organized the 4th CRISOL Free Software Strategic Encounter in the *Universidad Nacional del Nordeste* (National University of the Northeast). Members of the free software community from all over Argentina, as well as representatives from the public and private sector, universities and neighboring countries, met in order to discuss

⁵³ GrULiC was originally formed as a LUG (Linux User Group). A LUG exists due to the decentralized nature of LINUX developments, which may make things somewhat complicated for Linux users, especially if they are not programmers. A LUG provides support, training and education. In many respects, it plays the same role assigned to the regional office of a multinational (<http://www.grulic.org.ar/grulic.html>).

⁵⁴ <http://www.grulic.org.ar/about.html>.

⁵⁵ <http://www.solar.org.ar/?article63>.

⁵⁶ <http://www.misol.org.ar/nosotros/>.

⁵⁷ <http://www.nesla.org.ar/drupal/>.

the adoption of free software as a State policy. The meeting served to discuss free software experiences in Argentina (both in the northeast and in other regions) and abroad⁵⁸.

- CAdeSoL – *Cámara Argentina de Empresas de Software Libre* (Argentine Chamber of Free Software Companies). Founded in 2009, it gathers companies providing FLOSS solutions. CAdeSoL focuses on encouraging the development of businesses with free and open source software through collective action.⁵⁹

Section 2 of its by-laws sets forth that CAdeSoL shall, among other aspects, support and encourage the development and implementation of free software, collaborating with public and private entities, creating -as considered necessary- the technical and economic services considered appropriate to such effect; it shall also promote, support and conduct studies for the improvement of software based on free code and state-of-the-art technology applicable to the field, and for the adoption of legislation allowing for free software's use and dissemination.⁶⁰

In May this year, CAdeSol organized its first annual event "Free Software and Business" in the City of Buenos Aires dealing with -among other topics- the state of free software in Argentina and the rest of the world, reasons to choose (or not choose) free software, and legal framework of free software in Argentina⁶¹. Approximately 200 people attended⁶².

- *Fundación Vía Libre* (Free Way Foundation) – Vía Libre maintains contacts with different communications media with the purpose of reaching the general public with updated information about aspects of new technologies affecting the lives and rights of citizens in general, publishing articles in books, periodicals and Internet fora, giving interviews and commenting on recent national and international events.⁶³

In June 2009, Argentina had legislative elections. Prior to the elections, MiSoL and SOLAR launched the "Querido Candidato"⁶⁴ initiative, a campaign aimed at creating awareness and engagement in politicians for the adoption and implementation of Free

⁵⁸ <http://www.crisolargentina.org.ar/drupal/>.

⁵⁹ http://www.cadesol.org.ar/?page_id=2.

⁶⁰ Idem.

⁶¹ <http://www.cadesol.org.ar/evento/>.

⁶² Source: interview held with CAdeSoL's president -Daniel Coletti- on July 16, 2009.

⁶³ In 2007 Federico Heinz (Vía Libre's president) wrote with Fernando Da Rosa a "Free Software Practical Guide – Its Local Use and Application in Latin America and the Caribbean" (in Spanish, "Guía Práctica sobre Software Libre – su selección y aplicación local en América Latina y el Caribe"), published by UNESCO (United Nations Educational, Scientific and Cultural Organization). The Guide's foreword states that the principle of "Information for All" is targeted towards the reduction of the digital divide and it is, in many countries, part of the national policy for the construction of knowledge societies. According to the Guide, Free software may contribute with solutions to those demands, for example offering tools so that the visually or hearing impaired may profit from public schools and libraries. At the same time, experts see free software as a tool for the development of competitive capabilities in software engineering and related industries at the national level. The Guide presents definitions of Free Software pursuant to the FSF and it explains software development processes as a community-based activity. Available at: http://portal.unesco.org/ci/en/ev.php-URL_ID=26399&URL_DO=DO_PRINTPAGE&URL_SECTION=201.html.

⁶⁴ In English, "Dear Candidate".

Software and in support of digital freedom. The goal was for politicians to join the Free Software Pact (*Acuerdo por el Software Libre*).

When joining the Free Software Pact, candidates declare that (i) the work of participants in Free Software projects plays an essential role in the preservation of essential freedoms in the digital era, because of the knowledge it shares and because of its contribution to overcoming the “digital divide”, and that Free Software is an opportunity for the public in general, for competitiveness and technological independence, in Argentina and in Latin America; and (ii) Free Software is a common good, to be protected and developed and it is based on the right of authors to release their software together with the source code, which guarantees for all the right to use, copy, adapt and redistribute the software, whether in its original or modified form. The Pact requires for candidates to (i) encourage, in all areas of government, whether at the federal, provincial or local level, the preference for Free Software and open standards in the selection of information technology, whether concerning the purchase of goods and services and in their own internal developments; (ii) support affirmative action favoring, and opposing any discrimination against, Free Software; and (iii) guarantee the rights of Free Software authors and users, requiring the modification of, and opposing any bill or norm which, may affect those rights.⁶⁵

The initiative is supported by ASSOLI (*L'Associazione per il Software Libero*), an Italian free software non-governmental organization, and by other associations from Spain, France, Belgium and the United Kingdom. ASSOLI also launched the “Caro Candidato” (the Italian for “Dear Candidate”) campaign in Italy.⁶⁶

Not only not-for-profit entities are promoting FOSS in Argentina. Several companies are making money based on FOSS. In this regard, it is worth to note the story of Globant, an Argentine open source company which grew exponentially since its foundation in April 2003. Six years after, Globant has around 1,300 employees, evolving from a US\$ 3 million turnover in 2003 to US\$ 37 million in 2008, estimating US\$ 60 million for 2009. Globant has its main office in the City of Buenos Aires, four other offices in Argentina, and has opened subsidiaries in Colombia, Chile, Mexico, England and the United States. Globant’s business model is mostly open: they do not charge for licenses, but for software development and maintenance -releasing the source code to their various clients- which include A-list companies such as Google and Verisign. While Globant is open source, they do combine their software with proprietary platforms. However, they advise their clients to stay away from viral licenses in order to avoid challenges resulting from proprietary elements which may be present in software designed by Globant.⁶⁷

⁶⁵ <http://www.queridocandidato.org.ar/wiki/view/proposte>. According to the “Querido Candidato” website, only thirteen candidates joined the Pact (<http://www.queridocandidato.org.ar/election/list>); however, the campaign evidences the engagement in the area of free software by certain sectors of Argentine civil society.

⁶⁶ See: <http://www.softwarelibero.it/> and <http://www.freesoftwarepact.eu/>.

⁶⁷ Sources: Information Technology – Why Globant? March 2009; available at: http://www.globant.com/globantweb/export/sites/default/images/Inf_Technology_en.pdf; and interview held on August 3, 2009 with Guibert Englebienne, Globant’s Chief Technical Officer and Co-Founder.

CONCLUSIONS

Scholars note that the changes caused by information networks have radically changed the way we produce and exchange information, creating new opportunities for the dissemination of knowledge and culture. *“These changes have increased the role of nonmarket and nonproprietary production, both by individuals alone and by cooperative efforts in a wide range of loosely or tightly woven collaborations. These newly emerging practices have seen remarkable success in areas as diverse as software development and investigative reporting, avant-garde video and multiplayer online games.”* (Benkler: 2006)

FOSS is one of these remarkable successes created under a nonproprietary scheme in the framework of more or less tightly woven collaborations and it is here to stay⁶⁸, which means that, by now, legislation contemplating FOSS in Argentina should be adopted on a national level. However, the approach should be different in the private and public sector.

In the private sector, the law should guarantee that the effect of viral licensing be recognized in FOSS settings. Until a specific statute is adopted, the courts should follow the scant precedents available elsewhere which have recognized the validity of viral licensing and the relevant provisions in the Argentine Civil Code.

Considering the advantages of FOSS in the public sector (particularly cost savings, technological independence, generation of local providers and long-term availability of state-held information), legislation should favor the adoption of FOSS. Notwithstanding the foregoing, proprietary licenses should not be completely ruled out⁶⁹, if they offer a better technological solution or if a FOSS product is not available for certain uses. However, proprietary software in the Argentine Federal Government should be the exception, following the example of the Argentine provinces which have already adopted pro-FOSS legislation.

⁶⁸ In July 2009, Google announced that it was launching its new operating system, Google Chrome, *“an open source, lightweight operating system that will initially be targeted at netbooks”*. Considering Google’s importance, we may infer that many netbooks, and eventually laptops and desktops worldwide, will come equipped with Google Chrome, which will certainly increase the presence of open source software in the everyday lives of millions of computer users. See: <http://googleblog.blogspot.com/>.

Even Microsoft Corporation, probably the epitome of proprietary software, released earlier this year GPL’d driver source code for inclusion in the Linux kernel. The code consists of four drivers that are part of a technology called Linux Device Driver for Virtualization. The drivers are intended to provide the hooks for any distribution of Linux to run on Windows Server 2008 and its Hyper-V hypervisor technology. This submission of code was considered a milestone for Linux because it has been seen as implying that Microsoft considers the GPL as a valid development license. While this release is not seen as pure altruism (because it has been pointed out that the ultimate goal behind the release is to guarantee that Windows will become a part of every use of virtual Linux servers) it is a strong indicator that FOSS will likely continue its expansion in the future. See: *“Microsoft stuns Linux world, submits source code for kernel”*; available at: <http://www.networkworld.com/news/2009/072009-microsoft-linux-source-code.html?page=1>.

⁶⁹ Moreover, a statute which required an abrupt migration of all government sectors from proprietary platforms to FOSS would probably not be realistic, considering that the use of proprietary programs (such as Microsoft Office) is widespread in the public sector. A sudden change could generate resistance from governmental agencies, becoming counterproductive. Consequently, it appears that the most convenient solution would be gradual migration, maintaining certain proprietary platforms, if warranted.

As a final conclusion, in the future the discussion may not be between -or not exclusively between- proprietary software or FOSS because a third information technology model, cloud computing, may come into play. The U.S. National Institute of Standards and Technology defines “cloud computing” as “*a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort or service provider interaction*”. In particular, “cloud software as a service” (SaaS) is understood as the consumer’s capability to use the provider’s applications running on a cloud infrastructure, the applications being accessible from various client devices through an interface such as a web browser⁷⁰. In other words, in the future we may no longer have our software (and our information) in our computer’s hard disk but located in a web-based server. For example, someone writing a research paper could decide to store in it Google’s web-based word processor Google Docs, rather than in their own computer. Cloud computing is in principle neutral to FOSS or proprietary software. A web-based application may or may not be FOSS. It has been argued that open source software is complimentary to cloud computing and may have a role in reducing the lock-in associated to proprietary software⁷¹ but Richard Stallman has declared that cloud computing is “stupidity” that will ultimately result in escalating costs and vendor lock-in. According to Stallman, cloud computing results in handing over control of one’s information to third parties, and software users should do their own computing in a freedom-respecting program. By using somebody else’s web server, says Stallman, users are putty in the hands of whoever developed that software. Pursuant to Stallman, behind the people who say that cloud computing is inevitable, is a set of businesses campaigning to make it true⁷². It is hard to predict the future of cloud computing, considering that it is at a nascent stage. Moreover, storing one’s information in servers controlled by third parties raises privacy concerns. Notwithstanding the foregoing, as far as access to knowledge is concerned, non-paid web-based services such as Google Docs may further access to information technology products and services, particularly necessary to a developing country like Argentina⁷³.

⁷⁰ See <http://csrc.nist.gov/groups/SNS/cloud-computing/index.html>.

⁷¹ See <http://blogs.the451group.com/opensource/2009/10/01/foss-war-is-over-if-you-want-it/>.

⁷² See http://news.cnet.com/8301-1001_3-10054253-92.html.

⁷³ As expressed during the recent MERCOSUR summit (see footnote # 4).