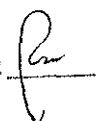


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SENATE
S.B. No. 2821

RECEIVED BY: 

Introduced by SENATOR MANNY VILLAR

EXPLANATORY NOTE

The era of Free/Open Source Software (FOSS) has come.

Once considered the realm of geeks, computer experts and cyberspace activists, FOSS is now steadily gaining ground among a broad range of information and communications technology (ICT) consumers – from home users and barangays, schools to large corporate enterprises and government agencies – who are looking for alternatives to the expensive, overbearing and restrictive products of proprietary software monopolies like Microsoft, Unix and Adobe, among others.

Unlike proprietary software, FOSS is **cheap** (in fact, most FOSS are distributed gratis to the public by their own developers and can be freely distributed), **flexible and development friendly** (FOSS source codes are accessible to consumers who may study, modify and customize the software), **interoperable** (FOSS adheres to open standards and are meant to work across various platforms and protocols), and **safe** (the opening of the source codes and the use of open standards have allowed hundreds of thousands of users around the globe to serve as a virtual research and development team, providing patches and solutions to bugs and glitches in real time over the internet).

Today, most widely-used proprietary softwares have equivalent FOSS which is cheaper, safer and more robust. This is why the use of FOSS is steadily gaining ground in many countries in Europe, North America, Latin America and Asia.

FOSS give software users freedom – the freedom to run the program in any way one wishes, to study and modify its source codes, to make copies and distribute them as one wishes, and to redistribute the said program.

An apparent benefit of FOSS is its low cost. Giant chip maker Intel reportedly saved \$200 million for switching their servers from proprietary UNIX software to open GNU/Linux software, while Amazon reported a US\$17 million savings for migrating from Microsoft to GNU/Linux.

Many organizations and several studies have shown that using FOSS in lieu of proprietary software results in significant savings of anywhere from 15% to 35% over a span of three years not only due to lower licensing costs but lower personnel and hardware costs.

A study produced by the International Open Source Network (IOSN) and United Nations Development Program - Asia-Pacific Development Information Programme have identified the following strategic benefits of FOSS: (1) Developing local capacity industry; (2) reducing imports/conserving foreign exchange; (3) Enhancing national security; (4) Reducing copyright infringements; (5) Enabling localization.

The study also identified economic benefits as: (1) Increasing competition; (2) Reducing total cost of ownership; (3) Enhancing security; (4) Achieving vendor independence.

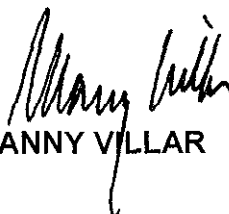
Add to this the social benefit of increasing access to information, promoting citizens' knowledge about software and software techniques, encouraging cooperation among the citizenry, and providing the public with democratic control over the software that it uses.

In fact, the viability and advantages of FOSS has not been lost on us Filipinos. The Advanced Science and Technology Institute of the Department of Science and Technology (ASTI-DOST) has developed the Bayanihan Linux, a complete desktop solution for office and school use based on GNU/Linux, and Bayanihan Linux Server, an easy-to-use GNU/Linux server for government agencies, schools and SMEs. These Bayanihan Linux programs can do everything that proprietary operating systems can do, except drain one's pockets, mainly because they are distributed by their developers for free.

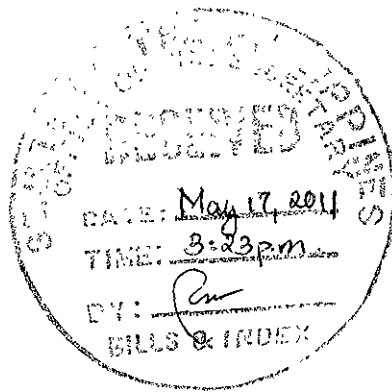
Exist, a 100%-owned Filipino open-source software company was recently awarded the prestigious Red Herring award for the top 100 start-up technology companies. This is proof that given the opportunity and proper support, Filipino companies can be a major supplier in the growing global FOSS market.

This bill, which mandates the use of FOSS, open standards and open formats in all government agencies, and which encourages the use and development of FOSS in the private and public sectors, will benefit the Philippines by: (1) Promoting the people's right to access public informations; (2) Lowering the overall cost of ICT in the public and private sectors by reducing the country's dependence on proprietary software and computer applications; (3) Making ICT more accessible to a greater number of users; (4) Unlocking the potential and encouraging the development of a self reliant, genuinely Filipino IT industry; and, (5) Providing greater security for highly sensitive government and private information systems.

In view of the foregoing, passage of the bill is earnestly sought.



MANNY VILLAR



SENATE

S.B. No. 2821

Introduced by SENATOR MANNY VILLAR

AN ACT
PROMOTING THE DEVELOPMENT AND USE OF FREE/OPEN SOURCE SOFTWARE
(FOSS) IN THE PHILIPPINES, AND FOR OTHER PURPOSES

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

1 **SECTION 1. Short Title.** – This Act shall be known as the “Free/Open Source Software
2 **(FOSS) Act of 2011”.**

3
4 **SECTION 2. Declaration of Policy.** – In accordance with Section 24 of Article II of the
5 Constitution which declares that: “The State recognizes the vital role of communication and
6 information in nation building”, and *recognizing* the wide discrepancy between the
7 technologies of developing countries and advanced countries; *realizing* the economic
8 limitations in the information and communication technology (ICT) of developing countries,
9 especially on the viability of purchasing and implementing expensive software solutions;
10 *aware* of the relatively slow diffusion of technology between the developed and developing
11 countries; it is hereby declared the policy of the State to:

12
13 1. Ensure the self-reliance of the State in technology and technology capabilities, in
14 accordance with Article XIV, Sec. 10 of the Constitution, by ensuring that the State has
15 access to the source codes of its computers’ software;

16
17 2. Strengthen the public’s access to information and government data, in accordance
18 with Article III, Section 7 of the Constitution, by mandating the use of open standards
19 and formats in government, hence ensuring the interoperability of data and government
20 communications;

21
22 3. Promote the preferential use of domestic material and Filipino labor in information
23 communications technology, in accordance with Article XII, Sec. 12 of the Constitution;

24
25 4. Adopt mechanisms to ensure fiscal discipline in the purchase of software without
26 compromising the State’s security and the stability and robustness of the country’s ICT
27 infrastructure, and;

28
29 5. Develop Filipino professionals and scientists in the field of software technology and
30 ICT by promoting the use and purchase of free/open source software, in accordance
31 with Article XII, Sec. 14 of the Constitution.

32
33
34
35
36
37 **SECTION 3. Definition of Terms.** – For purposes of this Act, the following terms and
38 phrases are so defined:
39

1 **Source code** – The set of human readable instructions and statements written by the
2 programmer using a particular programming language, including the modules, components
3 of the executable program, and any interface definition files and scripts used to compile and
4 install a program.

5
6 **Interoperability** – The ability of information systems to operate in conjunction with each
7 other encompassing protocols, hardware software, application, and data compatibility
8 layers. In particular, it is the ability of different types of computers, networks, operating
9 systems, and applications to work together effectively, without prior communication, in order
10 to exchange information in a useful and meaningful manner.

11
12 **Open standards** – Those standards, protocols, specifications, and any other data formats
13 made available to the general public and are developed, approved and maintained via a
14 public, collaborative, transparent and consensus-driven process. In addition, open
15 standards must meet all of the following criteria:

- 16
17 1. The adoption and development of the standard includes the consideration of and
18 response to inputs by interested parties, and occurs on the basis of an open decision-
19 making procedure available to all;
- 20
21 2. The standard has been published and the published document is available freely. It
22 must be permissible for all to copy, distribute and use it without any fee;
- 23
24 3. The standard is affirmed by an international standards development organization
25 (SDO) or, in the absence of such affirmation, at least by a government-commissioned
26 SDO;
- 27
28 4. The standard is vendor neutral and allows for sufficient development of a variety of
29 competing interoperable products or services, and;
- 30
31 5. There are no constraints on the re-use of the standard.

32
33 **Open Format** – A published specification for storing digital data that is based on and
34 employs open standards, and which are implementable by both proprietary and free-open
35 source software.

36
37 **Free-Open Source Software (FOSS)** – Any software computer program that meets all of
38 the following criteria:

- 39
40 1. The source code of the software, including the source code for such other parts and
41 components needed to compile and install the software shall be readily available and
42 accessible;
- 43
44 2. The license to use the program does not restrict nor require fees such as royalties
45 from anyone to redistribute, in any way, the program as part of an aggregate software
46 distribution or solution containing other programs from several other sources;
- 47
48 3. The license must allow modifications and derived works which, as specified in
49 Paragraph 4.2 of this Section, must allow for redistribution without additional charges;
- 50
51 4. The license to use must not discriminate against persons nor a specific group of
52 persons;
- 53
54 5. The license of the program shall not be restricted to it being part of a particular
55 software distribution, hence, individual components of an aggregate solution can be
56 modified and redistributed in accordance to Paragraphs 4.2 and 4.3 of this section;
- 57
58 6. A software license must not restrict other software from being used as part or in
59 cooperation with the FOSS. Hence, the license of the open source software can be used
in conjunction with proprietary software, and;

1
2 7. The license must be technology neutral. No foreseeable/deliberate restrictions should
3 be placed regarding the use of the software in any platform, or for any purpose.
4

5 **FOSS License** – any license and/or end-user agreement that ensures free access and
6 redistribution of free/open source software, the licenses of which are generally approved by
7 an internationally recognized FOSS advocate body.
8

9 **Total Cost of Ownership (TCO)** – covers all the costs involved in a technology or business
10 solution, including the initial investment cost and maintenance, support, replacement,
11 training and upgrade costs.
12

13 **Government** – includes the three separate branches of government and all departments,
14 bureaus, offices and agencies operating under each separate branch of government,
15 including schools and government-owned and controlled corporations.
16

17 **SECTION 4. Legal Recognition of FOSS.** – The government shall recognize the validity
18 and legitimacy of FOSS and FOSS licenses, subject to the provisions of existing laws, rules
19 and regulations.
20

21 **SECTION 5. Government Rules and Policies on the Use and Adoption of Open
22 Standards and FOSS in Government.**
23

24 1. **Use of Open Standards** – The government shall use only ICT goods and
25 services that comply with open standards except under extraordinary circumstances
26 as defined in Section 5.5 of this Act;
27

28 2. **Use of Open Formats** – All government communication and data intended for
29 public consumption shall be encoded in open standard data format;
30

31 3. **Use of FOSS** – The government shall apply only FOSS or FOSS solutions in all
32 ICT projects and activities except under extraordinary circumstances as defined in
33 Section 5.5 of this Act;
34

35 4. **Use of RAND License for Open Standards** – Open standards licensed under
36 “Reasonable and Non-Discriminatory” (RAND) terms, and hence are not free but are
37 available for a reasonable fee shall be used only under extraordinary circumstances
38 as defined in Section 5.5 of this Act;
39

40 5. **Extraordinary Circumstances** – The Commission on Information and
41 Communications Technology (CICT), through the Office of FOSS Migration created
42 under Section 15 shall determine, through public hearing, whether there exists
43 extraordinary circumstances that will exempt a government agency or project from
44 Sections 5.1 to 5.4 of this Act. Extraordinary circumstances exist when:
45

46 a) There is no reasonably available ICT goods or services supporting open
47 standards and/or FOSS in the field, area or activity that the government
48 intends to engage in, or;
49

50 b) A particular government agency or office has an existing, widely-used and
51 widely implemented proprietary ICT system and there are no reasonably
52 available technology using open standards and/or FOSS that can be used
53 with the said proprietary system.
54

55
56 6. **Limitations on the Use of Proprietary Standards and Software in
57 Government** – Should there exist extraordinary circumstances as enumerated in
58 Section 5.5 of this Act, the government may use proprietary standards and software
59 subject to the following conditions:

- 1
- 2 a) The state shall procure, purchase or acquire only ICT goods and services
- 3 that are interoperable and scalable with open standards;
- 4
- 5 b) The state shall procure, purchase or acquire available software that offers
- 6 license most similar to FOSS as defined in Section 3 of this Act, and;
- 7
- 8 c) Open standards and FOSS will be selected and given preference when
- 9 existing systems are to be retired or need major enhancements.
- 10

11 **SECTION 6. Adoption of FOSS Policy in Government Research and Development. –**

12 All software developed by government must be FOSS and open standards compliant except

13 in exigent circumstances where national security may be in peril, or in such other case

14 where the right to freedom to public information is reasonably controlled as provided for by

15 law. In case of exigent circumstances, government shall release under a FOSS license for

16 public consumption said software, system and ICT goods and services when it is to be

17 retired or replaced.

18

19 **SECTION 7. Provision Against Single Vendor Lock-in and Dependence.** Under no

20 circumstances shall the government acquire ICT goods and services that are restricted for

21 use in a single vendor environment only. All prospective ICT investments of the government

22 shall comply with open standards. Existing ICT systems will be reviewed for open standards

23 compatibility and will be enhanced to achieve open standards compatibility when

24 appropriate.

25

26 **SECTION 8. Preference in Procurement of ICT Services and Goods. –** In case there is

27 more than one company that offers FOSS and open standard compliant solutions to the

28 government with almost equal total cost of ownership, preference shall be given to the

29 Filipino-owned ICT Company.

30

31 **SECTION 9. Promotion of FOSS and Open Standards in Educational Institutions.**

32

33 1. The government, through the Commission on Higher Education (CHED),

34 Department of Education (DepEd), the National Computer Center (NCC), the

35 Department of Science and Technology (DOST) and other appropriate agencies

36 shall promote FOSS by providing laboratories, organizing competitions, and

37 encouraging research, thesis and dissertations on FOSS development and the

38 development of open standards;

39

40 2. Within eight (8) months after this Act takes effect, DepEd, DOST, CHED and the

41 Technical Education and Skills Development Authority (TESDA) shall spearhead the

42 formulation and implementation of a curriculum for training students and teachers on

43 the use and development of FOSS in all levels of education. They will also formulate

44 in cooperation with the CICT and other appropriate agencies, a basic government

45 retraining and certification program for existing IT professionals to test their

46 proficiencies and skills in implementing FOSS solutions.

47

48 3. Higher educational institutions that offer professional certification programs on the

49 use and implementation of proprietary software and solutions will be encouraged to

50 offer similar certification programs for FOSS and open standard solutions.

51

52 **SECTION 10. Promotion of FOSS and Open Standards in the Private Sector. -** The

53 government shall provide various types of non-fiscal incentives and support to private sector

54 entities involved in the use, promotion and development of FOSS and open standards.

55

56 **SECTION 11. Amending Section 22 of RA 8293, otherwise known as the “Intellectual**

57 **Property Code of the Philippines”.**

58

1 Sec. 22 of RA 8293 otherwise known as the Intellectual Property Code of the
2 Philippines is hereby amended to read as follows:
3

4 ---XXX---

5
6 **Section 22. Non-Patentable Inventions.** The following shall be excluded from patent
7 protection:

8
9 22.1. Discoveries, scientific theories and mathematical methods;

10
11 22.2. Schemes, rules and methods of performing mental acts, playing games or
12 doing business, and programs for computers;

13
14 22.3. Methods for the treatment of the human or animal body by surgery or therapy
15 and diagnostic methods practiced on the human or animal body. This provision
16 shall not apply to products and composition for use in any of these methods;

17
18 22.4. Plant varieties or animal breeds or essentially biological process for the
19 production of plants or animals. This provision shall not apply to
20 microorganisms and non biological and microbiological processes.

21
22 Provisions under this subsection shall not preclude Congress to consider the
23 enactment of a law providing sui generis protection of plant varieties and
24 animal breeds and a system of community intellectual rights protection:

25
26 22.5. Aesthetic creations; [and]

27
28 22.6. COMPUTER PROGRAMS, TECHNIQUES AND METHODS IN COMPUTING
29 AND ARRANGING DATA FOR USE IN DIGITAL FORMAT, INCLUDING
30 ALGORITHMS;

31
32 22.7. PROTOCOLS, SPECIFICATIONS, METHODS OF ARRANGING DATA THAT
33 ARE KNOWN TO FORM PART OF OPEN STANDARDS OR ARE INTEGRAL
34 TO IMPLEMENTATION OF OPEN STANDARDS, AND;

35
36 22.8. Anything which is contrary to public order or morality.
37

38 **SECTION 12. Penalties.** – Any act or omission on the part of any public official(s) and/or
39 individuals, juridical or otherwise, acting in conspiracy with public officials violating
40 provisions of this Act shall be penalized in accordance with pertinent provision(s) of RA
41 3019, otherwise known as the “*Anti-Graft and Corrupt Practices Act as Amended*”, “The
42 Civil Service Law as Amended” or both whichever is applicable.
43

44 **SECTION 13. Implementation.** – The Commission on Information and Communications
45 Technology (CICT) shall be the main government agency tasked to oversee the
46 implementation of this Act. Within six (6) months after this Act takes effect, the CICT shall:
47

48 1. Submit to the Office of the President and to Congress an audit of all existing
49 government ICT systems, and its recommendations as to system migration and
50 changes needed to fulfil the objectives of this Act;

51
52 2. Come up with implementing rules and regulations for this Act which shall include
53 as minimum the following:

54
55 a) Within three years, 90% of government IT professionals, and 65% of the
56 country’s IT professionals must be proficient in the implementation of FOSS
57 systems, and;
58
59

1 b) Within five years, 75% of all existing government systems shall be open
2 standards compliant, and all government communication and research data
3 intended for public consumption and access shall be in open standard data
4 format;

5
6 c) Within five years, 75% of all existing government systems shall employ FOSS.
7 To be qualified as compliant to this Act, one machine is counted as employing
8 FOSS when at the minimum, its operating system, and the computing programs
9 used to fulfill the purpose of the machine (e.g., office suite programs for
10 machines intended for office use, or counting programs for counting machines)
11 are FOSS.

12
13 d) The effective advocacy, training and development of a FOSS community in the
14 country that will help in the development of FOSS programs and in the advocacy
15 of FOSS.

16
17 **SECTION 14. Amending EO 269, Promulgating Additional Mandate to the CICT.** – To
18 successfully implement provisions of this Act, the mandate of CICT shall now include the
19 following:

- 20
21 1. Catalogue, compile and publish all existing international open standards
22 applicable to the Philippines;
- 23
24 2. Pending applicable international open standards for the Philippines, the CICT
25 shall spearhead the development of open standards for the country in the process
26 ensuring the participation of Philippine ICT professional organizations, non-
27 government organizations and other stakeholders in the creation of such;
- 28
29 3. Ensure the compliance of all government agencies to this Act, and;
- 30
31 4. Encourage private entities to adopt systems and solutions compliant with open
32 standards.

33
34 **SECTION 15. Creating the Office on FOSS Migration.** – There shall be created an office
35 on FOSS migration to be headed by a known FOSS advocate with at least ten years of
36 experience in the field of ICT and FOSS. Such office shall be an attached agency of the
37 CICT with its head receiving compensation, benefits, privileges and other emoluments
38 equivalent to a Commissioner of the CICT.

39
40 The new office thus created shall have the following mandate, duties, powers and
41 responsibilities:

- 42
43 1. Ensure the efficient, prompt and successful migration of all government ICT goods
44 and services to FOSS as mandated in this Act and its IRR;
 - 45
46 2. Determine, upon request of a government agency, if there exists extraordinary
47 circumstances enumerated in Section 5.5 of this Act that will exempt a particular
48 project or ICT implementation from Sections 5.1 to 5.4 of this Act;
 - 49
50 3. Review and ensure the compliance of all government agencies to pertinent
51 provisions of this Act;
 - 52
53 4. Train and develop human capital for FOSS in the Philippines;
 - 54
55 5. Coordinate with the DOST, National Computer Center (NCC) and other
56 government agencies, State Universities and Colleges, for modification,
57 customization and development of FOSS for government use;
- 58

1 6. Aid in the prosecution of public officials and individuals, juridical or otherwise,
2 acting in conspiracy with government officials in refusing to implement provisions of
3 this Act;

4
5 7. Create its own sub-offices, hire staff including programmers for modification,
6 improvement and development of existing FOSS, and seek the services of
7 consultants to aid in its mandate and successful implementation of this Act, and;

8
9 8. Disburse funds thereof for its operations.

10
11 **SECTION 16. Appropriations.** – The sum of twenty million pesos (P20,000,000.00) shall
12 be allocated for the CICT for the implementation of its new additional mandate, and another
13 fifty million pesos (P50,000,000.00) for the creation and operations of the Office of FOSS
14 Migration for the first year this bill is enacted into law. Appropriations for the implementation
15 of this Act for the succeeding years shall be included in the *General Appropriations Act*.

16
17 **SECTION 17. Repealing Clause** – Section 22 of RA 8293 otherwise known as the
18 “Intellectual Property Code of the Philippines” is hereby amended in accordance to Section
19 11 of this Act. All other laws, presidential decrees, executive orders, and rules and
20 regulations, or parts thereof inconsistent with the provisions of this Act are hereby repealed,
21 modified or amended accordingly.

22
23 **SECTION 18. Separability Clause** – If any section or provision of this Act is held
24 unconstitutional or invalid, the validity of other sections herein shall not be affected thereby.

25
26 **SECTION 19. Effectivity** – this Act shall take effect fifteen (15) days after its publication in
27 the Official Gazette or in at least two (2) newspapers of general circulation.

28
29
30 *Approved,*