EUROPEAN COMMISSION
DIRECTORATE-GENERAL INFORMATICS

Directorate A - Strategy & Resources
DIGIT A3 - ICT Procurement & Contracts

Brussels, 24 NOV. 2017
DIGIT/A/3/SdP digit.a.3.
Ares(2017)5759297
Polina Malaja
Free Software Foundation Europe
Schönhauser Allee 6/7
10119 Berlin
Germany

Advance copy by e-mail
ask+request-4743-
f5f5a7ef@asktheeu.org

Subject: **Your applications for access to documents**

Ref.: GestDem 2017/6717 - RE: access to documents request - Documents about WP4 "Full inventory of Open Source Software used in the European Commission and the European Parliament"

Dear Madam,

We refer to the request for access to documents which you made on 27 October 2017, which was registered on 6 November 2017 under the above-mentioned reference.

Your application is the following:

> *"All information concerning the WP4 "Full inventory of Open Source Software used in the European Commission and the European Parliament" as referenced in https://joinup.ec.europa.eu/community/eu-fossa/og_page/project-deliveries*
>
> *This includes emails, documents, notes, drafts, files, tables and other information. I want to have all information included, regardless whether it is considered short-lived or unimportant by the Commission."*

First of all, we thank you for your request and your interest in the work of DG DIGIT in the field of open source software.

Your request will be handled under the regime set up in Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents ("Regulation 1049/2001").

Commission européenne/Europese Commissie, 1049 Bruxelles/Brussel, BELGIQUE/BELGIË - Tel. +32 22991111
Office: MO15 07/P001 - Tel. direct line +32 229-52544

Commission européenne, 2920 Luxembourg, LUXEMBOURG - Tel. +352 43011

Jose-Martin.Bilbao-Zabala@ec.europa.eu

1. OBJECT OF YOUR REQUEST

WP 4 is a work package (study) that has been requested within the framework of the Pilot Project "*Governance and quality of software code – Auditing of free and open source software*" (reference 26 03 77 02). This Pilot project has been split into several work packages (1 – 7) and a contractor has been requested to perform the study.

You specify that the answer to your request should: "*include[s] emails, documents, notes, drafts, files, tables and other information. I want to have* ***all information*** *included, regardless whether it is considered short-lived or unimportant by the Commission*".

First, we remind you that Regulation 1049/2001 only covers the access to document and must be clearly distinguished from the access to **information**[1] (see the bold part of your request in the previous paragraph). Access to information is subject by the specific rules laid down in the Code of Good Administrative Behaviour[2].

Also, in its decision of 23 January 2002 amending its Rules of Procedure (2002/47/EC, ECSC, Euratom), the Commission added an annex to the Rules of procedure. According to article 4 of this annex, "*A document drawn up or received by a Commission department must be registered if it contains important information which is not short-lived and/or may involve action or follow-up by the Commission or one of its departments*". The Commission is therefore not in a position to deliver documents "*considered short-lived or unimportant*" (see the underlined part of your request in the second paragraph of the present section).

Finally, and linked to the previous paragraph, the Commission can only grant access to the documents that have been properly stored and are therefore still in ist possession: "*Es ist darauf hinzuweisen, dass die Verordnung Nr. 1049/2001 zwar selbst dann anwendbar ist, wenn – wie die Kommission hier geltend macht – das betreffende Organ nicht mehr über das Dokument verfügt, zu dem Zugang verlangt wird, und dieses Organ dem Antragsteller antworten und vor Gericht die aus diesem Grund erfolgende Verweigerung des Zugangs rechtfertigen muss, doch* ***kann diese Verordnung ein Organ nicht verpflichten, Zugang zu einem Dokument zu gewähren, über das es nicht mehr verfügt*** *(vgl. in diesem Sinne und entsprechend Urteil Strack/Kommission, oben in Rn. 56 angeführt, EU:C:2014:2250, Rn. 38 bis 47).*[3]" (Judgment of the General Court of 26 April 2016 in case T-221/08, Strack v Commission).

The Commission has currently located that the documents in its possession regarding the Work Package 4 (WP 4) are stored on 3 different locations:

1. The U drive of the unit in charge of the EU-FOSSA project
2. The Advanced record system (Ares)
3. The communication tool used by the contractor to store the documents related to the EU-FOSSA project (the "Wiki")

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[1] Judgment of the General Court of 2 July 2015 in case T-214/13, *Typke v Commission*, paragraphs 53-54.

[2] Commission Decision of 17 October 2000 amending its Rules of Procedure (2000/633/EC, ECSC, Euratom).

[3] This decision is only available in French and German, no English version is available. Taking into account your postal address, we provide you with an abstract of the German version.

The documents that have been identified as falling under the scope of your request are listed in Annex 1 of the present letter. Each document that has been identified has been numbered in the file; this number will be used to make reference to each specific document in the present letter.

Please also note that information regarding the Pilot Project "*Governance and quality of software code – Auditing of free and open source software*" (reference 26 03 77 02) has already been publicly released under the following link:

https://joinup.ec.europa.eu/page/project-deliveries

2. HOLDING LETTER

Due to the very large amount of documents targeted by the request (see Annex 1), we will not be in a position to complete the handling of your application within the time limit of 15 working days, which expires on 27 November 2017, and analyse all the documents contained in the wiki by then.

An extended time limit will in any event be required to grant you access to the largest amount of documents possible.

Therefore, we have to extend the time limit with 15 working days in accordance with Article 7(3) of Regulation (EC) No 1049/2001 regarding public access to documents.

The new time limit expires on 18 December 2017.

3. FAIR SOLUTION

3.1. Justification

Moreover, the Wiki contains a very large amount of documents and some of them are very long documents, that require to be scrutinised line by line in order to determine whether they contain (or not) security-related elements, personal data or any other elements that would fall within the exceptions of Article 4 of the Regulation 1049/2001.

In order to demonstrate our good faith, we already grant you access to certain documents that may obviously be released (see below).

However, the assessment of the remaining document will imply a very detailed analysis (and a very large amount of work) that cannot be carried out within the normal time limits set out in Article 7 of Regulation 1049/2001.

Article 6(3) provides that in the event of an application relating to a very long document or to very large number of documents, the institution concerned may confer with the applicant informally, with a view to finding a fair solution.

In accordance with the case law of the EU Courts, such a solution can only concern the content or the number of documents applied for, not the deadline for replying.[4] This

[4] Judgment of the Court of Justice of 2 October 2014 in case C-127/13, *Guido Strack v Commission*, paragraphs 26-28.

means that the scope of the request must be reduced in a way that would enable its treatment within the extended deadline of 15 + 15 working days.

We are not in a position to assess which documents would really be of interest for you and we do not want to privilege the analysis of certain documents while you might actually have interest in some other documents.

Therefore, based on the above-mentioned provision, we would kindly ask you to specify the objective of your request and your specific interest in the documents requested[5], and whether you could narrow down the scope of your request (i.e. the subject matter(s) and/or timeframe covered), so as to reduce it to a more manageable amount of documents.

3.2. List of documents and documents to facilitate the identification of the objectives and specific interests of your request

In order to facilitate the precision of your request, the documents contained in the wiki and falling under the scope of your request have been fully listed in Annex 1. An indication of their length and, where possible, a description of their content has also been provided.

Also, in order to help you to narrow down your request, as these documents clearly fall under the scope of Article 2 of Regulation (EC) No 1049/2001, full access to the summary and presentation of the main deliverables of WP 4 is already granted to you. A copy of documents 25, 26 and 27 will be enclosed to the present letter.

We also invite you to take into consideration while narrowing down your request, should you decide to have one, that the documents, for which the column "status" is marked in blue in the Annex 1, are most likely to be partially or fully redacted for public security reasons (Article 4(1)(b) first indent of the Regulation 1049/2001 – see Section 6.2 of the present letter).

3.3. Proposition

In order to enable us to respect the time-limits of Regulation 1049/2001, we would ask you for a swift reply to our invitation to propose a fair solution, within five working days at the latest:

- by email to: DIGIT-ACCESS-TO-DOCUMENTS@ec.europa.eu
- by postal mail to: Commission européenne/Europese Commissie,
  rue Montoyer 15
  1049 Bruxelles/Brussel,
  BELGIQUE/BELGIË
  Office: MO15 07/P001

If you have any questions concerning the invitation, you can contact us:

- by email at: DIGIT-ACCESS-TO-DOCUMENTS@ec.europa.eu
- by telephone at: (+32) (0) 229-52544

[5] Ibid, paragraph 28; Judgment of the General Court (then 'Court of First Instance') of 22 May 2012 in case T-344/08, *EnBW Energie Baden-Württemberg v Commission*, paragraph 105.

We would also be available to schedule a conference call in a short timeframe to discuss your objectives and specific interests in this request and help you narrow down your request.

In the absence of reply from your side within five working days, and in order to balance the right to access to document and the good use of resources of the European Commission, we will restrict the scope of your application to those parts that can be dealt with within the extended deadline of 30 working days, counting from the registration of your application on 5 November 2017 and ending on 18 December 2017. We would then focus on the documents 6 to 28 and 38 to 49.

4. THE DOCUMENTS TO WHICH ACCESS MAY OBVIOUSLY BE GRANTED

4.1. Full Access

Pursuant to Article 2 of Regulation (EC) No 1049/2001, in addition to the documents listed in Section 3.2, full access to the documents 1, 2 and 12 has been granted to you fully and we enclose a copy of these requested documents.

A copy of these documents will be enclosed to the present letter. In order for you to easily identify these documents, the column "status" of these documents is marked in green. Please note that documents 2 and 12 have the same content, it will therefore only be provided once.

5. EXCEPTION ON PRIVACY AND INTEGRITY OF THE INDIVIDUAL (ARTICLE 4(1)(B) OF REGULATION 1049/2001)

5.1. Rules

As indicated in Annex 1, many documents contain personal information / data whose disclosure could undermine the protection of privacy and the integrity of the individual (see the documents for which the column "Name of the document" is marked in yellow).

Pursuant to Article 4(1)(b) of Regulation 1049/2001, access to a document has to be refused if its disclosure would undermine the protection of privacy and the integrity of the individual, in particular in accordance with Community legislation regarding the protection of personal data. The applicable legislation in this field is Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data.

When access is requested to documents containing personal data, Regulation (EC) No 45/2001 becomes fully applicable.

According to Article 8(b) of this Regulation, personal data shall only be transferred to recipients if they establish the necessity of having the data transferred to them and if there is no reason to assume that the legitimate rights of the persons concerned might be prejudiced.

We consider that, with the information available, the necessity of disclosing the aforementioned personal data to you has not been established and/or that it cannot be

assumed that such disclosure would not prejudice the legitimate rights of the persons concerned.[6]

5.2. Partial access due to the presence of personal data

According to Article 4(6) of Regulation 1049/2001, "*If only parts of the requested document are covered by any of the exceptions, the remaining parts of the document shall be released*". This article applies if only some parts of documents would contain personal data.

The Advanced record system of the Commission (Ares) contains one document regarding the WP 4: document 5. Access to this document may obviously be already granted to you. Partial access to this document has been granted to you. However, as it contains personal data, according to the Rules on Privacy, all personal information contained in the document will be redacted.

A redacted copy of this document is enclosed to the present letter.

5.3. Access likely to be fully denied due to the presence of personal data

Some of the documents falling under the scope of the request are solely a list of names (and contact details) and a list of curriculum vitae. These documents solely contain personal data.

The Commission is therefore likely to decide that access to these documents will be fully denied. In order for you to easily identify these documents, the column "status" of these documents is marked in red. This decision will occur in due course.

6. ACCESS LIKELY TO BE FULLY OR PARTIALLY DENIED DUE TO OTHER EXCEPTION

6.1. Exception: Commercially sensitive business information

Access to some documents, including document 3, could be restricted in the way that some part of the document might need to be redacted

As already pointed out, according to Article 4(6) of Regulation 1049/2001, if only parts of a document is covered by an exception, the specific part(s) will be redacted and the rest of the document will be release, this applies also for the exception: Commercially sensitive business information.

Regarding document 3 for example, pages 32 and 33 of document 3 contain commercially sensitive business information of the company that submitted the document. Indeed, it contains the prices that the company charges for the services specifically requested. The prices charged by a company for its products / services are generally regarded as commercially sensitive business information[7]. According to Article 4(2), first

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[6] In this letter, the rules described in this section will be hereafter referred to as "the Rules on Privacy (Article 8(b) of Regulation 1049/2001)".

[7] Judgment of the General Court of 15 December 2011 in case T-437/08, *CDC Hydrogene Peroxide v Commission*, paragraph 45 and Judgment of the General Court of 21 September 2016 in case T-363/14, *Secolux v Commission*, paragraph 54.

indent of Regulation 1049/2001, it is highly likely that access to such commercially sensitive information may not be granted to you.

Therefore, it is most likely that the sensitive business information contained in the documents, and more specifically in pages 32 and 33 of document 3[8] will be redacted before the document can be released.

6.2. Exception: public security

Having been through the documents contained in the Wiki, we have noted that it is likely that some (parts of the) documents are likely to fall under the public security exception such as provided in Article 4(1)(a) first indent. This exception is applicable if the disclosure of the document would put at risk the security of the EU.

Case law has specified that "*The concept could equally well encompass situations in which public access to particular documents could obstruct the attempts of authorities to prevent criminal activities*"[9]. Also, measures taken to protect the IT infrastructure of the EU should be kept out of the public domain as their disclosure would undermine the effect of the protection.

This being said, the publication of information (contained in documents) - concerning the IP address of Commission's computers, its IT infrastructure and the specific programmes and application installed on specific computers or used to protect it - could to enhance the security threat that could target the EU IT infrastructure and make such infrastructure more vulnerable toward hacking and threats.

Therefore, it is likely that publication of this specific information is likely to be covered by the exception on public security and that all (parts of) documents that would include it would require a specific redaction.

7. FINAL DISPOSITION

You may reuse the documents, to which access has been granted to you, free of charge for non-commercial and commercial purposes provided that the source is acknowledged, and that you do not distort the original meaning or message of the documents. Please note that the Commission does not assume liability stemming from the reuse.

The final assessment of the Commission, regarding the (partial or full) access or the denial of such access for the remaining documents listed in Annex 1, will be communicated to you in due course and on 18 December 2017 at the latest.

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[8] If document 3 is finally released, in addition, as pages 2 and 28 contain personal data that, according to the Rules on Privacy (Article 8(b) of Regulation 1049/2001), these will need to be redacted before release.

[9] Judgment of the Court of first Instance of 17 June 1998 in case T-174/95 *Svenska Journalistförbundet v Council*, paragraph 121.

Yours faithfully,

José M. Bilbao

Martín BILBAO
Head of Unit

Enclosures:

1. Annex 1: List of documents covered by the request
2. Document 1: ABC technical annex WP3-5.docx
3. Document 2 (and 12): ABC technical annex WP3-5.pdf
4. Document 5: EP Pilot Project 645 - FOSSA WP3-5 – Deletion of confidential information (redacted)
5. Document 25: DLV7 - WP4 Executive Summary
6. Document 26: DLV7 - WP4 Presentation
7. Document 27: DLV7 - WP4 Flyer leaflet version

	Location	Folder	Subfolder	Sub-Subfolder	Name of the document	Description of the document (if necessary)	Size	Status
	U:/ Drive							
1					ABC technical annex WP3-5.docx	Technical Annex describing the work to be executed (text editing file format)	4 pages	Full Access
2					ABC technical annex WP3-5.pdf	Technical Annex describing the work to be executed (printing file format)	4 pages	Full Access
3					offer_KonSulT_1_Main.pdf	Offer of the consortium KonSulT - main part		Access likely to be partially granted - Redaction of personal data and likely redaction due to the presence of commercially sensitive business information
4					offer_KonSulT_2_CVs.pdf	Offer of the consortium KonSulT - list of CVs		Access likely to be fully denied as it only contains personal data
	Ares							
5		Ares(2016)6600235			EP Pilot Project 645 - FOSSA WP3-5 – Deletion of confidential information	Confirmation of deletion of confidential information by the consortium after the project completion.		Access partially granted - Redaction of personal data
	Wiki							
		Follow-up reports						
6					FOSSA - Follow-up Report 15 06 2015.doc	Progress report	5 pages	Fair solution
7					FOSSA - Follow-up Report 26 06 2015.doc	Progress report	5 pages	Fair solution
		Project charter						
8					Project_Charter FOSSA 1.0.doc	Project Charter	24 pages	Fair solution
9					Project_Charter FOSSA 1 4.docx	Project Charter	23 pages	Fair solution
10					Project_Charter FOSSA 1 4.pdf	Project Charter	23 pages	Fair solution

		Project organization & contacts						
11					FOSSA- Team_member_list.xlsx	List of project contacts.	18 rows	Fair solution - Document likely to be at least partially redacted as it contains personal data
		WP (3-5)						
12					ABC technical annex WP3-5.pdf	Technical Annex describing the work to be executed (printing file format)	4 pages	Access granted (same document as document 2)
			1 - Technical annex (3-5)					
13					FOSSA Inventory environment documentation	Technical documentation of the inventory.	4 pages	Fair solution
14					Pentaho dashboard creation guidelines	Technical documentation of the inventory dashboarding subsystem.	3 pages	Fair solution
			3 - Project plan (3-5)					
15					FOSSA-WP3-5 Gantt	Project planning - Gantt Chart	35 rows	Fair solution
			4 - Quality management (3-5)					
16					FossaWP7 - QualityFramework WP4	Quality assurance of WP4	21 pages	Fair solution - Document likely to be at least partially redacted as it contains personal data
17					FOSSA WP3-4-5 Quality Management Plan	Planning of quality assurance activities of WP3-4-5.	22 pages	Fair solution - Document likely to be at least partially redacted as it contains personal data
			5 - Presentations (3-5)					

18					FOSSA WP345 Kick-off meeting presentation	Presentation for a Kick-off meeting: WP3-5	25 slides	Fair solution
			6 - Task logs (3-5)					
19					FOSSA WP3-5 Task List	Task list: WP3-5	90 rows	Fair solution
			7 - Issue logs (3-5)					
20					FOSSA WP3-5 Issue Log	Issue log: WP3-5		
			8 - Risk logs (3-5)					
21					FOSSA WP3-5 Risk Registry	Risk Registry: WP3-5		
			9 - Meeting minutes (3-5)					
22					SC226.FOSSA.WP7 WP4-5 WP6 alignment meeting minutes.12-05-16.v1.0.docx	Meeting minutes - Alignment of work packages WP4-5 and WP6.	2 pages	Fair solution - Document likely to be at least partially redacted as it contains personal data
				WP3-5 Kick-off				
23					WP3-4-5 Kick-off meeting minutes	Kick-off meeting minutes: WP3-5	3 pages	Fair solution - Document likely to be at least partially redacted as it contains personal data
			10 - Project progress reports (3-5)					
24					FOSSA_WP345.Project_Progress_Report.docx	Progress report: WP3-5	10 pages	Fair solution
			11 - Task (3-5)					
				Deliverables				
25					DLV7 - WP4 Executive Summary	Dissemination materials for WP4	3 pages	Full Access
26					DLV7 - WP4 Presentation	Dissemination materials for WP4	7 pages	Full Access

27					DLV7 - WP4 Flyer leaflet version	Dissemination materials for WP4	2 pages	Full Access
28					DLV6 - Software Inventory	The main deliverable of WP4.	26 pages	Fair solution - Document likely to be at least partially redacted as it contains personal data and could be covered by the exception on public security
29					DLV6 - Annex 1 - Inventory Summary	Inventory summary: total numbers of items and instances in scope, summary numbers of OSS instances.	28 rows of a summary table	Fair solution - Document likely to be at least partially redacted as it contains personal data and could be covered by the exception on public security
30					DLV6 - Annex 2 - list of all software with instances	The complete list of all software installed at the EC with number of instances	46244 rows + 29615 rows	Fair solution - Document likely to be at least partially redacted as it contains personal data and could be covered by the exception on public security
31					DLV6 - Annex 3 - List of OSS with instances	The list of OSS installed at the EC with number of instances	8227 rows	Fair solution - Document likely to be at least partially redacted as it contains personal data and could be covered by the exception on public security
32					DLV6 - Annex 4 - OSS by system type	The list of OSS installed at the EC with number of instances, including system type (Workstation, Server, AppV)	8225 rows	Fair solution - Document likely to be at least partially redacted as it contains personal data and could be covered by the exception on public security
33					DLV6 - Annex 5 - Proprietary software by system type	List of proprietary software installed at the EC with number of instances, including system type	37991 rows	Fair solution - Document likely to be at least partially redacted as it contains personal data and could be covered by the exception on public security

34					DLV6 - Annex 6 - OSS by Software Type	List of OSS by type of software	4513 rows + 2 charts and a summary table	Fair solution - Document likely to be at least partially redacted as it contains personal data and could be covered by the exception on public security
35					DLV6 - Annex 7 - List of critical OSS with rating	List of shortlisted critical OSS and its rating against criticality and sustainability criteria defined in WP1-2	829 rows	Fair solution - Document likely to be at least partially redacted as it contains personal data and could be covered by the exception on public security
36					DLV6 - Annex 8 - Software dependencies	Analysis of dependencies of the shortlisted OSS	105 + 68 rows and a chart	Fair solution - Document likely to be at least partially redacted as it contains personal data and could be covered by the exception on public security
37					DLV6 - Annex 9 - Elaborations on raw inventory data	Elaborations on raw inventory data for Top-30 items by software type (methods used to group the software for the top 30 list)	92 cells	Fair solution - Document likely to be at least partially redacted as it contains personal data and could be covered by the exception on public security
				other outputs				
38					Docker environment for inventory	Documentation of the instance used for running the inventory.	3 pages	Fair solution - Document likely to be at least partially redacted as it could be covered by the exception on public security
39					FOSSA Inventory environment documentation	Documentation of the instance used for running the inventory.	4 pages	Fair solution
40					Pentaho dashboard creation guidelines	Documentation of the instance used for running the inventory.	3 pages	Fair solution
			Steering Committees					

41					SC226_FOSSA_M4_SteeringCommittee_Meeting_minutes 18-04-2016	Minutes of a Steering Committee	4 pages	Fair solution - Document likely to be at least partially redacted as it contains personal data
42					SC226_FOSSA_M7_SteeringCommittee_Meeting_minutes.11-07-2016	Minutes of a Steering Committee	3 pages	Fair solution - Document likely to be at least partially redacted as it contains personal data
43					SC226_FOSSA_M10_SteeringCommittee_Meeting_minutes.25-10-2016	Minutes of a Steering Committee	4 pages	Fair solution - Document likely to be at least partially redacted as it contains personal data
44					EU-FOSSA - Steering Committee 20161025 agenda	Agenda of a Steering Committee	1 page	Fair solution - Document likely to be at least partially redacted as it contains personal data
45					EU-FOSSA - Steering Committee 20161025 presentation - part1	Presentation for a Steering Committee	14 slides	Fair solution
46					EU-FOSSA - Steering Committee 20160711 agenda	Agenda of a Steering Committee	1 page	Fair solution - Document likely to be at least partially redacted as it contains personal data
47					EU-FOSSA Steering Committee 20160711 Presentation	Presentation for a Steering Committee	11 slides	Fair solution
48					EU-FOSSA - Steering Committee 20160408 agenda	Agenda of a Steering Committee	1 page	Fair solution - Document likely to be at least partially redacted as it contains personal data
49					EU-FOSSA - Steering Committee 20160418 presentation	Presentation for a Steering Committee	14 slides	Fair solution

TECHNICAL ANNEX – FOSSA WP3-5

1. CONTEXT / INTRODUCTION

This work is requested in the context of the Pilot Project "Governance and quality of software code – Auditing of free and open source software" (reference 26 03 77 02).

Recent discoveries of vulnerabilities in critical information infrastructure have drawn the broader public's attention to the need to understand how governance and quality of the underlying software code relates to basic safety and public trust in applications that are used on a day-to-day basis. As both the general public and the EU institutions regularly use free and open-source software - from end-user device applications to server systems - the need for coordinated efforts to ensure and maintain the integrity and security of that software has been highlighted by the European Parliament itself. This pilot project will offer a systematic approach to achieving a goal to which the EU institutions themselves can contribute, namely ensuring that widely used critical software can be trusted.

The project has been split into several work packages. This Technical Annex concerns Work Packages 3, 4 and 5 – preparation of a unified inventory methodology together with the necessary tools and preparation of inventories of free and open source software and open technical specifications used by the European Commission and the European Parliament.

2. DESCRIPTION OF TASKS

The contractor will perform the following tasks:

Work Package 3

Task 1: Development of a methodology to perform periodic inter-institutional inventories of software assets and standards

The contractor will collect the European Commission's and European Parliament's requirements and develop a unified inter-institutional methodology and related taxonomies for managing an inventory of software assets and an inventory of standards, targeting automated collection of data, preferably based on existing customer's processes.

Task 2: Propose tools to perform periodic inter-institutional inventories of software assets and standards

The contractor will prepare a list, together with necessary justifications, of tools which can be used for keeping and consolidating an inventory of software assets and standards, targeting regular automatic collection of data from systems existing in the European Commission and the European Parliament. The list will also contain information crucial for subsequent selection of tools by the European Commission and the European Parliament.

Task 3: Support in the selection and acquisition of tools, their installation and configuration

The contractor will assist the European Commission and the European Parliament in the choice of the final set of tools to use for the execution of Work Package 4 (inventory of software assets) and Work Package 5 (inventory of standards). The contractor will assist in the acquisition, installation and configuration of these tools in the European institutions' premises, including integration with the existing tools.

Work Package 4

Task 4: Full inventory of Open Source Software used in the European Commission and the European Parliament

The contractor will prepare full inventory of Open Source Software used in the European Commission and the European Parliament using tools selected and metrics defined in Tasks 1, 2 and 3.

Work Package 5

Task 5: Full inventory of open technical specifications used in the European Commission and the European Parliament

The contractor will prepare full inventory of open technical specifications used in the European Commission and the European Parliament using tools selected and metrics defined in Tasks 1, 2 and 3.

The work concerning all tasks mentioned above must involve close collaboration with the European Commission, the European Parliament and other project stakeholders and at least bi-weekly synchronisation meetings.

3. DETAILS ABOUT "DELIVERABLES" (different phases, tests, ...)

As outcome of this study, the following deliverables will be provided:

- **Deliverable 1:** Methodology described in Task 1 in the form of a comprehensive written report.
- **Deliverable 2:** Proposition described in Task 2 in the form of a written report.
- **Deliverable 3:** On-site presence as deemed necessary during the selection and acquisition process of tools to use for the inventories' consolidation.
- **Deliverable 4:** Installation and configuration of tools together with necessary documentation, with optional presence on-site, as deemed necessary.
- **Deliverable 5:** Delivery of communication and dissemination materials concerning Tasks 1, 2 and 3 in the form of executive summary, presentation and a flyer.
- **Deliverable 6:** Inventory described in Task 4 completed in the form described in Tasks 1, 2 and 3, with all the data present in the tool selected for the inventory and installed in Deliverable 4.
- **Deliverable 7:** Dissemination materials regarding the Task 4 in the form of a single-page executive summary, a concise presentation and a single-page flyer with visually attractive representation of the results.

- **Deliverable 8:** Inventory described in Task 5 completed in the form described in Tasks 1, 2 and 3, with all the data present in the tool selected for the inventory and installed in Deliverable 4.

- **Deliverable 9:** Dissemination materials regarding the Task 5 in the form of a single-page executive summary, a concise presentation and a single-page flyer with visually attractive representation of the results.

All deliverables will be provided to DIGIT in soft (.DOCX or .ODT, .PPTX or .ODP and .PDF) and hard copy (final version) in the English language.

The final delivery date for Deliverable 1 is set to the contract signature date plus 6 weeks. Earlier completion of the work is welcome.

The final delivery date for Deliverable 2 is set to the contract signature date plus 8 weeks. Earlier completion of the work is welcome.

The final delivery date for Deliverable 3 is set to the contract signature date plus 10 weeks. Earlier completion of the work is welcome.

The final delivery date for the Deliverable 4 is set to the contract signature date plus 14 weeks. Earlier completion of the work is welcome.

The final delivery date for the Deliverable 5 is set to the contract signature date plus 15 weeks. Earlier completion of the work is welcome.

The final delivery date for Deliverable 6 is set to the contract signature date plus 28 weeks. Earlier completion of the work is welcome.

The final delivery date for Deliverable 7 is set to the contract signature date plus 30 weeks. Earlier completion of the work is welcome.

The final delivery date for Deliverable 8 is set to the contract signature date plus 28 weeks. Earlier completion of the work is welcome.

The final delivery date for Deliverable 9 is set to the contract signature date plus 30 weeks. Earlier completion of the work is welcome.

4. KEY SUCCESS FACTORS

1. Existing tools will be analysed and tested and methodology for creating the inventory will be proposed, discussed and validated.
2. The specific requirements that must accomplish the methodologies and tools to be used in the creation of the inventory of assets and standards will be proposed.
3. The methodology to obtain the software inventory takes into account libraries, versions and dependencies between components.
4. Methodology to obtain the software inventory will let European Commission and European Parliament categorise the components by several criteria: criticality, existing support, areas where the components are used. Each component will be accompanied with information necessary to assess its sustainability, according to the metrics defined in Work Package 1 of FOSSA. Some examples known at the time of writing of this Technical Annex: development process, automatic regression testing, vulnerability reporting process, size of team supporting the project, financing of the team.

5. The list of free and open source software used by European Commission and European Parliament will be elaborated.
6. Levels of criticality are defined and validated, and classification of software following that criticality is made.
7. Extended information about each OSS component is obtained (E.g. community that is behind, type of licence).
8. Analysis of the application of the results of the Work Package 1 of FOSSA is made and conclusions are drawn.
9. The list of free and open technical specifications and open standards used by European Institutions is elaborated.

5. OTHER PRECISIONS

The job will be executed extra-muros with occasional visits on-site.

Given the project's specificity, the contractor must have a proven experience of working with the European Institutions.

The project description, as approved by the European Parliament, together with the project's Business Case and Project Charter documents are the accompanying sources of this work package's precise scope definition.

In case of specific tools necessary for completing the job (surveys, collaboration spaces, forums etc.), they will be hosted by the contractor. Hosting of the inventory software depends on the results of Work Package 3 (Tasks 1, 2 and 3).

Given the analysis and drafting quality expected, all contractors working for Deliverables 1, 2, 5, 7 and 9 must prove their experience in drafting high-level policy documents and proficiency in English (native speaker or CEFR English level C2 or equivalent).

TECHNICAL ANNEX – FOSSA WP3-5

1. CONTEXT / INTRODUCTION

This work is requested in the context of the Pilot Project "Governance and quality of software code – Auditing of free and open source software" (reference 26 03 77 02).

Recent discoveries of vulnerabilities in critical information infrastructure have drawn the broader public's attention to the need to understand how governance and quality of the underlying software code relates to basic safety and public trust in applications that are used on a day-to-day basis. As both the general public and the EU institutions regularly use free and open-source software - from end-user device applications to server systems - the need for coordinated efforts to ensure and maintain the integrity and security of that software has been highlighted by the European Parliament itself. This pilot project will offer a systematic approach to achieving a goal to which the EU institutions themselves can contribute, namely ensuring that widely used critical software can be trusted.

The project has been split into several work packages. This Technical Annex concerns Work Packages 3, 4 and 5 – preparation of a unified inventory methodology together with the necessary tools and preparation of inventories of free and open source software and open technical specifications used by the European Commission and the European Parliament.

2. DESCRIPTION OF TASKS

The contractor will perform the following tasks:

Work Package 3

Task 1: Development of a methodology to perform periodic inter-institutional inventories of software assets and standards

The contractor will collect the European Commission's and European Parliament's requirements and develop a unified inter-institutional methodology and related taxonomies for managing an inventory of software assets and an inventory of standards, targeting automated collection of data, preferably based on existing customer's processes.

Task 2: Propose tools to perform periodic inter-institutional inventories of software assets and standards

The contractor will prepare a list, together with necessary justifications, of tools which can be used for keeping and consolidating an inventory of software assets and standards, targeting regular automatic collection of data from systems existing in the European Commission and the European Parliament. The list will also contain information crucial for subsequent selection of tools by the European Commission and the European Parliament.

Task 3: Support in the selection and acquisition of tools, their installation and configuration

The contractor will assist the European Commission and the European Parliament in the choice of the final set of tools to use for the execution of Work Package 4 (inventory of software assets) and Work Package 5 (inventory of standards). The contractor will assist in the acquisition, installation and configuration of these tools in the European institutions' premises, including integration with the existing tools.

Work Package 4

Task 4: Full inventory of Open Source Software used in the European Commission and the European Parliament

The contractor will prepare full inventory of Open Source Software used in the European Commission and the European Parliament using tools selected and metrics defined in Tasks 1, 2 and 3.

Work Package 5

Task 5: Full inventory of open technical specifications used in the European Commission and the European Parliament

The contractor will prepare full inventory of open technical specifications used in the European Commission and the European Parliament using tools selected and metrics defined in Tasks 1, 2 and 3.

The work concerning all tasks mentioned above must involve close collaboration with the European Commission, the European Parliament and other project stakeholders and at least bi-weekly synchronisation meetings.

3. DETAILS ABOUT "DELIVERABLES" (different phases, tests, ...)

As outcome of this study, the following deliverables will be provided:

- **Deliverable 1:** Methodology described in Task 1 in the form of a comprehensive written report.
- **Deliverable 2:** Proposition described in Task 2 in the form of a written report.
- **Deliverable 3:** On-site presence as deemed necessary during the selection and acquisition process of tools to use for the inventories' consolidation.
- **Deliverable 4:** Installation and configuration of tools together with necessary documentation, with optional presence on-site, as deemed necessary.
- **Deliverable 5:** Delivery of communication and dissemination materials concerning Tasks 1, 2 and 3 in the form of executive summary, presentation and a flyer.
- **Deliverable 6:** Inventory described in Task 4 completed in the form described in Tasks 1, 2 and 3, with all the data present in the tool selected for the inventory and installed in Deliverable 4.
- **Deliverable 7:** Dissemination materials regarding the Task 4 in the form of a single-page executive summary, a concise presentation and a single-page flyer with visually attractive representation of the results.

- **Deliverable 8:** Inventory described in Task 5 completed in the form described in Tasks 1, 2 and 3, with all the data present in the tool selected for the inventory and installed in Deliverable 4.

- **Deliverable 9:** Dissemination materials regarding the Task 5 in the form of a single-page executive summary, a concise presentation and a single-page flyer with visually attractive representation of the results.

All deliverables will be provided to DIGIT in soft (.DOCX or .ODT, .PPTX or .ODP and .PDF) and hard copy (final version) in the English language.

The final delivery date for Deliverable 1 is set to the contract signature date plus 6 weeks. Earlier completion of the work is welcome.

The final delivery date for Deliverable 2 is set to the contract signature date plus 8 weeks. Earlier completion of the work is welcome.

The final delivery date for Deliverable 3 is set to the contract signature date plus 10 weeks. Earlier completion of the work is welcome.

The final delivery date for the Deliverable 4 is set to the contract signature date plus 14 weeks. Earlier completion of the work is welcome.

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5. The list of free and open source software used by European Commission and European Parliament will be elaborated.
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5. OTHER PRECISIONS

The job will be executed extra-muros with occasional visits on-site.

Given the project's specificity, the contractor must have a proven experience of working with the European Institutions.

The project description, as approved by the European Parliament, together with the project's Business Case and Project Charter documents are the accompanying sources of this work package's precise scope definition.

In case of specific tools necessary for completing the job (surveys, collaboration spaces, forums etc.), they will be hosted by the contractor. Hosting of the inventory software depends on the results of Work Package 3 (Tasks 1, 2 and 3).

Given the analysis and drafting quality expected, all contractors working for Deliverables 1, 2, 5, 7 and 9 must prove their experience in drafting high-level policy documents and proficiency in English (native speaker or CEFR English level C2 or equivalent).

The EC can request revisions, corrections or modifications to each of the deliverables during one month after the reception.

Free and Open Source Software Auditing (FOSSA) Pilot Project

DISSEMINATION MATERIALS

Work Package 4 - EXECUTIVE SUMMARY

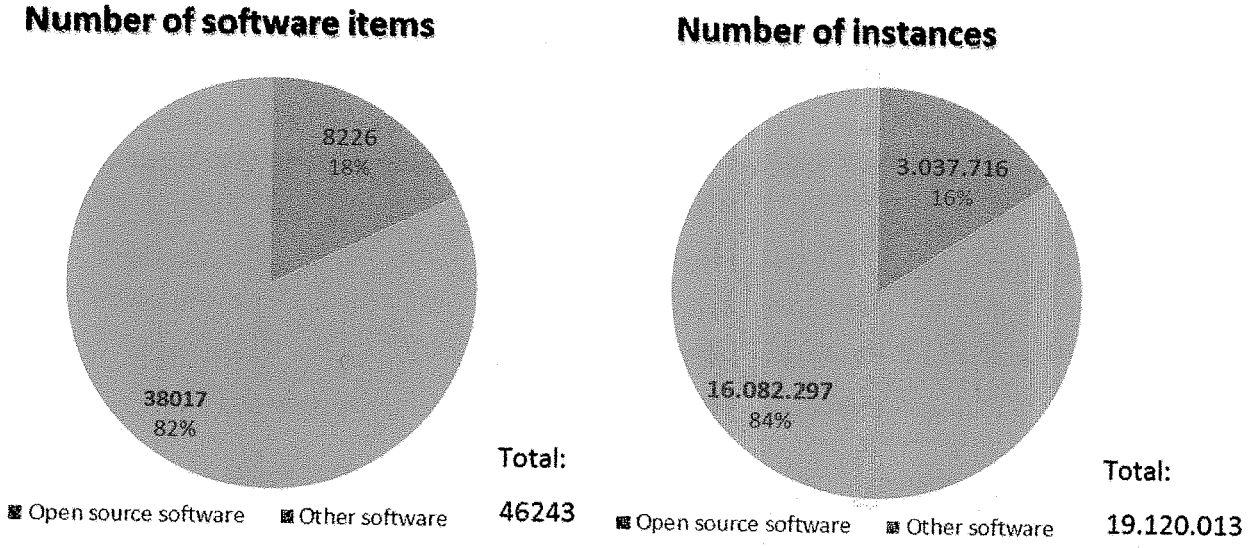
Work Package 4 (WP4) of the FOSSA Pilot Project prepared a full inventory of Open Source Software (OSS) used in the European Commission and the European Parliament. The applied methodology and architecture have been developed in Deliverables (DLV) 1, 2 and 3 of WP3. To evaluate OSS assets, both metrics developed by WP4 and the sustainability ones earlier defined by WP1 are implemented.

The inventory of OSS is based on the input data provided by the various stakeholders interviewed during the initial phase of the FOSSA project. As the information made available by the European Parliament on their IT assets did not allow performing an inventory of the OSS assets, such inventory focused for the time being only on the assets managed by the European Commission.

The **inventory scope** covered the infrastructure managed by DIGIT, including Datacenter applications and Desktop applications. The inventory provided results in two main respects: OSS screening / counting and critical OSS assessment:

1. Open Source Software screening / counting results

The screening and counting of software items and of their instances to weigh the OSS on the respective totals provided the following data:



This means that **a minority, although significant, of all inventoried software in use at the European Commission is Open Source**.

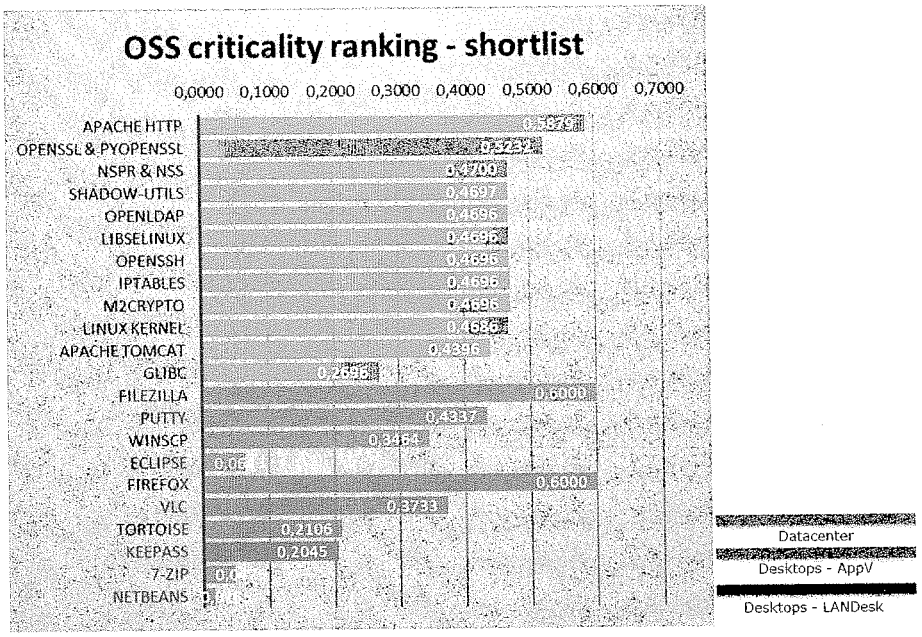
A few other facts:

- the top 4 OSS applications by number of instances (Firefox, Info-ZIP, VLC and Calibre) account for 1/3 of all OSS applications;
- as a consequence, the top three OS libraries / utilities are related with three of the top OSS applications (Firefox, VLC and Calibre);
- Almost all OS Operating Systems items refer to RedHat Enterprise Linux.

2. Detailed analysis of Open Source Software

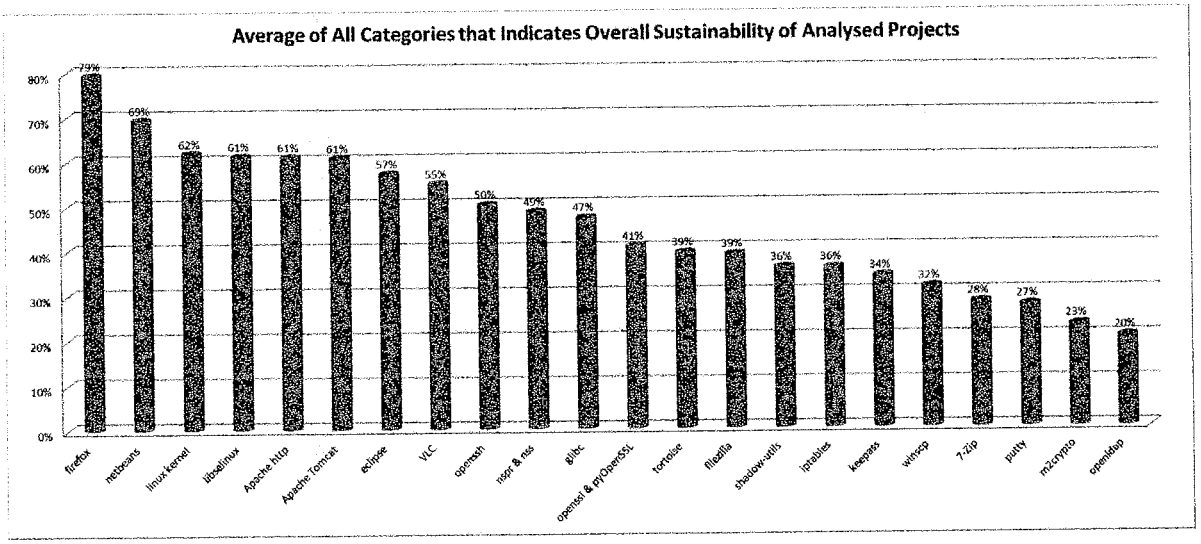
The OSS in use at the European Commission was assessed under the following aspects:

- A business criticality evaluation, based on an analysis of the presence and use of OSS in the institutions. It took into account parameters such as the number of instances, the exposure to end users, the relation with security. The ranking of OSS by a Business Criticality Index (BCI), based on such parameters, identified a shortlist of the most critical software in use, encompassing 22 items:



- An assessment of OSS sustainability, based on the 34 metrics developed within WP1 of FOSSA project. Such metrics were used to evaluate the support that each of the Open Source projects is supposed to get from the community throughout its lifecycle to ensure its long-term success. The elements needed for such evaluation were collected through sources such as project websites, wikis, bugtrackers and some reputed platforms of the open source world (e.g. openhub.net or github.com).

  The overall sustainability, calculated as the average of the 34 metrics (100% indicating top sustainability under all metrics), showed that the critical shortlist includes software with a wide range of sustainability, from 20% to almost 80%.



  The analysis has shown some limits in the actual availability and usability of data related to some metrics, particularly concerning the area of Performance (e.g. time spent in code reviews).

- Furthermore, the analysis of the interdependencies among the software items has identified the top software items by number of dependencies in the critical software shortlist:

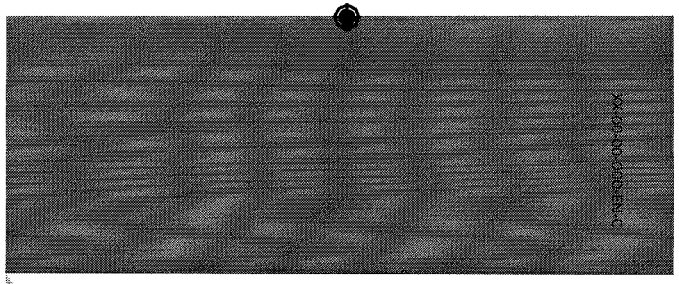
Components	Number of dependencies
Glibc	10 dependencies
Bash	8 dependencies
zlib, coreutils	4 dependencies
shadow-utils, libselinux, openssl-libs, system	3 dependencies
chkconfig, audit-libs, nss-util, krb5-libs, pcre, nspr, nss-softokn-frebl, libcom_err	2 dependencies

Dependencies analysis

The inventory analysis also covered one area that may amplify significantly the risks occurring in one of the inventoried OSS components: the dependencies Analysis performed on the Critical OSS shortlist.

Components	Number of dependencies
Glibc	10
Bash	8
zlib, coreutils	4
shadow-utils, libselinux, openssl-libs, system	3
chkconfig, audit-libs, nss-util, krb5-libs, pcre, nspr, nss-softokn-freebl, libcom_err	2

This analysis showed a relative fragmentation of the dependencies, apart from Glibc and Bash, on which depend respectively 10 and 8 software items of the shortlist.



For ongoing updates on FOSSA project status please visit:

https://joinup.ec.europa.eu/community/eu-fossa/home

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FOSSA

Free and Open Source Software Auditing

Work Package 4: Open Source Software Inventory

DIGIT – B1

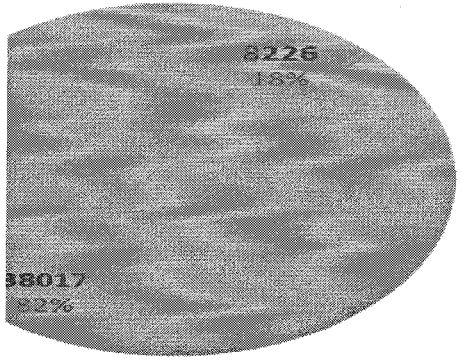
DIGIT

OSS counting

Inventory Scope:

Infrastructure managed by DIGIT, including Datacenter applications and Desktop applications.

of software items



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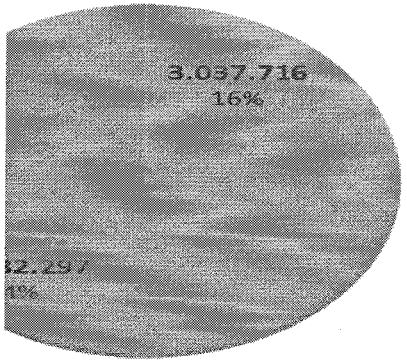
ber of instances



Total:

19.120.01

About **16%** of the total software installed and inventoried is Open Source.

Business Criticality analysis

EU-FOSSA defined a Business Criticality Index, based on three parameters:

- Number of instances of the software;
- Relation with security;
- Exposure to end-user.

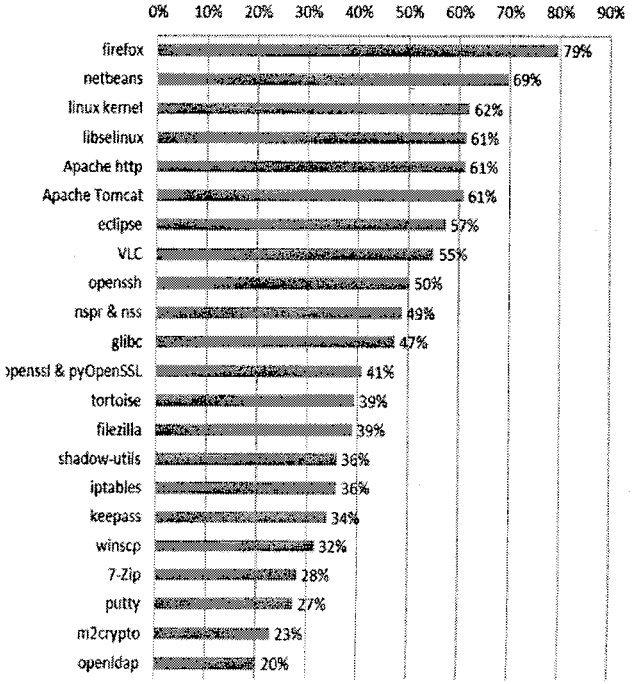
The inventoried OSS was assessed based on this index. A shortlist of the top 22 critical OSS items was defined, on which to perform the subsequent detailed analysis.

Datacenter | Workstations - AppV | Workstations - LANDesk

Sustainability analysis

The critical OSS shortlist was assessed on 34 sustainability metrics grouped in 6 categories (Community Activity, Performance, Quality and Security, Demographics and Diversity, Governance, FOSS support). The overall software sustainability is calculated as an average of those categories.

Average of All Categories that Indicates Overall Sustainability of Analysed Projects



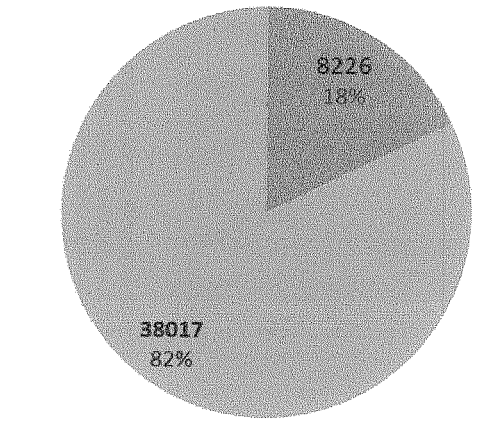
FOSSA – Work Package 4

Open Source Software Inventory

SW counting & screening OSS at the European Commission

European Commission

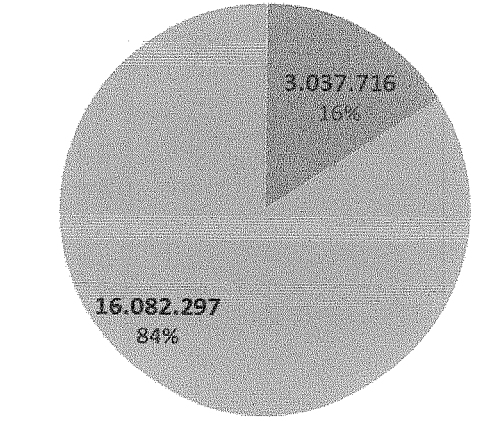
Number of software items



Total:

46243

Number of instances



Total:

19.120.013

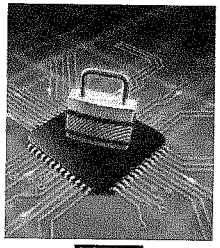
- Open Source Software items in use at the European Commission and managed by DIGIT amount to a significant part of the total software items (8.226 out of 46.243)
- The number of instances of OSS amounts up to 3.037.716 on a total of 19.120.013

A minority, although significant (16%) of all software items installed and inventoried is Open Source

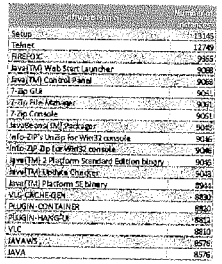
Business criticality analysis

European Commission

Relation with security



Number of instances



Exposure to end user

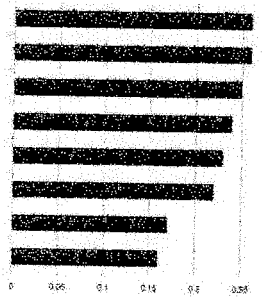
Criticality Index (CI)

OSS list

Software Name	Number of instances
Setup	13145
Telnet	12749
FIREFOX	9355
Java(TM) Web Start Launcher	9068
Java(TM) Control Panel	9068
7-Zip GUI	9061
7-Zip File Manager	9061
7-Zip Console	9061
JavaBeans(TM) Packager	9048
Info-ZIP's UnZip for Win32 console	9046
Info-ZIP Zip for Win32 console	9046
Java(TM) 2 Platform Standard Edition binary	9045
Java(TM) Update Checker	9043
Java(TM) Platform SE binary	8944
VLC-CACHE-GEN	8830
PLUGIN-CONTAINER	8820
PLUGIN-HANG-UI	8812
VLC	8810
JAVAWS	8576
JAVA	8576

ANALYSIS AND RANKING

OSS list ranked by criticality



The sustainability analysis

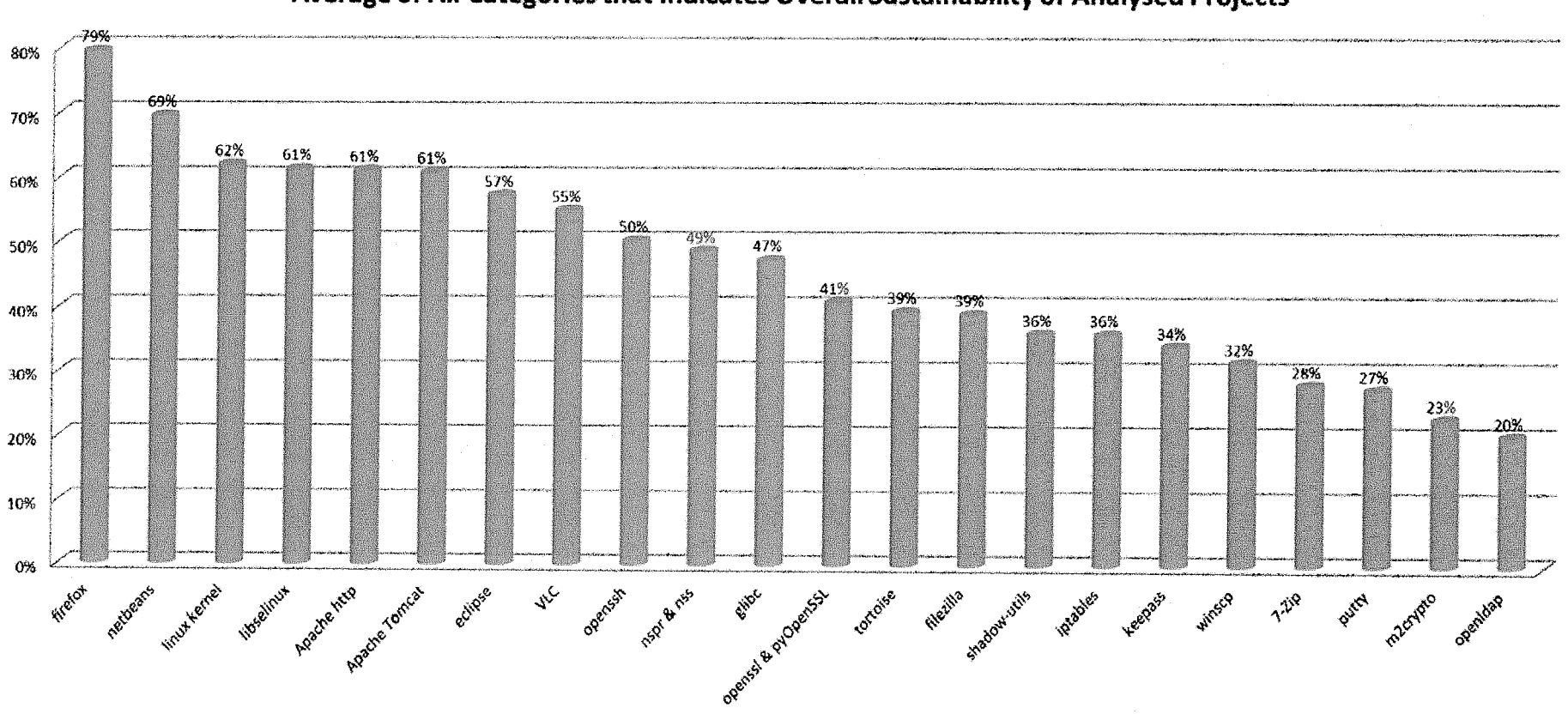
European Commission

The critical OSS shortlist was assessed on

34 sustainability metrics (Community Activity, Performance, Quality and Security, Demographics and Diversity, Governance, FOSS support).

The sustainability of the critical software ranges

from 20% (very low) to almost 80% (high).



The dependency analysis

European Commission

- The inventory also analysed the dependencies within the Critical OSS shortlist. Interdependencies may significantly amplify the risks occurring in one of the inventoried OSS components.
- The following components have more than 1 dependency upon the shortlisted items:

Components	Number of dependencies
Glibc	10 dependencies
Bash	8 dependencies
zlib, coreutils	4 dependencies
shadow-utils, libselinux, openssl-libs, system	3 dependencies
chkconfig, audit-libs, nss-util, krb5-libs, pcre, nspr, nss-softokn-frebl, libcom_err	2 dependencies

- This analysis shows a relative fragmentation of the dependencies, apart from glibc and Bash, which relate to the software shown below: