OPEN SOURCE BEYOND
2020
Powering a Digital Europe
14-15 November 2019 | Brussels, Belgium

Date: 14-15 November 2019

Location: Avenue de Beaulieu 25, 1160 Brussels, Room 0/S1 (ground floor)
               Please take into account sufficient time to get through the security control
               at the Commission's premises.

Co-organised by:

               Directorate-General Communications Networks, Content and Technology
               (DG CONNECT)
               Directorate-General Informatics (DIGIT)

Agenda

14 November

08:30 – 09:00	**Registration**
09:15 – 09:25	**Welcoming remarks and scene setting** (Room S1) Pearse O'Donohue, Director DG CONNECT E, Future networks Thomas Gageik, Director DIGIT B, Digital Business Solutions
09:25 – 09:45	**Keynote speech** (Room S1) Michiel Leenaars, Director of Strategy, NLnet Foundation
09:45 – 11:15	**Panel 1: Role of Open Source as Innovation enabler** (Room S1) *During the past 15 years, Open Source Software has experienced a dramatic expansion and has constituted a cornerstone that supports many new products. We are now starting a new decade and Open Source seems up to fit for innovation and economic development. What are the emerging, OSS based, business models? What is the*

	economic impact of OSS? What are the issues that may hinder the optimal contribution of Open Source to the economy? How can we reach the full potential of Open Source? What new business model are working? What are the main barriers? Should there be a role for policy setting? What should public services do? Chair: Pearse O'Donohue, Director DG CONNECT E, Future networks Panellists: • Michiel Leenaars, Director of Strategy, NLnet Foundation • Sachiko Muto, CEO, Open Forum Europe • Cédric Thomas, CEO, OW2 • Gerald Pfeifer, CTO, SuSE • Deborah Bryant, Senior Director Open Source Program Office, Red Hat Inc.
11:15 – 11:30	Coffee break
11:30 – 13:00	**Panel 2.1: The advent of Open Source Hardware and the Internet of Things** (Room S1) *The level of maturity of Open Source Hardware (OSH) remains far lower than that of Open Source Software. However, the business ecosystem for OSH is developing fast, e.g. the Reprap 3D printer constitutes an ecosystem on its own of global dimension. OSH shares with OSS its modularity and self-assembly feature. If OSH is to follow the same development as OSS, the demand for OSH can be expected to develop rapidly in the next decade. In that sense, it could constitute a cornerstone of the future Internet of Things (IoT) and the future of computing. How OSH may transforms established supply chains? The session will build on today's situation and possible paths of action in the following decade.* Chair: Colette Maloney, Head of Unit DG CONNECT A3, Competitive Electronics Industry Panellists: • Jesús Labarta, Director Computer Sciences Department, Barcelona Supercomputing Center • Ulrich Thombansen, System Technology and Process Control, Fraunhofer Institute for Lasertechnology • Luca Benini, Professor, ETH Zurich and Universita' di Bologna • Jason Kridner, Sitara processor applications, Texas Instruments

	• Congduc Pham, Professor, Computer Science, University of Pau • Tobias Redlich, Head of Laboratory and Group Leader, Helmut Schmidt University **Panel 2.2: Nurturing Open Source Communities** (Room S9; +S5 +S4) *In the backdrop of the increasing popularity and use of open source software, it is a paradox that many open source projects continue to struggle to sustain themselves. Remarkably, sustainability issues afflict not just the small and medium-sized project, but also some of the larger and well-known ones.* *The success of open source software initiatives often goes hand in hand with the success of their communities. So what are the success factors leading to a sustainable community? What are the key challenges open source projects face? More importantly, what can and should be done about the sustainability and funding issue?* *This session invites a brief discussion to identify key sustainability concerns, followed by two deeper debates on practical proposals/solutions to solve (i) Sustainability issues (ii) Funding issues. The session combines results and inputs from the Commission's EU-FOSSA project and the Commission's Open Source Observatory (OSOR)* Chair: Emanuele Baldacci, Director - Director Digital Services DIGIT D - Digital Services Panellists: • Maha Shaikh, Senior Lecturer of Digital Innovation, King's College London • Dirk-Willem van Gulik, Member of the Apache Software Foundation • Sebastian Bergmann, creator of PHPUnit • Carlo Daffara, CEO, NodeWeaver • Frank Karlitschek, Founder, Nextcloud • Bastien Guerry, free software officer for the French administration, DINSIC
13:00 – 14:00	Lunch break
14:00 – 15:30	**Panel 3.1: Open source and the manufacturing industry** (Room S1) *The EU industry is living a fourth industrial revolution lead by new digital paradigms. Open source principles can be applied across the value chain from hardware to software infrastructures and*

applications in many areas. These principles can help the EU ensure there is healthy competition. This session focuses in Open Source as innovation enabler for the industry and how technological barriers could exist or cease to exist in the next decade.

Chair: Maria Tsakali, Programme Officer DG CONNECT E2, Cloud and Software

Panellists:

- Arnaud Samama, Computing Engineering R&T Manager, Thales
- Oliver Fendt, Senior Manager Open Source, Siemens AG
- Jonas Öberg, Open Source Officer, Scania CV AB
- Alessandro Ranellucci, Head of Open Source and Community, Arduino
- Christian Renz, Head of IoT and Digitalisation, Robert Bosch GmbH

Panel 3.2: Knowledge transfer   (Room S9; +S5 +S4)

Over the years open source projects, user organisations and service providers have created a valuable pool of knowledge and best practices in developing, securing, maintaining and providing solutions in open source. On the whole, the smaller and newer open source projects, SMEs and user organisations do not have access to this pool of knowledge.

This session aims to confirm the key issues in knowledge transfer, and then seeks to formulate concrete proposals for knowledge sharing and transfer between the various stakeholders within the open source software ecosystem. The session combines results and inputs from the Commission's EU-FOSSA project.

Chair: Ms Chrysanthi GIORTSOU, Deputy Head of Unit, DIGIT.B.3 - Reusable Solutions

Panellists:

- Dirk-Willem van Gulik, Member of the Apache Software Foundation
- Raul Oliveira, CEO, IPBRICK
- Carlo Daffara, CEO, NodeWeaver
- Gerald Pfeifer – CTO, SUSE
- Stuart J Mackintosh, OpenUK *(tbc)*
- Lothar Becker, Member of the board, Managing Director, OSB Alliance, .riess applications GmbH

15:30 – 15:45	Coffee break
15:45 – 17:15	**Panel 4.1: Open source and the ICT industry** (Room S1) *Many Open Source based business models have succeeded (e.g. Canonical, Red Hat). Moreover, different ICT players have embraced Open Source to stay competitive or to enter into fierce competition with dominant established players (e.g. Google developed Android in order to compete with the iPhones and attain a critical mass of application developers). The recent acquisition of RedHat by IBM for $34 billion, GitHub by Microsoft for $7.5 billion and Microsoft's participation in Linux foundation since November 2016, demonstrate how the mindset of the biggest software vendors has shifted towards exploiting Open Source as a key asset for their business. What is going to come next? What are the plans of the ICT industry?* Chair: Luis C. Busquets Pérez, Programme Officer, DG CONNECT E2, Cloud and Software Panellists: - Timo Perälä, Head of Open Source Network and Service Automation, Nokia - Mirko Boehm, Director, Linux System Definition, Open Invention Network - Peter Ganten, CEO, Univention GmbH - James Lovegrove, EMEA director government affairs public policy, RedHat - Clara Pezuela, Innovation Hub Manager, Atos **Panel 4.2: Lowering the barriers for SMEs to provide their open source services to the public sector** (Room S9; +S5 +S4) *A large numbers of SMEs work with open source software and form the backbone of the open source ecosystem. However, there exist barriers to selling to public services, which means that they are under-represented within European Public Services.* *This session aims to elicit the key barriers SMEs face to access European Public Services and asks participants to brainstorm and provide concrete proposals to break down these barriers and improve such access. The session combines results and inputs from the Commission's EU-FOSSA project.* Chair: Thomas Gageik, Director DIGIT B, Digital Business Solutions Panellists: - Paulo Ribeiro, CEO, Linkare TI - Tecnologias de

	Informação, Lda. • Daniel Melin, Procurement Officer ICT, Kammarkollegiet • Stéfane Fermigier, Co-chair, CNLL • Stuart J Mackintosh, OpenUK • Bastien Guerry, free software officer for the French administration, DINSIC • Lothar Becker, Member of the board, Managing Director, OSB Alliance, .riess applications GmbH
17:15-18:00	**'The Relationship Between Open Source Software and Standard Setting'** (Room S1) Launch of the new Joint Research Centre (JRC) study. Standards and open source development are both processes widely adopted in the ICT industry to develop innovative technologies and drive their adoption in the market. Innovators and policy makers assume that a closer collaboration between standards and open source software development would be mutually beneficial. The interaction between the two is however not yet fully understood, especially with regard to how the intellectual property regimes applied by these organisations influence their ability and motivation to cooperate. This study provides a comprehensive analysis of the interaction between standard development organisations (SDOs) and open source software (OSS) communities. The analysis is based on 20 case studies, a survey of stakeholders involved in SDOs and OSS communities, an expert workshop, and a comprehensive review of the literature. Chair: Nikolaus Thumm, JRC Digital Economy Unit Panellists: • Knut Blind, Technical University Berlin and Fraunhofer Institute for Systems and Innovation Research • Mirko Boehm, Open Invention Network • Pamela Chestek, Open Source Initiative • Christian Loyau, ETSI • Patrick Hofkens, Ericsson
18:00-19:30	**Reception** (drinks and snacks)

15 November

08:30 – 09:00	Registration
09:00 – 09:15	**Welcoming remarks Day 2** (Room S1) Pierre Chastanet, Head of Unit DG CONNECT E2, Cloud and Software
09:15 – 10:45	**Panel 5.1: Digital skills for Open Source** ((Room S9; +S5 +S2) *The demand for software is fuelled by the increasing capability of software to perform tasks that were previously accomplished through some form of hardware. While the malfunctioning of the PC in the 90s could cause the loose of hours of work, the malfunctioning of the software inside a car or a plane puts at risk human lives. This is affecting the sort of skills required to benefit from the advantages modern technology offers. What kind of skills are required to enable digital capabilities of the latest innovations? How can this process be facilitated? What sort of skills are necessary to obtain the optimal benefit from Open Source? How could Open Source skills could help engineers with the requirements of new IoT products?* Chair: André Richier, Principal Policy Officer, DG GROW F2, Advanced Technologies, Clusters and Social Economy Panellists: • Sivan Pätsch, Research Director, OpenForum Europe • Gianfranco Cecconi, EU "European Data Portal" and "Support Centre for Data Sharing" projects lead, Capgemini Invent • Mary Cleary, Deputy Chief Executive, Irish Computer Society • Mika Helenius, Director, DIX Digital Innovation X • Despina Mitropoulou, Director, GFOSS - Open Technologies Alliance • Christian Renz, Head of IoT and Digitalisation, Robert Bosch GmbH **Panel 5.2: The role of Standards in Open Source** (Room S1) *Open Source development process has demonstrated its capacity in the productions of millions of lines of code use across billions of devices. Is this way of development the next stage to be adopted by SDOs? To what extent a closer collaboration between standards and open source software development could increase efficiency of both processes? How can intellectual property regimes applied by SDOs influence the ability and motivation of open source communities to cooperate with them? This session will include the latest studies carried out connecting Open Source and Standardisation and enquiry on how the interoperability if the Open Data Space could be promoted through standardisation.*

	Chair: Thomas Reibe, DG CONNECT F3, Digital Innovation & Blockchain Panellists: • Mirko Boehm, Director, Linux System Definition, Open Invention Network • Jochen Friedrich, Technical Relations Executive , IBM • Carol Cosgrove-Sacks, Senior Advisor on International Standardisation Policy, OASIS • Sachiko Muto, CEO, Open Forum Europe • Istvan Sebestyen, Ecma International
10:45 – 11:00	Coffee break
11:00 – 12:30	**Panel 6.1: Open Science and Open Source** (Room S9; +S5 +S2) *ICT developments and in particular Open Source have contributed to Open Science practices, especially open access publishing and open access to research data, collaborative practices etc. For example, a very well known Open Source Software for publishing platforms, the Open Journal Systems, has vastly contributed to developing open access journals across the globe and has empowered institutional publishers, such as universities, to develop their own publishing activities, or transfer their print activities into the digital medium. Items for discussion include: infrastructures running on OSS, under open standards, with open APIs etc.; OSS development models inspiring new ways for opening the research system; how Open Science paradigms could be transposed into the Open Source of the future.* Chair: Victoria Tsoukala, DG R&I G4, Open Science Panellists: • Paolo Manghi, Researcher, Consiglio Nazionale delle Ricerche • Robert Jones, Project leader, CERN • Ignacio M. Llorente, Executive Director and Chief Scientist, OpenNebula • Alastair Dunning, Head, 4TU.ResearchData, TU Delft • Javier Serrano, Leader of the Hardware and Timing Section in the Beam Controls Group, CERN **Panel 6.2: Support and operational threads of Open Source in public services** (Room S1) *Provision of adequate support for open source software, especially in critical software solutions, remains a key barrier to greater use of open source. However, across Europe, groups of local public services have found practical ways to pool efforts and resources. This panel focuses on these practices, aiming to find a European-*

	wide common ground. The session combines results and inputs from the Commission's <u>EU-FOSSA</u> *project.* Chair: Mr. Evangelos TSAVALOPOULOS, Head of Sector, DIGIT.B.3.002 - Corporate Services, Mobile Apps and OSS Strategy Panellists: • Paulo Ribeiro, CEO, Linkare TI - Tecnologias de Informação, Lda. • Matthieu Faure, Adullact • Stéfane Fermigier, Co-chair, CNLL • Frank Karlitschek, Founder, Nextcloud • Srinath Perera, Vice President, Research, WSO2 • Joël Lambillotte, IMIO
12:30 – 13:30	Lunch break
13:30 – 15:00	**Panel 7: Improving openness, trust and security thanks to open source** (Room S1) *The advent of emerging technologies like Artificial Intelligence and block chain and the exponential increase on cybersecurity threats made the demand for security, trust and transparency in decision making as key priorities in designing ICT systems. Open source is seen as a mechanism to ensure such characteristics. The purpose of this session is to highlight the role of Open Source towards achieving security, trust and transparency in decision-making. What are the strengths but also what are the weaknesses and limitations? The session combines results and inputs from the Commission's* <u>EU-FOSSA</u> *project.* ➔ *OSS and cybersecurity* ➔ *Algorithmic transparency and unbiased decision making* ➔ *NGI and OSS (e.g. see:* https://archive.fosdem.org/2019/schedule/event/nextgen_internet/ Chair: Mr. Thomas Gageik, Director, DIGIT.B - Digital Business Solutions Panellists: • Matthieu Faure, Adullact • Peter Ganten, CEO, Univention GmbH • Mr Gaël Duval, /e/ Founder • Srinath Perera, Vice President, Research, WSO2 • Kurt Roeckx, PMC, OpenSSL

15:00-15:15	**Closing Remarks** (Room S1)
	Carl-Christian Buhr, Deputy Head of Cabinet Mariya Gabriel