



Nexa Center for Internet & Society
Politecnico di Torino

Annual Report 2015

Studying the Internet, exploring its potential & experimenting new ideas



Nexa Center *for Internet & Society*

Politecnico di Torino

Via Pier Carlo Boggio 65/A, 10129 Torino, Italy

(to reach us, see: <http://nexa.polito.it/contact>)

+39 011 564 7217 (Phone)

+39 011 564 7216 (Fax)

info@nexa.polito.it

Mailing address:

Centro Nexa su Internet & Società

Politecnico di Torino - DAUIN

Corso Duca degli Abruzzi, 24

10129 TORINO

ITALY

The Nexa Center for Internet & Society is a research center of the Department of Control and Computer Engineering of the Politecnico di Torino (<http://dauin.polito.it>).

This report was mainly edited by Raimondo lemma and Federico Morando, with the contribution of Nexa co-directors and project managers.



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EXECUTIVE SUMMARY: THE 8TH YEAR IN BRIEF

Foreword

During its 8th year of activity, the Nexa Center improved its **role and visibility in the international context**, activated promising collaborations in the fields of **network measurements** and **linked open data**, and set the stage for new multidisciplinary research threads, e.g., on the **Internet of Things**.

The **Neubot** project on network neutrality benefited from joint development carried out with scholars and hackers, which also led to create an **App for iOS**, to write a library called **liblight** for running network measurements on mobile platforms, and to merge code for mapping the Internet in it. A future plan for Neubot as a platform will also take input from a recently submitted Horizon2020 proposal, EXPONENT^E, that connects hackers, users, and policymakers in a collective awareness platform to jointly address **network transparency**.

Advancements in linked open data

Several improvements were applied to **TelMeFirst**, an open-source software designed for classifying and enhancing documents with natural language processing and linked open data. In particular, we increased software scalability, and the reusability of specific modules.

The launch of a **community linked open data platform** (complementing the open data portal of the Piedmont Region) represented an occasion to strengthen our collaboration with players operating in that technological domain, and to acquire new competences on the web of data and on **data quality**, a research area in which we invested more than in the past.

Moreover, we completed a research on the use of **open data in the context of the Italian Parliament**, in cooperation with the Italian Chamber of Deputies and the Italian Senate.

From service robots to the Internet of Things

The Nexa Center is currently in its second year of a research aimed at identifying the **legal framework that applies to service robots**, and at describing the major legal issues related to their production and usage, such as the implications of data exchange over the cloud, and liability aspects. On a related note, the Nexa Center started a research project on the **Internet of Things** and its implications with respect to the concept of ownership and the empowerment of European consumers.

Looking at international relations, the Nexa Center took the role of coordinator of the **Global Network of Internet & Society Research Centers** (NoC) for the period October 2014 – October 2016, with the main objective to contribute creating the most relevant Internet & Society research community worldwide, both as a group of institutions and as a network of individuals.

Symposium on Internet Governance

Besides activities related with the management of the NoC, which also include its online presence, we participated in a joint research activity on governance models to inform the debate on the future **Internet Governance**. This multifaceted topic was also at the center of an academic symposium – *The Evolution of the Internet Governance Ecosystem* – co-organized by the Nexa Center and the Berkman Center in October at Politecnico di Torino, in the context of the Network of Centers events series.

As far as the Nexa **project life-cycle** is concerned, some relatively large EU-funded projects, such as **Open-DAI**, have come to completion, or are to be completed in the near future. Many of the new projects in the pipeline are arguably smaller in terms of volume and duration, but will allow to incremen-

tally improve the potential of our research activities in many of the fields mentioned above.

The amount and type of **financial resources** budgeted each year is illustrated in Figure 1 below. As for 2014, the weight of EU funding increases from the previous year, and the same goes with other types of research contracts, while the use of funding from donations drops, but is expected to be higher than ever in 2015. Furthermore, the breakdown shows a progressive reduction in the resources coming from the Piedmont Region. We also consider effort by PoliTO personnel (mainly Juan Carlos De Martin, Alessandro Mantelero and Federico Morando), and from Marco Ricolfi (University of Torino). The outlook for the second half of 2015 is moderately positive, with an overall increase of the available financial resources, which will be translated in new opportunities for collaborations and mobility.

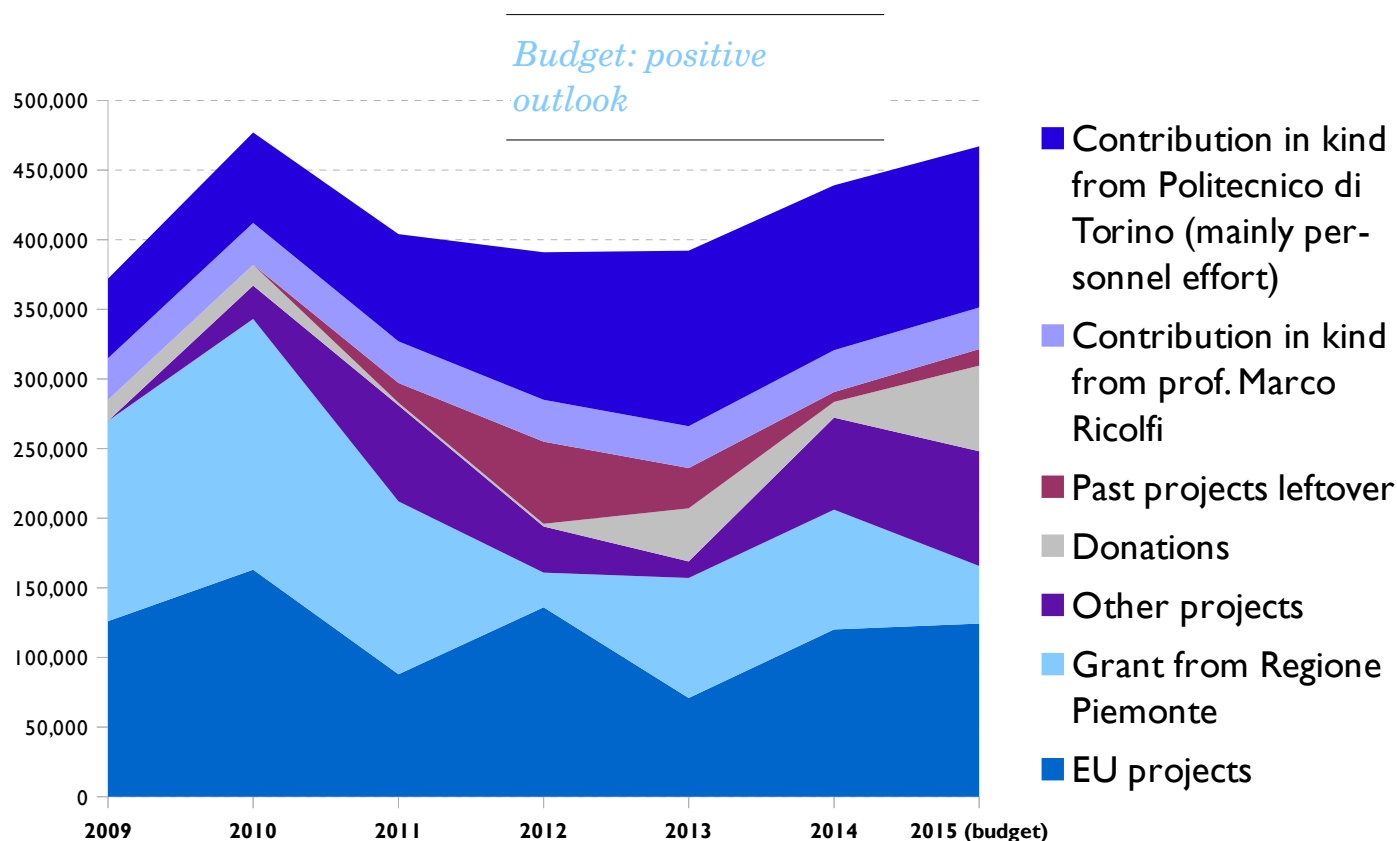


Figure 1: Composition of available financial resources (in Euros), 2009 – 2015

Summary

The report at hand describes the research and policy support activities of the Nexa Center over the period May 2014 – May 2015. These activities are illustrated along **four areas**, complemented by the participation in **international networks** – such as the Global Network of Internet & Society Research Centers (NoC), as coordinator – and a **teaching** thread which began in Spring 2012 (mainly, the “Rivoluzione Digitale” course, plus other teaching activities). A snapshot of our thematic areas, including the indication of a relevant subset of projects/initiatives, is presented in Figure 2 below.

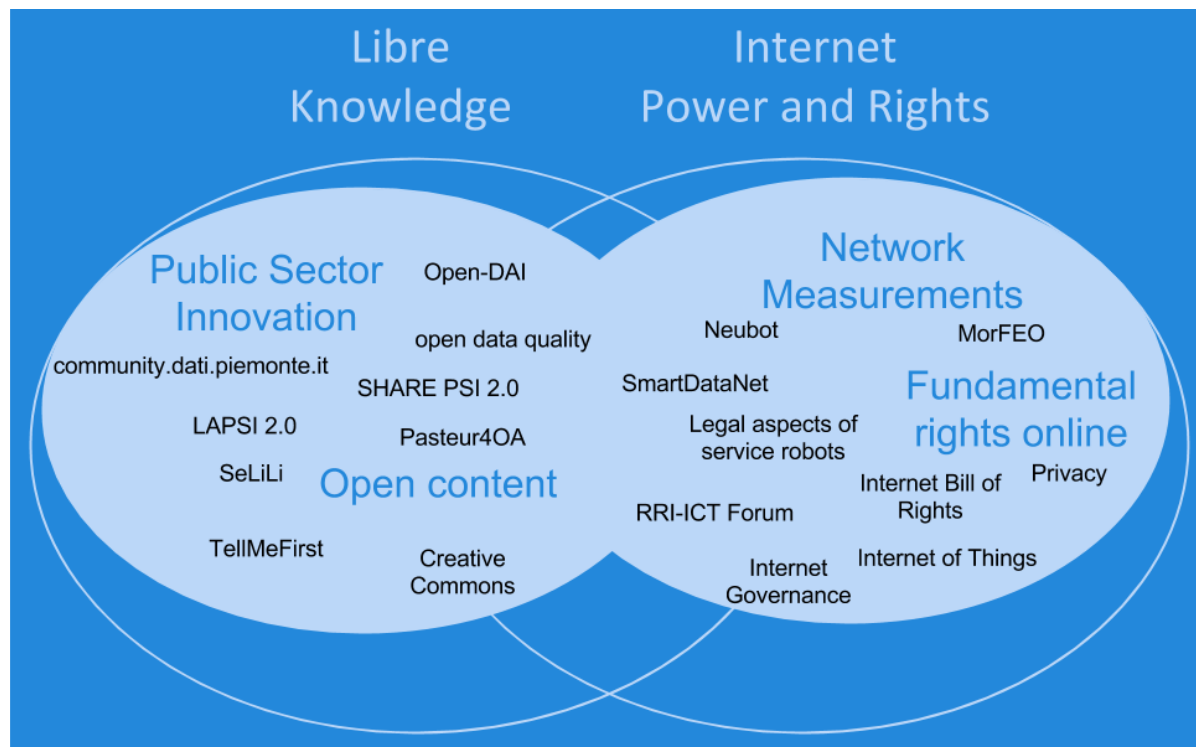


Figure 2: Nexa projects and topics, 2014 - 2015

The **Open content** (p. 12) thread is mainly focused on general-purpose projects aimed at supporting an easier and wider circulation of digital contents. **Public Sector Innovation** (p. 16) relates with the application of those findings to improve the efficiency and transparency of the public sector, and of complex organizations in general. Jointly, the two aforementioned areas contribute to a top-level thread that we labeled **Libre Knowledge**.

Network Measurements (p. 24) are carried out through software projects aimed at improving network transparency, and at providing evidence for researchers, policymakers, activists, and citizens in general. We grouped in **Fundamental rights online** (p. 26) all projects that take as their main perspective the preservation of fundamental rights such as privacy, and freedom of expression. Jointly, the two aforementioned areas contribute to a top-level thread that we labeled **Internet Power and Rights**.

Obviously, several projects may very well pertain to more than one area, and other types of meaningful breakdowns are possible (e.g., in terms of disciplines involved, methodologies applied, or relevance of software development activities).

In terms of **core competences**, our research and policy support activities rely on the combination of two approaches: qualitative methods, especially deriving from **law & economics** studies, which mainly find their application in the domains of Open content and Fundamental rights online; and quantitative methods, **open-source software development** in particular, applied to Public Sector Innovation

and Network Measurements. From this point of view as well, some overlapping has to be taken into account.

Libre Knowledge *Open content*

A number of progresses have been made on **TellMeFirst** (TMF), p. 12, an open-source software designed for classifying and enhancing documents with **Natural Language Processing** (NLP) and **Linked Open Data** (LOD) technologies. Also thanks to the development activity carried out in cooperation with Telecom Italia's Joint Open Lab at Politecnico di Torino, several improvements were applied at software level in order to increase its scalability, and the opportunities of reusing specific modules. As for possible **applications**, we have built a classification pipeline for e-books, and started working on the use of TMF for the classification of academic publications, using the institutional repository of Politecnico di Torino as a pilot.

Improved accessibility to scientific publications has been addressed also from a different angle, i.e., the legal / institutional one, within **Pasteur4OA** (p. 13), a EU-funded project led by the Greek National Documentation Center, aimed at coordinating **Open Access (OA)** policies and practices. During the reporting period, the Nexa Center contributed to a general mapping of OA **mandates** in Italy and East Asia, and is classifying OA **policies of academic publishers**. Moreover, the Nexa Center started elaborating the **OA policy of Politecnico di Torino**, now to be finalized.

In another long-standing area of interest for the Nexa Center, **open licensing**, we are close to completing the official **Italian translation** (under final review as of May 2015) of the **Creative Commons 4.0** licenses, and the **CC Zero waiver** (p. 13). As in the previous years, the Nexa Center supported the Libraries and Museum Area of Politecnico di Torino by providing policy and operational advice, also contributing to the celebration of the 2015 Public Domain Day (p. 13).

As for **SeLiLi** (p. 14), the Free Licenses Service clinic, we structured the description all cases addressed since 2007 using a semantic wiki, so to make information more easily retrievable and interpretable (the wiki is expected to substitute the existing SeLiLi website by the summer).

In the foreseeable future, the Open content thread is expected to remain on the track summarized above. With respect to TellMeFirst, new features will be added, e.g., to better classify entities pertaining to specific domains known in advance, moreover an additional field of application will concern the domain of tourism and cultural events. As far as Open Access to scientific publications is concerned, the Nexa Center will be organizing and hosting a meeting with stakeholders and policymakers in early 2016, in the context of Paster4OA. Moreover, Paster4OA will enter soon in its most active phase, publishing significant outputs, from guidelines and advocacy materials to a scientific journal paper on the mapping of open access policies and mandates. Also the activities concerning open licensing and the public domain are expected to be maintained in 2015/2016.

Public Sector Innovation

The Nexa Center contributed to the successful completion of **Open-DAI** (p. 16), the EU-funded, open-source platform that extracts data from legacy databases of public sector applications, so to expose real-time data. In particular, we coordinated the production of user-friendly documentation, performed software tests, and reached out to potential adopters so to ensure the maximum exploitation of the project results.

A significant effort is being devoted to **linked open data technologies** (p. 17), both in terms of data representation and exposure – as in the case of the recently created <http://community-dati.piemonte.it>, that will complement the Piedmont open data portal – and as a subject of study. E.g., we analyzed the use of linked data for **open data versioning** in the article *Collaborative Open Data Versioning: A Pragmatic Approach Using Linked Data* (Lorenzo Canova, Simone Basso, Raimondo Iemma, Federico Morando) presented at the International Conference for E-Democracy and Open Government 2015. Findings discussed in this article mainly derive from the feasibility study **ODINO**.

Directors

Juan Carlos De Martin - Founder and Co-Director

Juan Carlos De Martin is co-founder and faculty co-director of the Nexa



Center for Internet & Society at the Politecnico di Torino, Italy. He is also Faculty Fellow at

Harvard University Berkman Center for Internet & Society and a Senior Visiting Researcher at the Internet and Society Laboratory of Keio University (Tokyo). His most recent main interest is the future of university in the Internet age, a topic on which he is writing a book. In 2012 he published, together with co-editor Melanie Dulong de Rosnay, "The Digital Public Domain: Foundations for an Open Culture".

In 2003 he co-founded, with law professor Marco Ricolfi, Creative Commons Italy, which he led between 2005 and the end of 2012. Between 2007 and 2011 Juan Carlos De Martin was the coordinator of COMMUNIA, the European thematic network on the digital public domain. Since 2007 he is President of the libraries of the Politecnico di Torino. Before returning to Italy in 1998, Juan Carlos De Martin was a visiting researcher at the University of California at Santa Barbara for two years and, after receiving his Ph.D. in Telecommunications from the Politecnico di Torino, he worked for two years at Texas Instruments in Dallas, Texas. Since Spring 2012 Juan Carlos has been teaching a new course on the digital revolution to first-year students at the Politecnico di Torino. Juan Carlos De Martin also serves as member of the Scientific Board of the Institute of the Italian Encyclopedia Treccani and of the Biennale Democrazia. He is a frequent op-ed contributor to "La Stampa", one of the Italian leading newspapers, and he often acts as a commentator in European media. He is a member of the Institute of Electrical and Electronic Engineers (IEEE) and is author, or co-author, of over 100 peer-reviewed conference papers, journal papers and book chapters.

Furthermore, specific attention was devoted to the topic of **open data quality** (p. 18), matching theoretical studies – discussed in an article submitted to Government Information Quarterly in cooperation with Antonio Vetrò (TUM) and the Nexa Faculty Fellow Marco Torchiano – and empirical analysis. In particular, we constructed a semantic wiki (<http://trasparenza.nexacenter.org>) to monitor the **state of government transparency** in Italy and the quality of the published datasets in the context of the 2013 Italian 'Transparency' Decree. Results of the analysis are also available as linked data, which makes possible further data linking. Moreover, a discussion on ongoing research around open data quality has been carried out in **ODQ2015**, an international workshop organized within the EINS Network and in cooperation with the Technische Universität München.

Still in the thread related with open data released by public administrations, we completed a research on the **use of open data in the context of the Italian Parliament** (p. 19), in cooperation with the Italian Chamber of Deputies and the Italian Senate. The study – released and presented in May as a report and as a semantically annotated wiki – discusses the open data publication strategy of the Italian Parliamentary institutions, also presenting an international comparison, as well as the use of data by external reusers and internal users.

As for the two **European Thematic Networks on Public Sector Information, LAPSI 2.0** (focused on legal aspects, led by the Law School of the University of Leuven), p. 20, completed its achievement during the reporting period, while **SHARE-PSI 2.0** (discussing technological best practices, coordinated by the W3C) is still ongoing with its periodic workshops, where we presented some of the research activities about open data mentioned above (p. 21).

As a complementary aspect to open data, we started addressing a research thread that investigates data disclosure models that enable citizens to reconstruct and exploit their digital footprint, mainly analyzing examples of **smart disclosure** of consumption data, such the U.S. Green Button on energy data (p. 22).

In the forthcoming months, the Nexa Center intends to further invest in the application of linked open data technologies, also improving partnerships with players in the field of data science, using the "community" regional open data portal as a hub.

Internet Power and Rights Network measurements

Nexa's major open-source development project remains **Neubot** (p. 24), which measures the Internet from the edges with active network measurements. During the reporting period, the doctoral thesis of Simone Basso (Neubot project leader) was published on Politecnico's archive, and a journal paper based on it is currently in "best final draft" state. We started drafting a different Neubot architecture that allows for running external commands. Moreover, we have developed a working prototype of the μ TTP test written by an intern

(Alessandro Quaranta). We also wrote a prototype pipeline to process and analyze Neubot data.

Furthermore, an App for iOS was developed in the context of the **MorFEO** project (p. 25), aimed at measuring network censorship on mobile platforms. It was carried out in cooperation with Arturo Filastò, lead developer of the OONI tool for measuring network censorship, and new Nexa Fellow for 2015/2016.

An important input for our Network measurement thread came in the context of **NNTools2015**, an international workshop organized in the context of the EINS Network, that put together people working on experiments and people that do policy in the network neutrality domain, so to enable mutual learning.

A plan for the development of Neubot as a platform is currently under construction. A first step in this direction is represented by a research proposal recently submitted in the “collective awareness platforms” (CAPS) thread of Horizon 2020. The proposal – named **ExPONENT^E** (acronym for *Engaging people in network neutrality experiments*, p. 60) – focuses on the CAPS centered around the personal (i.e., that you can run at home or from your mobile phone) network measurement tools aiming to increase network transparency, that is, aiming to reveal the behavior of the network with network experiments, a super set goal of monitoring network neutrality.

In the forthcoming months, we will invest time and resources to further develop **libight**, experimental library that provides common functionalities useful to implement open measurement tools on mobile platforms. Measurement Lab has expressed interest into funding its development to add support for the widely used NDT network test. Further cooperation opportunities, both with scholars and with hackers, are foreseen.

[Fundamental rights online](#)

The Nexa Center is currently in its second year of research collaboration with Telecom Italia (Joint Open Lab at the Politecnico di Torino) aimed at identifying the **legal framework that applies to service robots** (p. 26), and at describing the major legal issues related to their production and usage, such as the implications of data exchange over the cloud, and liability aspects. The research was coordinated by Claudio Artusio and the Nexa Fellow Monica Senior. In May, a **public meeting** was held at the University of Turin in order to disseminate the first round of our research findings. The Nexa team – coordinated by the Nexa Faculty Fellow Ugo Pagallo and by the Nexa Fellow Monica Senior – is currently developing the second half of the research tasks, which will consist of a more practical output, i.e., a legal toolkit illustrating some basic case scenarios in order to help drone users to comply with the current Italian legislation.

On a related note, the Nexa Center started a research project, supported by eBay Inc., on the ownership in the **Internet of Things** (IoT), p. 27, and its implications for European consumers. The expected outcome of the research is the realization of a conceptual

Directors

[Marco Ricolfi - Founder and Co-Director](#)

Prof. Ricolfi, was born on 19.7.1952, received his degree at the Faculty of



Law of the University of Turin on 1974. Master of Laws, Yale Law School, 1975-1976. He cur-

rently is professor of Intellectual Property Law at Turin Law School, where he also teaches Business Law. He is Director of the LL M in Intellectual Property, organized by Turin Law School together with WIPO and ILO. Between 2010 and 2012, he has been the scientific coordinator of the LAPSI European Thematic Network on Legal Aspects of Public Sector Information.

Staff

Federico Morando - Director of Research and Policy & Research Fellow

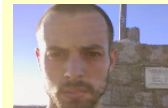
Federico is an economist, with interdisciplinary research interests fo-



ocused on the intersection between law, economics and technology. His research activity at

the Nexa Center mainly concerns new models of production and sharing of digital contents. He also taught intellectual property and competition law at Bocconi University in Milan and he is an associate editor of the *IJCLP*. He has an undergraduate degree in Economics from Bocconi Univ. and a master's degree in Economic theory and econometrics from the Univ. of Toulouse. He holds a Ph.D. in Institutions, Economics and Law from the Univ. of Turin and Ghent. He joined the working group of the Nexa Center in 2006 at the beginning of its first year of formal activity. From Dec. 2012, he leads the Creative Commons Italy project (p. 13) and he is a member of the Open Team of Regione Piemonte. From 2008 to 2012 he served as the first Managing Director of the Center. From 2013 he is Director of Research and Policy, focusing on the coordination of the cross-disciplinary research activities of the Center and on the related policy support actions. A list of his publications is available [here](#).

Davide Allavena – IT Manager & Research Fellow (from April 2015)



Davide Allavena is a Master student of Physics at Università di Pavia. He is completing his thesis on biologically detailed computational models of the cerebellar cortex. In April 2015 started his work as IT Manager at Nexa Center. His main research interests focus on network measurements, network neutrality, and open data technologies. Davide regularly contributes into the Nexa software development projects.

framework facilitating the further implementation of a Business-to-Consumer commerce able to empower the consumer of IoT solutions. In particular, the research is investigating consumer interests, identifying the overall European legal regulation applicable to the subject, and trying to clarify concepts related to the IoT subject.

The legal expertise of the Nexa Center also played a role in the recently created 'big data' platform of the Piedmont Region, called **SmartDataNet**, for which we provided support on data protection policies, and licensing (p. 28). Moreover, a data-protection aware design of the information system behind the public transport ticketing of the Piedmont Region, managed by 5T (**BIP**), has been delivered (p. 28).

Since early 2015, the Nexa Center collaborates as a partner in the EU-funded **RRI-ICT Forum** (p. 29), which aims at monitoring, analyzing, supporting and promoting SSH (Social Sciences and Humanities) contribution to a **Responsible Research and Innovation** approach in ICT research and innovation. The Nexa Center coordinates the work on the online wiki platform of the project: <http://www.rri-ict-forum.eu/>.

In October 2014, a draft **Declaration of Internet Rights** (p. 29) has been published in Italy, as the first outcome of the work of the study commission established by the President of the Italian Chamber of Deputies, Laura Boldrini, and led by Prof. Stefano Rodotà for the development of principles and guidelines on the subject of Internet rights. The commission is composed of MPs (one for each political group) and experts, including Nexa co-director Juan Carlos De Martin. Between 27 October 2014 and 31 March 2015, the draft declaration has been widely discussed with experts and all citizens interested in the topic, by the means of an online consultation and of experts auditions. The Nexa Center promoted the **consultation** also at international level, and encouraged a discussion in the Nexa community. Taking into account the input received in the context of the consultation, the study commission is currently working at a second version of the Declaration.

Moreover, during the reporting period, the Nexa Center increased its attention on the multifaceted topic of **Internet Governance** (p. 30), by participating in international debates on the subject – e.g., in the occasion of the conference on *The Evolution of the Internet Governance Ecosystem*, co-organized by the Nexa Center in October at Politecnico di Torino in the context of the Network of Centers (NoC) events series – and also in terms of research, e.g., by bringing the case of the governance of Creative Commons in a global research endeavor on Internet Governance models steered by the Berkman Center within the NoC.

The Nexa Center furthermore organized three events about digital issues, involving also some Nexa Trustees and Fellows, in the context of **Biennale Democrazia 2015** (p. 31), a prestigious kermesse organized by the city of Turin under the leadership of former Supreme Court Chief Justice prof. Zagrebelsky.

In 2015/2016, the activities concerning the law of robots and the concept of ownership and user empowerment in the Internet of Things are expected to proceed (but both ongoing projects are going to be completed by the end of 2015). The Responsible Research and Innovation thread is expected to be maintained and start delivering its first results, while the Declaration of Internet Rights is going to be released in its final form. The research activities on Internet Governance are expected to grow, also thanks to the ongoing work of the Nexa Center as coordinator of the Network of Internet & Society Research Centers.

International networks

International relations for the Nexa Center are becoming even more central for the Nexa Center, in particular for having taken in charge the role of coordinator of the **Global Network of Internet & Society Research Centers** (NoC) between October 2014 and October 2016 (p. 34). The NoC continues to grow larger, and currently encompasses 50 centers from 27 countries, with an overall involvement of 100+ researchers. Arguably, the main objective for the NoC is to constitute the most relevant **Internet & Society research community** worldwide, both as a group of institutions and as a network of individuals. That is, on the one hand, enhancing the role of academic contributions in current Internet-related global debates; on the other hand, enabling cooperation, exchanges, and mobility between researchers in the Internet & Society arena. Several initiatives have been organized in this respect by the Nexa Center. Some of them relate with internal management, including the online presence of the NoC. Other pertain to the facilitation of research projects, such as the ones on Internet Governance models and on the role of Online Intermediaries, as well as other special initiatives, such as the previously mentioned public consultation on the Italian Declaration of Internet Rights.

Moreover, during the reporting period, the **EINS Network of Excellence in Internet Science** (p. 35) completed its activities as a EU-funded project. The Nexa Center contributed to a broad range of research threads, mainly related with experimental studies applied to network measurements, and open data quality (including the two previously mentioned workshops NNTools2015 and ODQ2015). Moreover, TellMeFirst is being used to classify network measurement methodologies.

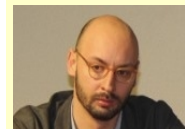
Teaching

As part of the Teaching thread, the “**Digital Revolution**” (p. 39) undergraduate course at Politecnico di Torino continued as the first structured teaching activity planned by a member of the Nexa Center (the Co-Director Juan Carlos De Martin), involving also Simone Basso (as teaching assistant), Lorenzo Canova (as teaching assistant), and Giuseppe Futia (as media assistant), plus several Nexa Fellows and Trustees, and other guests. In 2015, the course enrolled 177 students. Since the course ends in mid June, we are currently tracking and evaluating the students' online activity. Dario Chaifouroosh, one of the best students of the 2014 course, will be spending 10 weeks at the Berkman Center as a Summer Intern, supporting the NoC.

Staff

Raimondo Iemma - Managing Director & Research Fellow

Raimondo Iemma, born Turin (Italy) 1982, holds a MSc in Industrial engineering from Politecnico di



Torino. He is PhD candidate in "Management, production and

design" at Politecnico di Torino. He joined the Nexa Center in early 2012 as Staff Research Fellow, taking the role of Managing Director in 2013. He collaborates in the management of research projects and coordination of the activities of the Center and its staff, and performs research and policy support in the field of Open Government and innovation within (or fostered by) the public sector. He serves as project manager for the Global Network of Internet & Society Research Centers (p. 34). He participates in several EU-funded research projects and networks in fields related with Future Internet, Public Sector Information, Open Data architectures, and economics of science. The list of his publications is available [here](#).

Simone Basso – Research Fellow



Simone Basso is a research fellow of the Nexa Center for Internet & Society since 2010. At the Nexa Center he leads the Neubot (p. 24) and the MorFEO (p. 25) projects on network performance, network transparency and network neutrality. He is also teaching assistant of the Rivoluzione Digitale course (p. 39) held by prof. De Martin. His main research interests are network performance, network neutrality, TCP, security, Internet traffic management, peer to peer networks, and streaming. He studied at Politecnico di Torino from which he received the B.Sc. degree (in 2006), the M.Sc. degree (in 2009) and the PhD degree (in 2014). A list of his publications is available [here](#).

Staff

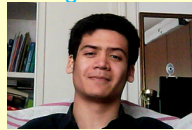
Selina Fenoglietto - Administrative Manager

Selina Fenoglietto joined the Nexa Center for Internet & Society in May 2009 as administrative assistant. She holds a Bachelor degree in Economics from the Università di Torino and her former experiences include the administrative management of projects funded by the European Commission, the World Bank and the Italian Foreign Office. She is the administrative manager of the Center since 2010.

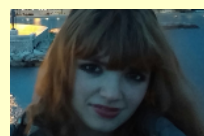


Giuseppe Futia - Communication Manager & Research Fellow

Giuseppe Futia joined the Nexa Center for Internet & Society in February 2011. He holds a Master Degree in Cinema and Media Engineering in 2011 and since 2008 he collaborates regularly with the Italian newspaper “La Stampa”. At the Nexa Center, he is in charge of communication and media management. Giuseppe also takes part in several ICT projects, dealing with different technical tasks, and especially Natural Language Processing and Linked Data applications (TellMeFirst, p. 12) within Internet Science studies (EINS, p. 35), and public sector innovation (Open-DAI, p. 16). Giuseppe holds data visualization skills, useful to both sustain the outreach of some of the Nexa projects, and to support research in the field of Open Data. A list of his publications is available [here](#).



Miryam Bianco - Research Fellow



Miryam Bianco graduated in Law at the University of Turin in February 2015, with a thesis on Copyright and Digital Property. Since May 2015, she has been Research Fellow at the Nexa Center, performing research in the field of the Internet of Things, focusing particularly on its effects on the legal and factual position of European consumers (p. 27).

Moreover, we delivered a 20 hours course on the legal, technological, and economic aspects of **open data** within the Master in **Big Data Engineering** at Politecnico di Torino (p. 39). Beyond lectures by Juan Carlos De Martin, Raimondo Iemma, and Federico Morando, the course hosted the participation of Diego Valerio Camarda (Regesta.exe) on linked open data, Lorenzo Canova (Nexa Center) on open data quality, and Stefano Gatti (CERVED) on open data business models.

For the first year, the Nexa Center also organized “**Topics in Internet & Society Interdisciplinary Studies**” (p. 40), a PhD course of Politecnico di Torino Doctoral Programme, involving as lecturers several Nexa Trustees. This course – addressed to students of all fields – provides an interdisciplinary overview of a selection of Internet & Society topics currently addressed by scholars at global level, all of which have tangible implications in many domains, and may suggest new lines of reasoning to ongoing research.

Organization & Community

During the reporting period, **new researchers entered the Nexa staff**: in chronological order, Lorenzo Canova, who completed his Master's thesis on open data quality at Politecnico di Torino, and continued his research work in the same thread, Davide Allavena, master student of Physics, who started contributing to Nexa software projects, also managing Nexa's IT infrastructure, and Miryam Bianco, who recently graduated in law at Università degli Studi di Torino, and is currently continuing her research on the legal aspects of the Internet of Things (p. 47).

At the same time, two staff members concluded their collaboration with the Nexa Center: Claudio Artusio, staff research fellow between 2013 and 2015 – who will continue participating in the Nexa community as a Fellow – and Luca Leschiutta, Nexa IT manager between 2007 and 2015.

In general, a further effort to reducing organizational **overhead** has been undertaken, mainly following two lines of action. On the one hand, we continued **aggregating projects around thematic hubs** – such as the one on linked open data – and/or exploiting funded projects so to derive publications and other materials beyond standard deliverables. On the other hand, we started **rationalizing our IT infrastructure**.

Four **new Fellows** entered in the role: Marco Torchiano, Associate Professor at the Department of Control and Computer Engineering of Politecnico di Torino (as Faculty Fellow); Claudio Artusio, long-standing collaborator of the Nexa Center; Arturo Filastò, member of Hermes center for transparency and digital human rights for which he develops at GlobalLeaks and The Tor Project; and Alessio Melandri, student of computer engineering at the Politecnico di Torino, wikipedian and former Nexa intern who contributed to the software development projects of the Center (p. 48).

Outreach

Our communication strategy aimed at highlighting the results of

the Nexa research projects, creating also new opportunities to show practical implications of the Nexa policy support activities (p. 51). To achieve these purposes, the Nexa Center organized several workshops and **hackathons** (p. 54) in addition to its consolidated periodical meeting series.

The already mentioned academic symposium on “**The Evolution of the Internet Governance Ecosystem**” has been the major event organized by the Nexa Center during the reporting period (p. 52). The symposium gathered more than 100 people, including researchers, professionals, students, and other experts. Considering the international vocation of the symposium, the adopted communication strategy has been based on a close collaboration between the Nexa Center and other NoC members, in particular the Berkman Center for Internet & Society at Harvard University and the Alexander von Humboldt Institute for Internet and Society (Germany). The symposium, that also featured a keynote speech by the science fiction author and Nexa Trustee Bruce Sterling, has been broadcast live on the Nexa Center website and supported by a live tweeting. The web page of the symposium published on the Nexa Center website was one of the top 5 most visited pages during the reporting period.

The “**Nexa Wednesdays**” (p. 53) public seminars continued to be successfully held monthly in the conference room of the Center with live webcast. The “**Nexa Lunch Seminars**” (p. 53) also regularly take place on the fourth Wednesday of each month.

Moreover, the **public mailing-list** (p. 56) of the Nexa Center showed an increased number of participants (from 530 in the previous reporting period to, currently, 570) and messages (around 2,000 in the reporting period) arguably confirming itself as the major mailing-list for in-depth discussion of Internet-related issues in Italy. The Nexa Center also continued to regularly issue press releases concerning its seminars, workshops, meetings and other initiatives (see nexa.polito.it/press-releases/). During the reporting period, the Center also increased the use of **social networks** (p. 56), such as Facebook (facebook.com/nexa.center) and Twitter (@nexacenter). The Nexa Center has 1893 Twitter followers (1503 the previous year) while, the total number of fans in Facebook is 1117 (981 the previous year).

Finally, major changes were made to improve the user's browsing experience and the richness of the information provided by the **Nexa website** (p. 55), and in particular in the project section nexa.polito.it/research. During the reporting period the website collected a significant amount of traffic, i.e., about 24,000 visits from 16,900 different visitors, remaining steady from the previous year.

Staff

[Lorenzo Canova - Research Fellow](#)



Lorenzo Canova holds a MSc in Industrial engineering from Politecnico di Torino with a Master thesis on Open Government Data quality, and is a research fellow at Nexa since November 2014. His main research interests are in open data quality, government transparency, and linked data. He is currently involved in the Share-PSI2.0 network (p. 21), and works on other projects in the Public Sector Innovation area (p. 16). He collaborates in the Digital Revolution Course (p. 39). A list of his publications is available [here](#).

[Claudio Artusio - Research Fellow](#)

Claudio Artusio graduated in Law at the University of Turin in 2009. He



has been Research Fellow at Nexa since 2013, with a focus on open content and open licensing: he provided front office assistance for Creative Commons Italia (p. 13) and worked the operations manager of SeLiLi license clinic (p. 14). In addition, he followed the LAPS12.0 on open data (p. 20) and PASTEUR4OA on open access (p. 13), and managed the research performed by the Nexa Center on the Legal Aspects of Service Robotics (p. 26) and on Open Data within the Italian Parliament (p. 19). A list of his publications is available [here](#).

[Luca Leschiutta - IT Manager \(until January 2015\)](#)

After graduating in Electronic Engineering, he pursued a PhD in Information Technology at Politecnico di Torino in the field of image compression and wireless net-



working. He also taught programming and networking courses. In the past, he worked as a reliability engineer at Alenia Spazio in the ISS project. He has been collaborating with the Nexa Center since the very beginning of its formal activity.

I. LIBRE KNOWLEDGE

The top-level thread that we labeled Libre Knowledge encompasses two areas: Open content – mainly focused on general-purpose projects aimed at supporting an easier and wider circulation of digital contents – and Public Sector Innovation, which elates with the application of those findings to improve the efficiency and transparency of the public sector, and of complex organizations in general.

1.1 Open Content

This section summarizes the activities that the Center performed in the field of linked data technologies, Open Access to scientific information – also in light of the involvement in the PASTEUR4OA European coordination action –, open licensing and the translation of the Creative Commons 4.0 licenses, and the digital public domain.

1.1.1 TellMeFirst - A knowledge discovery application

TellMeFirst is a tool designed for classifying and enriching textual documents using Linked Open Data.

Project website/page	http://nexa.polito.it/tellmefirst
Status	ongoing
Period	2012 – present
Funding	20,000 €
Funding organization	Telecom Italia – Joint Open Lab
Persons in charge	Giuseppe Futia (Nexa PM and main developer), Alessio Melandri (Developer), Simone Basso (Software engineering advisor), Federico Cairo (Project founder)

TellMeFirst (TMF) is an open-source software designed for classifying and enhancing documents with **Natural Language Processing** (NLP) and **Linked Open Data** (LOD) technologies.

Background

The amount of unstructured text generated on the Web is increasing day by day. To bring order into this wealth of contents, we need tools for automatically analyzing it, and for extracting structured information (NLP) linkable to other resources (LOD). To increase the value of these tools for Internet users, communities, public administrations, and companies, open knowledge bases (e.g., DBpedia/Wikipedia) and open algorithms represent the essential requirement.

Objectives

TMF intends to leverage NLP and LOD technologies to extract the main topics from texts in the form of DBpedia resources, retrieving new informa-

tion from the Web.

To maintain an effective classification process, in particular on texts concerning recent topics (covered, for instance, by online newspapers), the DBpedia knowledge base has to be updated to the latest version.

To increase the robustness and the scalability of TMF, the software has to be tested in a defined use case.

Results

In March 2015, the paper *Semantic Annotation and Classification in Practice* written in collaboration with the SoftEng group of Politecnico di Torino (<http://porto.polito.it/2585561/>), has been published on IT Professional Magazine | IEEE Computer Society - IEEECS.

Thanks to the **ongoing collaboration with Telecom Italia** (Joint Open Lab at Politecnico di Torino), we started to unbundle the features of TMF in order to increase the scalability of

the software and facilitate the reuse of specific modules (https://github.com/TellMeFirst/tmfc_core_build).

Moreover, we have developed a specific **classification pipeline for eBooks** built on the case of Project Gutenberg (<https://github.com/TellMeFirst/tellmefirst/tree/master/doc/epub>), and plan to apply our findings to scientific publications, using the official repository of Politecnico di Torino (PORTO) as a pilot.



We have also updated the indexes for the TMF's classification system to the **last version of DBpedia** (<http://wiki.dbpedia.org/Downloads2014>).

1.1.2 PASTEUR4OA: Open Access Policies for European Union Research

The Coordination Action encouraging the development of matching policies on Open Access and Open Research Data in the EU.

Project website/page	http://www.pasteur4oa.eu/
Status	ongoing
Period	February 2014 – July 2016
Funding (of which Nexa)	1,935,984 € (80,891 €) for the entire project
Funding organization	European Commission (SiS.2013.1.3.3-1)
Person(s) in charge	Claudio Artusio (Nexa project manager), Federico Morando

PASTEUR4OA is a EU-funded project aiming to **coordinate strategies, activities and policies on Open Access (OA)**. Coordinated by the Greek National Documentation Centre and addressing the European Science in Society call, PASTEUR4OA involves a broad consortium of project partners who range from research-performing organizations through research funders to OA advocacy organizations.

Background

A considerable progress was achieved on Open Access in Europe over the five years preceding the launch of the project, both in the provision of technical infrastructure and in the policy-related arena, with significant national policy developments in some EU countries and noteworthy progress at institutional level. However, mostly due to lack of coordination across the

EU, a full harmonization between the policies of the Member States is still to be achieved.

Objectives

PASTEUR4OA aims at improving coordination in developing OA policies that align to the European Commission's Recommendations and Horizon2020 rules. The Nexa Center will exploit the involvement in PASTEUR4OA to increase its expertise in the field; in particular, by **contributing to the analysis of OA policies and the drafting of OA policy recommendations**. Also, the Center will strengthen its networking and relationship with actual and potential OA-oriented policymakers.

Results

During the reporting period, the Nexa Center contributed by providing information on current and in-progress OA mandates in

Italy and East Asia; complementing the **OA policies mapping** and analysis task of the project.



As part of the second year of activity focused on the identification and engagement of EU national policymakers, the Nexa Center is currently contacting Italian research funders and research institutions.

In addition, the Nexa Center is contributing to the development of advocacy material with a **classification of OA policies** of academic publishers, by performing automated queries on the SHERPA-RoMEO database API.

1.1.3 Creative Commons Italia

The Italian affiliate of Creative Commons, a nonprofit organization that enables the spread of knowledge and creativity through free legal tools.

Project website/page	http://www.creativecommons.it/
Status	ongoing
Period	November 2003 – present
Funding	about 10,000 € annually

Funding organization

none (in kind contribution of the Nexa Center)

Persons in charge

Federico Morando (*CC Italia project lead*); Claudio Artusio (*project manager*).

The Nexa Center hosts and coordinates the activities of the working group of Creative Commons Italy (CC-IT), founded in July 2003.

During the reporting period the Nexa Center focused on the **Italian translation of the CC4.0 licenses and CC0 waiver full legal texts**. Also, the CC IT website was renewed.

Background

Creative Commons (CC) is a project building a new and more flexible paradigm for copyright. CC develops standardized copyright licenses and other (optional) technical tools to assist authors wanting to share some of their rights with users and fellow authors in a way that is easy, flexible and legally rigorous.

Objectives

In 2013/2014, CC-IT concentrated its effort in the final phase of the CC4.0 licenses and CC 0 waiver translation process. Also, to better fulfill its dissemination purposes the CreativeCommon-

s.it website look and feel has been updated.

Results

Following a public consultation period (July-August 2014) the Nexa Center is currently completing the final phase of the Italian translation process of the CC 4.0 licenses full legal text together with the CC Headquarters Legal Staff. Simultaneously to CC4.0 licenses, the CC-IT staff is currently defining also the CC0 waiver Italian official translation, following a dedicated public consultation period.

By analyzing the structure of the CC organization and community, two case studies on the **governance of open data licensing** projects were developed within the EINS network and the Global Network of Interdisciplinary Internet & Society Research Centers (NoC) (p. 34).

In order to rearrange its content and upgrade the CMS to Drupal 7, the CC-IT website has been updated borrowing the

look and feel of the CC International website; a [theme for Drupal 7](#) was created for this purpose and made available under a GPL license [on GitHub](#).

4.0

It's here.

During the reporting period, the [creativecommons.it](#) website continued to be very popular, having a monthly average of about 10,000 visits from about 7,000 different IP addresses (google analytics metrics). Both the CC-IT Community's mailing-list and the mailing-list devoted to discuss the CC licenses saw its number of posts decrease (198 members and 28 posts against 198 members and 109 posts in the previous year; 386 members and 9 posts against 414 members and 172 posts in the previous year, respectively).

1.1.4 SeLiLi: the Free Licenses Service Clinic

Making socially beneficial projects possible and helping them to use open licenses, without being scared by copyright and other legal issues.

Project website/page

<http://selili.polito.it/>

Status

ongoing

Period

2006 – present

Funding (of which Nexa)

2,000 – 5,000 € annually

Funding organization

none (in kind contribution of the Nexa Center)

Persons in charge

Claudio Artusio (*project manager*), Federico Morando

The Free Licenses Service clinic (**Servizio Licenze Libere, SeLiLi**) started its ac-

tivity in 2006 as an initiative of the Nexa Center, funded by the Piedmont Region.

The activity of SeLiLi regularly continued during the reporting period and a semantic

wiki gathering all the SeLiLi answers and advises was developed.

Background

Usually, projects, websites, mailing-lists, etc. dealing with FLOSS and open content issues contain disclaimers stressing that the information is provided as is. In order to use such information it is necessary to contact a professional, usually a lawyer, who can advise on the specific case. Since professional services are frequently not affordable, the SeLiLi project helps users pursuing their initiatives and openly share their results.

Objectives

SeLiLi offers **informative services** and **professional advice** on Free and Open Source Software and open licenses: the first seek to solve issues regarding the basic characteristics of licenses; the second takes place when a specific request is too complex. In such cases, a professional consultation between a qualified professional and the requester takes place (in the past, the cost of such advice was covered by the Piedmont Region).

Results

During 2014-2015 SeLiLi had a rather limited activity, with the

exchange of about **28 messages on the internal mailing-list, which represents the discussion of 4 cases** regarding the involvement of CC Licenses within pertaining or loosely related legal issues (e.g., dissemination of creative works, patents and copyright infringement). During the last year, we did not activate any new professional advice.

In addition to its regular activities, SeLiLi has **developed a semantic wiki in order to archive and structure all the answers and advises produced so far**, both for reporting and informative purposes.



1.1.5 Public Domain: Supporting the Libraries of the Politecnico di Torino

Increasing awareness of the public at large on the Public Domain.

Project website/page	http://digit.biblio.polito.it/pubdom.html
Status	ongoing
Period	February 2012 – present
Funding (of which Nexa)	in kind (negligible)
Funding organization	internal funding
Person(s) in charge	Giuseppe Futia (Nexa contact person)

In order to increase awareness on the Public Domain, the Nexa Center supports the initiatives of the Libraries and Museum Area (former Library System).

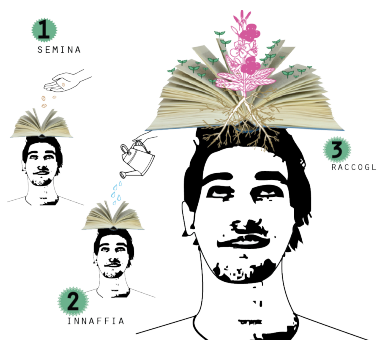
Background

The Libraries and Museum Area of Politecnico di Torino, in collaboration with the University of Turin, the Public Libraries of the City of Turin, the actors of Fondazione Teatro Nuovo Torino,

and the support of the Nexa Center organize long-term initiatives for a “continuous celebration” of the public domain.

Objectives

The objective of this initiative is to make more people (students, professors, librarians, users of public libraries) aware of the richness and further potential of the public domain, promoting a series of live performances, revisiting the works of some of the greatest writers and artists entered this year into the Public Domain.



Results

The 2015 activities to celebrate the Public Domain started

with a public meeting entitled “VIVA L'ITALIA LIBERA!”, an initiative related to the 70th anniversary of the end of the second world war and the end of Nazi occupation of Italy.

queries an index that contains all Wikipedia entities). The domain to test the new TMF classification system will focus on points of interests (POIs) for tourism. Exploiting this new feature, we also intend to use TMF in our Linked Data projects (see p. 17) related to a specific domain classifying information expressed in natural language (e.g., the description of museums of abbey in the domain of POIs).

1.1.6 Outlook

As far as the Creative Commons project is concerned, after the release and translation of the 4.0 version of the license suite and of the Creative Commons Zero waiver, the next reporting period will be focused on awareness and dissemination activities, and possibly on the identification of new research threads related with Creative Commons.

With respect to the complementary SeLiLi free licenses service clinic, a strategic choice is expected: the project needs to be relaunched or essentially archived.

As far as Open Access to scientific publications is concerned,

the Nexa Center will be organizing and hosting a meeting with stakeholders and policymakers in early 2016, in the context of Pasteur4OA. Moreover, Pasteur4OA will enter soon in its most active phase, publishing significant outputs, from guidelines and advocacy materials to a scientific journal paper on the mapping of open access policies and mandates.

About TellMeFirst, during 2015 we will explore the creation and the usage of an index that contains only a subset of the Wikipedia entities that belong to a specific domain of knowledge (while the current classification system of TMF

queries an index that contains all Wikipedia entities). The domain to test the new TMF classification system will focus on points of interests (POIs) for tourism. Exploiting this new feature, we also intend to use TMF in our Linked Data projects (see p. 17) related to a specific domain classifying information expressed in natural language (e.g., the description of museums of abbey in the domain of POIs).

The rest of the projects of this thread (e.g., related with the public domain) are also expected to be active in the next reporting period, but on a more reactive mode, on the basis of the opportunities that will arise.

1.2 Public Sector Innovation

This section describes the main activities performed by the Nexa Center in the field of open government data and public sector innovation enabled by ICTs, but also other types of innovation improving eGovernment. The Open-DAI open data services platform has come to completion. Several applications based on linked data are ongoing, as well as a research thread on open data quality. Moreover, a research on open data in the context of the Italian Parliament has reached its first results. The LAPSI 2.0 European network on legal aspects of public sector information completed its achievements, while Share-PSI2.0 – that focuses on technical best practices – is still ongoing.

1.2.1 Open-DAI: Breaking Public Administration Data Silos

Innovating in the Public Sector, using cloud computing and Service-Oriented Architectures to break internal information silos and make data available externally for useful applications.

Project website/page	http://www.open-dai.eu/
Status	concluded
Period	February 2012 - September 2014
Funding (of which Nexa)	1,645,984 € (88,400 €) for the entire project
Funding organization	European Commission (CIP-ICT-PSP-2011-5)
Person(s) in charge	Federico Morando, Raimondo Iemma

Open-DAI is a EU-funded, open-source platform that ex-

tracts data from legacy databases of public sector applications, in

order to expose real-time data.

Background

Open-DAI has been coordinated between 2012 and 2014 by the Consortium for Information Services of Regione Piemonte, gathering 11 partners from 4 countries. The Nexa Center mainly contributed to exploitation of the project results.

Objectives

In the last year of the project, the Nexa Center aimed at defining **exploitation scenarios** for Open-DAI, including a business-

oriented one, as well as supporting the adoption of the Open-



DAI platform by the partners, and by third parties, including public administrations.

Results

The Open-DAI source code (<https://github.com/open-dai/>)

and documentation (<http://open-dai.eu/>) are available online since late 2014. The Nexa Center contributed by drafting of user friendly materials, by performing software tests, and by reaching out to potential adopters. Moreover, Nexa's Raimondo lemma and Federico Morando, with Michele Osella, published their **comparison of Open-DAI with other open data platforms** in the eJournal of eDemocracy and Open Government (<http://www.jedem.org/article/view/304>).

1.2.2 Everything as Linked Data

Connecting fragments of open knowledge to make sense of them.

Project website/page	http://community.dati.piemonte.it/ http://trasparenza.referata.com/ (semantic wiki on Transparency Decree)
Status	ongoing
Period	2011 – 2013 (agreement with Regione Piemonte)
Funding	in kind + about 10,000 € from ODINO project (Nexa Center budget)
Funding organization	ICT Innovation Cluster of Regione Piemonte (ODINO project)
Person(s) in charge	Lorenzo Canova, Federico Morando, Giuseppe Futia, Raimondo lemma

During the reporting period, the Nexa Center conducted a series of activities aiming at increasing its linked open data related skills and at publishing **higher quality open data**, for the benefit of the general public.

Nexa also continued to support (*pro bono*) various municipalities, e.g., the one of Alessandria, with respect to their open data initiative. Also the support to the Piedmont Region was offered *pro bono* during the reporting period, as all existing contracts in this regards were concluded during the previous reporting period. The activities of the Center also involved various SMEs, interested in establishing (linked) open data related skills

(e.g., Cosvifor, SSB, ePublic, Otto) and other SMEs with distive skills in this domain to exchange best practices and training (e.g., Regesta.exe).

Notice that the Nexa center continued to work on data published following the Italian **Transparency Decree**, but the project is becoming so rich and articulated that it deserves a separate description (see below, p. 18).

Background

Around 70% of the Italian Open Government Data obtain 3 stars out of five in the Tim Berners Lee scale. Some score even less. It basically means that datasets are published online in

an open and machine readable format, however they don't have structured links that could highlight relations enhancing a combined used of datasets that would create value. In other words, there is no semantic standardization and interoperability amongst Italian open datasets.

Data quality is another big issue for (Italian) open data: lack of accuracy, duplication, missing values, obsolete data are common problems.

Moreover, there is no evidence of any structure data publishing pipeline enabling collaborative processes to improve and integrate published data. A feedback procedure, and a versioning

system to enable crowdsourcing (by means of forks and merges) would be beneficial.

Objectives

The Center supports innovative initiatives in this domain with the twofold objective of promoting socially beneficial initiatives and gathering experience, case studies and empirical evidence to feed our research on public sector information (and innovation in general).

With respect to the ODINO project, which is the only funded activity in this group, the specific goal is to gather evidences about the realization of virtuous feedback procedures regarding Public Sector Information, e.g., about the possibility of establishing and managing a feedback channel from data re-users to public administrations (and other data publishers). This includes a technical analysis of versioning systems tailored for data and a multidisciplinary analysis of data re-acquisition procedures within public administrations.

Results

The first and main result of this group of activities is that the Nexa Center acquired relevant skills and experiences in the domain of linked open data. This led to the publication of an **alpha version of <http://community.dati.piemonte.it/>** (announced during the International Open Data Day, on Feb. 21, see <http://nexa.polito.it/iodd2015>).

The same technologies are being used at the moment to create a **linked open data version of the PORTO Open Access repository of the Politecnico**, together with some related datasets, e.g., concerning the OA policies of various publishers, to support the work of the OA group of the library services of the Politecnico.

With respect to the ODINO project, the activities focused on the tourism domain for defining feedback procedures. In this context focus groups with Public Sector bodies in the tourism sector have been organized in

order to know what is the current state of art in the publication procedures.

Thanks to the ODINO project, Lorenzo Canova with Simone Basso, Raimondo Iemma and Federico Morando, submitted and presented a **paper on Linked Data collaborative feedback loops** at the Ce-DEMI5 conference that took place in Krems on the 20-21st of May 2015.

Moreover, in the occasion of the 2015 meeting of Spaghetti Open Data (the largest open data community in Italy) Giuseppe Futia and Alessio Melandri were selected as winners of a hackathon entitled "Lod that works". Thanks to a small reward, they have developed an **interactive data visualization of the Trentino Region events** published as Linked Data. A demo is available at <http://explorer.nexacenter.org/>, while the code is in a [GitHub repository](#).

1.2.3 #WikiTrasparenza & Data Quality

The tool for open government transparency data.

Project website/page	http://nexa.polito.it/WikiTrasparenza
Status	ongoing
Period (Nexa contribution)	July 2014 – present
Funding	About 1000€
Funding organization	Cosvifor in the context of the OP4PA project
Person(s) in charge	Lorenzo Canova (<i>project lead</i>)



WikiTrasparenza is a tool

based on **Semantic Wiki** (<http://trasparenza.nexacenter.org>). It has been built for **monitoring the state of government transparency** in Italy and the quality of the published datasets in the context of the Italian 'Transparency' Decree

(d.lgs 33/2013) and the anti-corruption Act (190/2012).

Wikitransparenza is part of Nexa center's efforts on the research topic of Open Government Data (OGD) quality and its effects on data reusability.

Background

The Italian anti-corruption Act (190/2012) requires all public administrations and some publicly owned companies to release open data about procurement contracts.

Furthermore, the Transparency Decree (d.lgs.33/2013) regulates obligations about publicity, transparency and diffusion of information about public sector bodies.

Since the adoption of the Decree, many datasets have been published by public authorities. However it happens frequently that these datasets do not give enough information (or not clear enough), or they do not appear in the section where they are supposed to be consulted, or they are simply not machine readable.

In this framework there is the need of checking which kind of mistakes have been made in the publication of data (quality measurements), and what could be done in order to improve it.

Objectives

The first objective is to have

an overview on the Open Government Data in Italy in the context of the Transparency Decree (d.lgs 33).

As second objective we aim at verifying that all published *procurement information* is consistent with regulation. We will then convert these public procurement data into linked open data RDF triples, in order to overcome the fragmentation of existent datasets and allow easy analysis and reuse.

Results

By now several public sector bodies have been monitored, for a total of **119 analyzed Municipalities** and **595 datasets** also thanks to our Intern Roberta Bruno.

A SPARQL endpoint has been set up on <http://trasparenza.nexacenter.org/sparql> in order to easily query the collected data.

A report, analyzing the gathered data about all the 119 Italian municipalities Provence Capital has been published on the 30th of January 2015 and it's available at <http://nexa.polito.it/working-paper/2015-1>.

The results explained in this paper have also been presented during the 27th Nexa lunch seminar (for the time being all the published reports are available only in Italian).

Parts of the findings of this study have been shown in the ODQ2015 workshop ("Open data quality: from theory to practice") held in Munich on the 30th of March 2015 and organized in the context of the EINS network (p. 35) by the Technische Universität München and the Nexa Center (<http://nexa.polito.it/2015/03/Open-DataQuality>).

An ontology for representing the Italian public procurement data as linked data has been defined and we are currently working on the conversion of the datasets in RDF.

In July 2015 the new results obtained by the analysis on the Italian public procurement data will be presented at the Samos Summit 2015 on ICT-enabled Governance.

1.2.4 Open Data in the Italian Parliament

A collaborative study to analyze the role of open data (published or reused by) the Italian Parliament, with an international benchmarking.

Project website/page	http://nexa.polito.it/open-data-parlamento
Status	concluded
Period (Nexa contribution)	February 2014 – May 2015
Funding	about 1,500 € (contribution for travel expenses from Lapsi 2.0, see p. 20)
Funding organization	N/A
Person(s) in charge	Claudio Artusio (Project manager)

The Nexa Center carried out a research on the use of **open data in the context of the**

Italian Parliament. The research – which was performed in collaboration with the Italian

Chamber of Deputies and Senate of the Republic – analyzed the wealth of data made available

(or simply held) by the Parliament houses and provided best practices to exploit such data, e.g. for citizens' engagement purposes. During the reporting period the project working group has been populating a 'semantic' Wiki, that will be opened to the public for further improvements, and the research report has been publicly presented.

Background

Several Parliaments are currently making available datasets as open data, also using linked data standards such as RDF to enhance data re-usability. Usually, these data are quite relevant to better understand the work of elected assemblies, and to improve citizens trust. Several other reuses, including business-oriented ones, are possible as well. Besides, Parliaments themselves make an intensive use of external data, e.g., to prepare

documentation to be attached to legislation, inform Members of the Parliament, and so forth.

Objectives

The research reviewed the wealth of data generated and managed by the Italian Parliament, and compared best practices of data publications with respect to the initiatives of other European Parliaments. Besides, insights were gathered on **how an advanced use of open data could improve the efficiency and quality of the Parliament's activities**, highlighting the dual role of producers and users of data of the elected assemblies.

Results

During the reporting period the research output (consisting in a semantically annotated Wiki, and a public report) was completed. The research encom-

passes an introduction on legal, technical and operational issues of open government data; a second section describes the open data publication strategy of the Italian Senate and Chamber, with an **international comparison**; the third and fourth sections focus on the use of data by external reusers and internal users; finally, the study provides an overview of the key opportunities and best practices to promote the use of parliamentary data both internally and externally. A **semantic wiki** was populated, both as a working platform, and as a future output open for edits. Besides, interviews with independent associations, public organizations, open data communities, experts and researchers in the field of open data re-use were conducted. The public report was presented at the 2015 ForumPA convention, gathering Italian civil servants.

1.2.5 LAPSI 2.0: the European Thematic Network on the Legal Aspects of PSI

Which are the main legal obstacles to an effective reuse of PSI? Consensus building and policy support at the European level, as a follow-up of the LAPSI network.

Project website/page	http://www.lapsi-project.eu
Status	concluded
Period	January 2013 – December 2014
Funding (of which Nexa)	446,000 € (16,000 €) for the entire project
Funding organization	European Commission (CIP-ICT-PSP2012.2.2)
Person(s) in charge	Marco Ricolfi (Nexa scientific supervisor); Claudio Artusio (Nexa project manager).

The LAPSI 2.0 thematic network supported the objectives of the European Open Data strategy by addressing the most relevant **legal aspects of access to and reuse of Public Sector Information (PSI)**, i.e., data produced and collected by public bodies.

Background

Building on the results achieved within the LAPSI thematic network, the LAPSI 2.0 spin-off worked on the remaining open issues in the fields, also in light of the amended European Directive on PSI.

Objectives

The Nexa Center focused its

efforts on the analysis of legal aspects tightly connected with technology (e.g., linked data, open data services, and related issues, such as license interoperability and standardization).



Results

During the reporting period, the Nexa Center contributed to the development of a report on

best practices in Intellectual Property, a collection of good practices on institutional embedding and enforcement, a position paper on access to data (available at: <http://www.lapsi-project.eu/lapsi-20>) and a PSI Legal Toolbox (available at: [http://www.lapsi-project.eu/psi-](http://www.lapsi-project.eu/psi-toolbox-member-states)

[toolbox-member-states](http://www.lapsi-project.eu/psi-toolbox-member-states)).

The project final conference was held in Bruxelles (28th November 2014); joint workshops were also held in Milan (October 10th 2014 – Federico Morando chaired a session on charges applied to cultural PSI) and Lisbon (December 3rd and 4th 2014).

1.2.6 SharePSI2.0: the European Thematic Network on the Technical Aspects of PSI

Highlighting technical best practices for PSI.

Project website/page	http://nexa.polito.it/share-psi-2.0
Status	ongoing
Period	February 2013 – July 2016
Funding (of which Nexa)	446,000 € (20,000 €) for the entire project
Funding organization	European Commission (CIP-ICT-PSP2013.2.2b)
Person(s) in charge	Lorenzo Canova (<i>Nexa project manager</i>)

Share PSI 2.0 – coordinated by W3C – aims at bringing together stakeholders to continue in the definition of **technical standards for PSI**.

Background

In the open government data arena, some technical standards are well established. It would be of great benefit expand the breadth of coverage to include the majority of EU member states and beyond. Share-PSI 2.0 is the European network for the exchange of experience and ideas around implementing open data policies in the public sector.



Objectives

The main practical objective of the Share-PSI2.0 network is to organize a series of workshops in which the network partners with direct experience will present their case studies. The output of these workshop will be a set of best practices for best implementing the PSI Directive.

Results

The network identified the following topics as focuses for its periodical workshops: Uses of open data within government for innovation and efficiency (Samos, July 2014); Encouraging data us-

age by commercial developers (Lisbon, December 2014); Identifying datasets for publication (Timisoara, March 2015); A self sustaining business model for open data (Krems, May 2015); Using and extending core vocabularies for greater interoperability (Berlin, November 2015).

Lorenzo Canova - with Antonio Vetrò, Marco Torchiano, Federico Morando, and Raimondo lemma- presented the paper “OpenCoesione and Monithon - a transparency effort” in the first Share-PSI2.0 workshop in Samos.

Some **best practices** (BPs) have been already defined and can be retrieved online at <http://www.w3.org/2013/share-psi/bp/>.

1.2.7 Individual-centric Data Ecosystem

Smart disclosure of consumption data, and personal data services.

Project website/page	https://nexa.polito.it/individual-centric-data
Status	ongoing
Period	2013 – present
Funding (of which Nexa)	50,000 €
Funding organization	Telecom Italia (unrestricted grant)
Persons in charge	Raimondo Iemma, Alessandro Mantelero, Federico Morando

This research threads investigates data disclosure models that enable citizens to reconstruct and exploit their digital footprint.

Background

A literature review of [users' valuation of personal data](#) has been released in May 2014 in Internet Policy Review.

Objectives

To analyze relevant examples,

emerging business models, and current legislation, so to better understand the enabling factors for the creation of services based on personal (consumption) data.

Results

In September 2014, Raimondo Iemma presented at the 8th International Conference on Methodologies, Technologies and Tools enabling e-Government an article around **"smart disclo-**

sure" of consumption data, mainly based on the Green Button project on energy data in the U.S.: *Data Ingredients: smart disclosure and open government data as complementary tools to meet policy objectives. The case of energy efficiency* (<http://nexa.polito.it/iemma-metteg>). An enriched and revised version of the article has been submitted to the International Journal of Electronic Governance.

1.2.8 Outlook

In the next months, the Nexa Centers intends to continue investing in the applied side of its research on open government models. That is, we will not only support open data policies of third parties, but we will also further increase our understanding and use of linked data technologies and tools to expose in-

formation. In this respect, we also aim at improving partnerships with players in the field of data science, such as, e.g., Regesta.exe and SpazioDati, two relatively small but highly dynamic Italian companies working on innovations in the semantic web domain. In fact, linked data formalisms stand at the core of <http://community.dati.piemonte.it>

, but also other initiatives related with data representation and disclosure that directly invest Politecnico di Torino (e.g., its library system), and even the Nexa Center in specific (e.g., our observatory on the "transparency" data exposed by the Italian public administrations).

2. INTERNET POWER AND RIGHTS

The 'Internet Power and Rights' thread focuses on two aspects. One is Network Measurements, which are carried out through software projects aimed at improving network transparency, and at providing evidence for researchers, policymakers, activists, and citizens in general. The other relates with Fundamental rights online (p. 26), and gathers all projects that take as their main perspective the preservation of fundamental rights such as privacy, and freedom of expression.

2.1 Network Measurements

This section lists our network measurements and analysis efforts. These are carried out in the Neubot project which, among other things, develops the namesake piece of software. In this reporting period the MorFEO project on measuring network censorship has reached its final results

2.1.1 Neubot, the Network Neutrality Bot

A project to measure the Internet from the edges.

Project website/page	http://www.neubot.org/ https://github.com/neubot/neubot
Status	ongoing
Period	June 2008 – present
Funding	about 67,000 € in the 2012-2015 period
Funding organization	Regione Piemonte (research grant), Measurement Lab (unrestricted grant)
Person(s) in charge	Simone Basso (<i>project manager</i>)

Neubot is a project to measure the Internet from the edges with active network measurements. In its context we develop the namesake software tool and we perform other network measurement activities.

Background

The Neubot project was established in 2008 to develop a user-friendly piece of software to collaboratively monitor network neutrality.

This piece of software has been developed at the Nexa Center since then. The main contributor over the years has been Simone Basso.

Specific research and/or development tasks related to measuring the Internet (but not necessarily to Neubot as a soft-

ware) are also performed as part of the Neubot project.



Objectives

1. Publications based on Neubot.
2. Run tests as external commands for flexibility.
3. Neubot application for Android and for iOS.
4. Emulate / study the BitTorrent's Micro Transport Protocol (μ TP).
5. Data visualization and analysis tools.
6. Multi-server tests.

Results

1. Simone's **doctoral thesis** was published on Politecnico's archive, and a journal paper based on it is now in "best final draft" state.

2. We started drafting a different Neubot architecture that allows for **running external commands**.

3. An **App for iOS** was developed in the context of the Morfeo project.

4. We have a working prototype of the **μ TP test** written by an intern (Alessandro Quaranta).

5. We wrote a prototype pipeline to process and **analyze Neubot data**.

6. No progress was made in this respect.

2.1.2 MorFEO: Monitoring network connections to assess Freedom of Expression Online

A multidisciplinary research project to measure network censorship.

Project website/page	http://nexa.polito.it/morfeo https://github.com/TheTorProject/libight
Status	ongoing
Period	March 2014 – March 2015
Total funding (Nexa funding)	About 42,000 € (36,800 €)
Funding organization	European Commission (via the EINS Open Call)
Person(s) in charge	Simone Basso (<i>project manager</i>)

MorFEO was a project to **measure network censorship on mobile platforms**.

It was carried out by us in cooperation with Arturo Filastò (lead developer of the OONI tool for measuring network censorship) who was also a partner.

We developed a C++ library, libight, to measure Internet censorship on mobile platforms such as iOS and Android.

This library implements three network measurement tests specified by the OONI project and provides abstractions to implement more network tests.

During MorFEO we also developed a **prototype application for iOS** devices based on libight that demonstrates the feasibility of running tests on iOS.

We decided to write a library to increase the potential for co-

operation between projects as regards network measurements on mobile (and possibly PC) platforms

This decision was influenced by the outcomes of the NNTools2015 workshop, carried out at the Nexa Center in January 2015 as part of the EINS network (p. 35) in which we discussed ways to increase the impact of network measurement tools.

2.1.3 Outlook

We will invest time and resources to further develop libight, the library developed during MorFEO.

Measurement Lab has expressed interest into funding libight development to add support for the widely used NDT network test.

OONI developers are interested to cooperate to write a mobile version of OONI based on libight.

After the end of Morfeo we have added to libight code to run traceroutes on Android contributed by developers of the

Portolan project at the University of Pisa.

Now we are discussing with these folks about performing joint research on μ TP performance and routing (using the traceroute code they contributed and the μ TP module written by Alessandro Quaranta).

In addition to all the above, we will also continue to rationalize and improve Neubot's architecture.

There is an ongoing internal effort that aims to specify and refine Neubot's design and that aims to lead the reimplementa-

tion of selected features in light of the improved design.

Beyond merely specifying in a better way the Neubot software, this effort also aims to draft a plan describing the objectives and the strategy of Neubot as a project for the following years.

Also, Simone is co-advisor of a MoS thesis together prof. Marco Mellia and other colleagues of the Dept. of Electronics and Telecommunications. This thesis is on mapping and measuring the interconnection of large ISPs and large content providers using Neubot.

2.2 Fundamental Rights Online

This section summarizes the research and policy support activities that the Center performed in the field of fundamental rights online. As one of the prominent topics in the reporting period the legal implications of service robotics, complemented by the recent start of a research on the ownership in the Internet of Things. Other activities pertain to privacy studies, to our participation in a EU coordination action on Responsible Research and Innovation, and on Internet Governance.

2.2.1 Legal Aspects of Service Robotics

What are the legal issues related to service robotics? How could service robots impact on law and society?

Project website/page	http://nexa.polito.it/law-of-service-robots
Status	ongoing
Period	September 2013 / August 2015
Funding (of which Nexa)	60.000 € (over the entire duration of the project)
Funding organization	Telecom Italia
Persons in charge	Claudio Artusio (Project Manager), Federico Morando

The Nexa Center is performing a research on legal issues related to service robotics and drones, funded by Telecom Italia (JOL CRAB at the Politecnico di Torino), which aims at identifying the legal framework that currently applies to service robots and describe the major legal issues related to their production and usage. In particular, the implications of **data exchange over the cloud** (e.g., trivially, to update algorithms), and **liability aspects**.

Background

According to a tentative definition provided by the [International Federation of Robotics](#), service robots are “*robots which operate semi or fully autonomously to perform services useful to the well-being of humans and equipment, excluding manufacturing operations*”. The possible fields of applications are extremely varied (e.g., home security, surveillance, personal transportation, inspection and maintenance, education and entertainment etc.) and may involve a certain number of legal aspects.

Objectives

Based on the analysis of real cases of design and testing provided by Telecom Italia, the first research output identified the pertaining legal framework in order to highlight potential legal aspects connected to the development and use of service robots. Such legal threads will also provide the basis for a toolkit for drone users.

Results

The research team has discussed real cases of service robots development with Telecom Italia in order to abstract three major **typologies of service robot applications** (robotic telepresence; robotic courier; drones within smart city-like environments). To address the po-

tential legal aspects involved, the research team analyzed the main legal threads (in particular, criminal and civil liability connected with the production, processing and transmission of personal data) together with the recent **Italian ENAC Regulation** on civil aviation which provides a set of safety rules for drones. The apportionment of liability between Telecom Italia, which actually aims at implementing a cloud infrastructure for the development of service robots applications, and third parties (producers of the robot; developers of software applications for the robot; final users) was probed as well.

The first deliverable, “**The Law of Service Robots**”, was completed in early October 2014.

On May 11th 2015 a [public meeting](#) was held in order to disseminate research findings.

2.2.2 Ownership in the Internet of Things

Concepts, relevant regulation, and implications for European consumers.

Project website/page	http://nexa.polito.it/iot
Status	ongoing
Period	May 2015 – April 2016
Funding (of which Nexa)	70.000 USD as unrestricted gift
Funding organization	eBay Inc.
Person(s) in charge	Miryam Bianco (<i>project manager</i>)

The Nexa Center started a research project, supported by eBay Inc., on the **Internet of Things (IoT) and its implications for European consumers**. The expected outcome of the research is the realization of a conceptual framework facilitating the further implementation of a Business-to-Consumer commerce able to empower the consumer of IoT solutions.

Background

The “Internet of Things” (IoT) - term coined in 1999 by the British technology pioneer Kevin Ashton - refers to that **complex phenomenon which sees billions of physical goods** - uniquely identified and equipped with sensors and actuators, processing capabilities, and connectivity - collecting data, communicating with people and with other devices, and enabling remote and/or autonomous command and control of environments.

This integration of the material dimension with the immaterial dimension is destined to impact significantly on the everyday life of individuals: however, the 'how' is still uncertain.

Considering that consumer

IoT applications drive the number of connected things, one of the main challenges concerns the ability of consumers of IoT solutions to derive tangible value from them. Indeed, legal, contractual and technological issues stand against this implementation: in the short and medium term, their effect could be the disempowerment of consumers, i.e. the impairment of their safety and personality and of the usability of the IoT solutions; in the long term, it could be the rejection of the IoT itself.

Therefore, to foster the current value of IoT and its further innovation, it is paramount to promote consumer interests, because of the influential role they play in driving the market.

Objectives

Based on the analysis of the European legislation applicable to the matter and of a set of exemplary real or potential cases, this research project aims at shaping a conceptual framework for the implementation of a consumer-empowering B2C commerce of IoT solutions.

The building of this framework will take place answering three main questions:

1. a) What **concepts** need to be clarified when dealing with B2C Commerce of IoT Solutions? b) For each of them, can we provide a univocal definition? c) And, if not, why?

2. a) What European legal acts are applicable when dealing with B2C Commerce of IoT Solutions? b) What overall **regulation** can be inferred from this body of laws? c) Does it show imperfections to correct or gaps to fill?

3. a) What are the **interests of the consumer of an IoT solution**? b) For each of them, what obstacles stand against their realization? c) What tools could be employed to override them?

Results

The research project started May 2015 and will last one year.

The first intermediate results are expected for July 2015. The final outcome will be a white paper depicting the research carried out and the results achieved. In autumn 2015, a public workshop on the topic will be held, so to present and discuss findings with key stakeholders.

2.2.3 Data protection-aware information systems

Legal Support for the smart mobility card and for the Internet of Everything platform of the Piedmont Region.

Project website/page	n.a.
Status	almost concluded
Period	during the entire reporting period
Funding (of which Nexa)	About 25,000 €
Funding organization	5T (about 7,000 €) and CSI Piemonte (about 18,000 €)
Persons in charge	Alessandro Mantelero (<i>principal investigator</i>)

The Nexa Center is involved in several projects and other activities concerning the Smart City domain. The *fil rouge* of this involvement is a strong attention to the role and rights of citizens.

Background

In the past, the Nexa Center took part in the SMILE (Smart Mobility, Inclusion, Life&Health, Energy) project. Coordinated for the City of Turin by the Torino Wireless Foundation, SMILE was a strategic project, aiming at involving several key stakeholders in the definition of the domains and long terms goals of Torino as a Smart City.

A similar activity, focused on providing legal and strategic support with respect to personal data management and flows, was provided to CSI Piemonte, with respect to the recently released Smart Data Net platform (<http://www.smartdatanet.it/>).

Objectives

In the context of various local policy support fora, the Nexa Center started a fruitful interacting with 5T, which is the organization managing the majority of the data concerning the mobility of Turin (e.g., traffic sensors, parkings, public transport data, etc.). Coordinated by Alessandro Mantelero, various Nexa fellows analyzed and commented the

plan concerning the management of the **data flow produced by the new Piedmont Integrated Ticket (BIP)** travel smart card, which will collect data generated by the customers of more than one hundred public and private firms.

The analogous activity conducted with CSI Piemonte concerns data gathered on the Smart Data Net platform, a publicly funded Big Data and Internet of Things platform supported by Regione Piemonte and aiming at fostering innovation in this domain for Piedmontese SMEs.

Results

In close collaboration with 5T (and thanks to its financial support) and after a careful examination of the current BIP model, Alessandro Mantelero drafted and coordinated the contributions of other Nexa fellows to the report “Smart mobility: the case of the BIP project” (in Italian), which focuses on designing a new data flow model, which is as respectful as possible of the privacy of citizens (and still satisfies the data intelligence needs of 5T and its stakeholders and partner transport companies).

The report concluded the first phase of the collaboration between Nexa and 5T, but a second phase is ongoing and the

Nexa Center, in agreement with 5T, also aims at making as much information as possible about this process publicly available, also in order to provide a benchmark for other local transport companies and consortia.

The second phase is coordinated by the Department of Management and Production Engineering and focuses on the architecture of the Piedmont smart mobility system. In this light, the goal of the project is the adoption of innovative data protection by design solutions for smart mobility.

The results of this second part are expected to be presented by Mantelero at the 11th International Conference on Internet, Law & Politics “Regulating Smart Cities” (IDP 2015, Barcelona 2-3 July 2015). The Piedmont smart mobility system is a multi-modal integrated systems realised in the north of Italy by Piedmont Region. The project covers the entire region, which is an area of 25402 square kilometres with about 4.6 million inhabitants (approximately the same population of the Republic of Ireland) that comprehends different territorial contexts. Smart ticketing solutions and smart technologies for collecting and analysing mobility information represent the core of the Pied-

2. Internet Power and Rights

mont model, which involves various companies that provide different services in terms of frequency and transport modes.

The results of the support

activity offered to CSI Piemonte have not been published so far, but they could provide similar insights and be the basis of new publications, especially in case the legal support is going to be

extended, as all parties deem useful, assuming that additional funding will become available to support the legal aspect of Smart Data Net.

2.2.4 RRI-ICT Forum: Promoting Responsible Research and Innovation in ICT

The European support action fostering responsible research and innovation in ICT.

Project website/page	http://RRI-ICT.eu http://RRI-ICT-Forum.eu
Status	ongoing
Period	January 2015 - January 2018
Funding (of which Nexa)	about 1M€ (about 80k€ for the Nexa Center)
Funding organization	European Commission
Persons in charge	Federico Morando (Nexa project manager)

The RRI-ICT Forum aims at monitoring, analyzing, supporting and promoting SSH (Social Sciences and Humanities) contribution to and RRI (Responsible Research and Innovation) approach in ICT research and innovation.

The RRI-ICT Forum consortium is composed of a multi-disciplinary group led by Sigma Orionis. The Nexa Center coordinates the work on the online wiki platform of the project: RRI-ICT-Forum.eu.

Background

Responsible Research and Innovation (RRI) is an emerging

concept that the European Commission defines as “an inclusive approach to research and innovation (R&I), to ensure that societal actors work together during the whole research and innovation process. It aims to better align both the process and outcomes of R&I, with the values, needs and expectations of European society.”

RRI includes the design and implementation of policies to: engage society more broadly in research and innovation activities; increase access to scientific results; ensure gender equality; take into account the ethical dimension; and promote science

education.

Objectives

The RRI-ICT Forum aims at monitoring, analysing, supporting and promoting SSH (Social Sciences and Humanities) contribution to RRI (Responsible Research and Innovation) in ICT research and innovation.

Results

The Nexa Center designed the structure and maintains the content of the **RRI in ICT Forum wiki** (<http://RRI-ICT-Forum.eu>), which is the online platform at the core of the project activities.

2.2.5 Declaration of Internet Rights

The ongoing work of the study commission established by the Italian Chamber of Deputies.

Project website/page	http://camera.civi.ci/
Status	ongoing
Period	June 2014 – September 2015
Funding (of which Nexa)	N/A
Funding organization	N/A
Person(s) in charge	Juan Carlos De Martin

A draft Declaration of Internet Rights has been released by a

study commission established by the Italian Chamber of Deputies.

After a 5 months public consultation, an updated version of the

Declaration is being elaborated by the commission.

Background

In October 13, 2014, a [draft Declaration of Internet Rights](#) has been published in Italy, as the first outcome of the work of the study commission established in July 2014 by the President of the Italian Chamber of Deputies, Laura Boldrini, and led by Prof. Stefano Rodotà for the development of principles and guidelines on the subject of Internet rights. The commission (list of members here) is made up of MPs (one for each group) and experts, including Nexa co-director Juan Carlos De Martin.

In recent months, several European institutions moved in the same direction. At the end of 2013 the Speaker of the UK House of Commons established a [commission on digital democracy](#). In February 2014, the German Bundestag established a parliamentary standing commission on the "[Digital Agenda](#)". In April 2014, the Council of Europe published a [guide of human rights for Internet users](#). In the summer of 2014, the French Parliament established a "[Commission de réflexion et de propositions ad hoc sur le droit et les libertés à l'âge du numérique](#)",

which counts among its members the intellectual Philippe Aigrain (trustee of the Nexa Center) and the Italian researcher Francesca Musiani. Both the British and French commissions plan to present their findings at the beginning of 2015. In the same two countries, there are also two other significant initiatives. In UK, "Labour Digital", an influential group of experts close to the British Labour Party, has just published "[Number One in Digital](#)", with several references to democracy and human rights in the digital age. In France, the [annual report](#) of the State Council has also analyzed the relationship between digital and human rights.

Objectives

The aim is to achieve a document to be delivered to the Italian Parliament and Government to contribute - in Italy, in Europe and worldwide - to protect Internet as a platform, not only for the economic development, but also for the exercise of fundamental human rights.

Beyond the participation of Juan Carlos De Martin in the study commission, the Nexa Center committed to gather contributions to the draft Declaration along the consultation

process.

Results

Between 27 October 2014 and 31 March 2015, the draft declaration has been widely discussed with experts and all citizens interested in the topic, by the means of an online consultation and of experts auditions. As coordinator of the Global Network of Internet & Society Research Centers, the Nexa Center has promoted the consultation also at international level, by making available for comments [English, French, and German translations of the Declaration](#). Moreover, the draft declaration has been thoroughly discussed within the Nexa community, in particular through the Nexa public mailing list, and in the occasion of the [72° Nexa Wednesday](#) in February.



Taking into account all inputs received in the context of the consultation, the study commission is currently working at a second version of the Declaration.

2.2.6 Internet Governance Research: NoC Creative Commons Case Study

A case study to contribute to the global debate on multi-stakeholder governance groups.

Project website/page	https://publixphere.net/i/noc/page/IG_Case_Study_Creative_Commons
Status	concluded
Period	July 2014 – January 2015
Funding	15,000 USD
Funding organization	Harvard University
Person(s) in charge	Federico Morando (case study author)

The Nexa Center produced a case study within the Internet Governance Case Study Series

of the Global Network of Inter-disciplinary Internet & Society Research Centers (NoC).

Overall, the research is based on twelve case studies and it suggests that there is no single best-fit model for **multistakeholder governance groups** that can be applied in all situations. Rather, it reveals a range of approaches, mechanisms, and tools available for both the formation and operation of such groups. (See also § 6.2 *5th Annual Conference: The Evolution of the Internet Governance Ecosystem*, p. 52.)

The case study conducted by the Nexa Center examines the formal structure of **Creative Commons (CC)** as an organization stewarding the development of the most well-known and widespread set of standard public copyright licenses, and the interaction of CC with its own community and with a broader set of international stakeholders. The study focuses on the drafting of the fourth version of the Creative Commons Public Licenses

The key insights provided by the case study are the following.

Non-monetary incentives, namely opportunity to interact within a network of knowledgeable and/or highly interconnected peers, can play a key role in engagement and willingness to cooperate. That may apply even in presence of a highly skewed decision making. Arguably, such scenario does not facilitate collaboration, but open and participative discussion and knowledge exchange opportunities may nevertheless elicit participation, in particular if a transparent documentation of the decisions made and of their rationale is provided and mistakes are admitted.

2.2.7 Internet and Democracy: the Nexa Center at Biennale Democrazia 2015

Bringing an Internet & Democracy perspective within the “Biennial of Democracy”.

Project website/page	http://nexa.polito.it/biennale-democrazia-2015
Status	ongoing (next edition of Biennale in the Spring of 2017)
Period	2009 – present
Funding	support in kind + minor travel costs
Funding organization	internal funding
Person(s) in charge	Juan Carlos De Martin (<i>scientific board member</i>)

The Nexa Center is playing a leading role in the organization of the “Internet & Democracy” activities within the program of Biennale Democrazia (the “Biennial of Democracy”).

Background

Since 2009, the City of Turin hosts and supports Biennale Democrazia, a national event with international guests devoted to democracy in the broadest sense. Juan Carlos De Martin, Nexa co-director, is a member of the scientific committee of Biennale.

The Nexa Center supports Biennale Democrazia since 2009 and it took a more relevant role

within the last editions, supporting the organization of events such as Lawrence Lessig's *Lectio Magistralis In sunlight. The nature of corruption within the US Congress*.

Objectives

The Nexa Center nurtures the “Internet & Democracy” related themes within the program of Biennale Democrazia. It also uses this venue to reach a broader public.



Results

In 2015 the Center organized three major public events.

“Memory and oblivion in the age of the Internet”, with a reflection of Luciano Floridi, introduced by Luca De Biase, on the balance between the right to be forgotten and the right to report.

“A Magna Carta for the Internet”, with Philippe Aigrain and Juan Carlos De Martin, a discussion on how to preserve the flexibility and the openness of the Internet and how to protect fundamental rights online.

“The Social Networks: who decides what we see”, with Sara Bentivegna, Antonio Casilli, Fabio

Chiusi, a debate on the behavior of social network like Facebook, search engine like Google, and

trading platforms like Amazon that are now part of our life.

2.2.8 Outlook

In 2015/2016, the activities concerning the law of robots and the concept of ownership and user empowerment in the Internet of Things are expected to proceed (but both ongoing projects are going to be completed by the end of 2015). The Nexa team is currently developing a legal toolkit illustrating some basic scenarios in a detailed way, in order to help drone users to comply with the current Italian legislation (mainly, the ENAC Regulation). In parallel to this activity, a new thread (supported by a new contract) is expected to focus on the use of open source software and operating systems in particular in the

context of complex ecosystems, starting from the Android example and extending the analysis to the Robot Operating System (ROS).

The next reporting period will also almost coincide with the project on the concepts of ownership and user empowerment in the Internet of Things.

The Responsible Research and Innovation thread is expected to be maintained and start delivering its first results, while the Declaration of Internet Rights is going to be released in its final form.

The research activities on In-

ternet Governance are expected to grow, also thanks to the ongoing work of the Nexa Center as coordinator of the Network of Internet & Society Research Centers. In particular, Juan Carlos De Martin is participating in international debates on the subject, and Nexa will dedicate one of its forthcoming “Nexa Wednesdays” on the topic.

Finally, the Nexa Center is considering the opportunity of activating research activities focused on the right to be forgotten and similar scenarios, where online intermediaries have to take down content because of legal concerns.

3. INTERNATIONAL NETWORKS

The Nexa Center is involved in several international networks to perform joint research, policy support, and coordination on Internet Science topics. Currently, the main project in this respect is the Global Network of Internet & Society Research Centers, coordinated by the Nexa Center until October 2016.

3.1 The Global Network of Internet & Society Research Centers

The Nexa Center is acting as coordinator through 2016.

Project website/page	http://nexa.polito.it/noc
Status	ongoing
Period	October 2014 – October 2016
Funding (of which Nexa)	40,000 € for the first year
Funding organization	Compagnia di San Paolo
Person(s) in charge	Juan Carlos De Martin (<i>coordinator</i>), Raimondo Iemma (<i>project manager</i>)

In October 2014, the Nexa Center took the role of administrative coordinator of the [Global Network of Internet & Society Research Centers](#), until October 2016. The Nexa Center is playing the role of contact point and facilitator.



GLOBAL NETWORK OF INTERNET AND SOCIETY RESEARCH CENTERS

Background

Since late 2012, the Nexa Center is amongst the eight founding members of the Global Network of Interdisciplinary Internet & Society Research Centers (NoC). The NoC is a collaborative initiative among academic institutions with a focus on interdisciplinary research and a strong attention to the social impact and policy implications of their research agenda. During 2013 and 2014, the Nexa Center has been involved in several NoC activities, as member of the Steering Committee. In particular, the roadmap and guiding principles for the NoC were discussed, with the aim to set up common practices for knowledge exchange amongst the NoC members (such as learning calls, workshops and conference), and joint research threads, focusing on interdisciplinary topics such as the role of online intermediaries, and Inter-

net governance. In October 2014, the Nexa Center took the role of administrative coordinator of the Network, until October 2016.

Objectives

Building on previous work and achievements, our main objective is to contribute making the NoC the most relevant **Internet & Society research community** worldwide both as a group of institutions and as a network of individuals. Some achieved initiatives relate with internal management, including online presence. Other pertain to the facilitation of research projects, such as the ones on **Internet Governance models** and on the role of **Online Intermediaries** (see <http://www.networkofcenters.net/research>), as well as other special initiatives, such as the public consultation on the Italian Declaration of Internet Rights.

Results



On 2 October 2014, the Nexa Center co-organized the [NoC academic symposium on Internet Governance](#), preceded

by an academic workshop discussing preliminary results of the NoC research project on this topic. In its first months as NoC coordinator, the Nexa Center set up a coordination strategy, and started launching some of the foreseen initiatives, including the [online consultation on the Italian draft Declaration of Internet Rights](#). Moreover, the Nexa Center took in charge several internal processes, including managing the online presence, and activated mailing-lists, including [Netsociety](#), a public discussion list (with public archive) open to anyone who wishes to discuss Internet & Society issues. The Nexa Center is also working at internal tools, such as a semantic wiki, to connect with each other NoC participants, also within working groups. Several [NoC regional meetings](#) were held during 2014 and 2015, amongst which “[Internet policy in Latin America](#)”, organized in Buenos Aires by the Center for Global Communication Studies at University of Pennsylvania and the Centro de Tecnología y Sociedad, Universidad de San Andrés, featuring Nexa co-director Juan Carlos De Martin as keynote speaker. Moreover, the [APRU Internet Governance Business Off-site 2015](#), organized in Tokyo by Keio University in March, encompassed the participation of several NoC scholars, including Juan

Carlos De Martin. In January 2015, the NoC released the results of a globally-coordinated academic research effort on Multistakeholder Governance Groups, which informs the debate about **Internet governance** models and mechanisms. The research consists of twelve

geographically and topically diverse **case studies** of governance structures – including one on the **governance of Creative Commons** by Nexa's director of research Federico Morando – and a **synthesis paper** that summarizes key findings across these cases. In February 2016, the

NoC collective research project on **online intermediaries**, coordinated by the Berkman Center at Harvard, has been published. Moreover, in January 2015, **10 new centers joined the NoC**, which -as of May 2015- gathers **49 participants from 26 countries**.

3.2 EINS: the European Network of Excellence in Internet Science

Gathering more than 30 academic institutions across Europe and beyond, EINS aims at paving the way towards an integrated 'Internet Science'.

Project website/page	http://www.internet-science.eu/
Status	ongoing
Period	December 2011 - May 2015
Funding (of which Nexa)	4,997,000 € (111,000 €)
Funding organization	European Commission (FP7-ICT-2011-7)
Person(s) in charge	Raimondo Iemma (Nexa project manager), Federico Morando (work package coordinator)

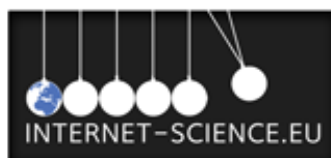
The EU-funded EINS Network of Excellence in Internet Science connects scholars to pave the way towards an integrated Internet Science. In the last reporting period, the Nexa Center contributed to a broad range of research threads, mainly related with experimental studies.

Background

Launched in 2011, the EINS Network of Excellence in Internet Science brings together scholars from a broad range of disciplines, with the aim to kick-start an integrated Internet Science. The network is mainly organized around Joint Research Activities. The **First EINS Conference on Internet Science** was held in Brussels in April 2013, with **Juan Carlos De Martin** as scientific co-chair. The **2nd International Conference on Internet Science** will be held in Brussels, May 27-29, 2015.

Objectives

The Nexa Center is involved in four joint research threads, related with Internet Regulation and Standards (Open licensing in particular), Evidence and Experimentation (with two main topics: network measurement tools, and data quality), Privacy, and Virtual Communities (case studies).



Results

In the last reporting period, the Nexa Center contributed to the re-shuffle of JRA3 ("Evidence and Experimentation"). The main JRA3 deliverable is an **evidence base for Internet science** with auto-classification. Nexa's **TellMeFirst** software is being used to classify network measurement methodologies. The integration of TellMeFirst into the

evidence base largely reduces the effort to share datasets/tools/e-infrastructures and provide more metadata. In January 2015, the Nexa Center hosted **NNTools2015**, a multidisciplinary workshop on **network measurement methodologies and tools applied to net neutrality**, which also paved the way for our H2020 CAPS proposal on the topic (p. 60). Moreover, a research thread on Open Data quality has been activated, with a case study on Italian public administrations. In this vein, the workshop **ODQ2015 - Open Data Quality: From Theory to Practice** was held in March 2015 hosted by TU München, and co-organized with the Nexa Center. Further work is being carried out on top of these to workshops, in particular in order to publish their results as jointly authored articles.

Finally, the Nexa Center finalised case studies in the Stan-

dards and Regulation thread (on **open licensing**) and in the **Virtual Communities** research area (also thanks to the ongoing work in this domain by Nexa Fellow [Elena Pavan](#)).

3.3 Global Network Initiative

A non-governmental organization with the dual goals of preventing Internet censorship by authoritarian governments and protecting privacy rights of individual.

Project website/page	https://globalnetworkinitiative.org/
Status	ongoing
Period	March 2013 - present
Funding (of which Nexa)	none
Funding organization	none
Person(s) in charge	Federico Morando

GNI champions fundamental human rights online, with a focus on privacy and freedom of expression. GNI includes civil society and academic participants, but also investors and several major ICT companies (such as Google, Microsoft, Yahoo! or Facebook), with the aim of providing them with a standard framework to deal with funda-

mental rights online, ensuring accountability and enabling opportunities for policy engagement and shared learning across stakeholders.

In March 2013, the Nexa Center for Internet & Society joined the Global Network Initiative as the first Italian participant. Nexa was welcomed in

GNI as “a critical source of interdisciplinary research, informed by expertise in technology, law, and economics, on Internet policy from a European perspective.”

During the reporting period, the Nexa Center participated in various periodic “learning calls” of the Network.

3.4 Communia: the International Association on the Public Domain

The international association lobbying in the public interest, for the promotion of the digital public domain.

Project website/page	http://www.communia-association.org/
Status	ongoing
Period	Spring 2011 - present
Funding (of which Nexa)	none
Funding organization	none
Person(s) in charge	Federico Morando

The Communia International Association for the promotion of the digital public domain was co-funded by the Nexa Center and built on the work of the Communia European Thematic

Network that the Nexa Center designed and led. Since October 2012, the Communia Association is also a WIPO observer.

During the reporting period, the discussion going on within

Communia complemented several similar research and support efforts within the Nexa Center, e.g., answering to public consultations or issuing policy statements.

3.5 Outlook

The Nexa Center will coordinate the NoC also in 2015/2016. Amongst the various activities, we will participate in the organization of the NoC annual conference at the end of

3. International Networks

the year, and contribute to the NoC organization by improving community-building and mobility.

The EINS Network has come to completion as a EU-funded project in May. Follow-ups using

the same type of instrument, or others, could be possible.

4. TEACHING

The Digital Revolution undergraduate course at Politecnico di Torino is in detail in this section, because of its strong affinity with the Center both in terms of topics and people involved (from the professor to the teaching assistant, going through many guest lecturers). Two further courses that were delivered by Nexa staff, fellows and trustees during the reporting period are also described, as well as “Other teaching activities”.

4.1 “Digital Revolution”: an Undergraduate Course at Politecnico di Torino

A Politecnico di Torino undergraduate course – trying to understand the times we are living.

Project website/page	http://rivoluzionedigitale.polito.it/ https://github.com/nexacenter/RivoluzDigitale
Status	ongoing
Period	March 2012 – present
Funding (of which Nexa)	standard funding by Politecnico di Torino (additional support in kind)
Funding organization	Politecnico di Torino + Nexa internal funding
Person(s) in charge	Juan Carlos De Martin (lecturer); Simone Basso (teaching assistant); Lorenzo Canova (teaching assistant); Giuseppe Futia (media assistant).

“Rivoluzione Digitale” (Digital Revolution) is an elective course for first-year students at Politecnico di Torino. It aims to contribute to the education of future engineers and architects as digital individuals, by providing students with the multidisciplinary knowledge required to understand the digital revolution, and by teaching them practical on-line-world skills.

Background

Ranging from business activities to culture, from politics to everyday life, digital-revolution effects are so deep and lasting that the traditional education of engineers and architects has to

be complemented with selected multidisciplinary knowledge – legal, economic, historical and social – to fully understand the aspects of the digital revolution and the related impact on society.

Moreover, on the practical side, responsible and aware digital citizens need to master on-line skills such as blogging, discussing on mailing lists and on twitter, producing short videos of themselves presenting their own work and ideas.

Objectives

1) To provide students the multidisciplinary knowledge required to understand the multi-

ple aspects of the digital revolution, and its impact on the society.

2) To teach students practical online skills.

Results

The course featured few guest lecturers, some of which are Nexa trustees or fellows.

In 2014 we enrolled 192 students. Of them, over 100 passed the final exam. In 2015, the course enrolled 177 students.

Dario Chaifouroosh, one of the best students of the 2014 course, will be spending 10 weeks at the Berkman Center as a Summer Intern.

4.2 Open Data course within the Master in Big Data Engineering at PoliTO

A course within the Master in Big Data Engineering of Politecnico di Torino.

Project website/page	http://nexa.polito.it/2014/corso-open-data
Status	concluded
Period	September – November 2014
Funding (of which Nexa)	N/A
Funding organization	N/A
Person(s) in charge	Juan Carlos De Martin, Raimondo Iemma, Federico Morando

The Nexa Center delivered a 20 hours course on the legal, technological, and economic aspects of open data within the Master in Big Data Engineering at Politecnico di Torino.

Background

Data specialist/scientist is a high ranking professional profile that companies increasingly look for. Politecnico di Torino organized a Master course to deliver

the know-how to use the analysis of big data to make effective decisions. Since a share of what it is commonly defined as “Big Data” is also legally and technically open, a course on the topic

has been included in the curriculum

Objectives

The course aimed at providing students – all of which recently graduated, and are employed in companies that make large use of data – with a description of what open data is from a legal and technical point of view, also discussing economic implications. Moreover, the

course was designed to present specific insights on European legislation, linked open data technologies, open data platforms, and business models, making a broad use of examples.

Results

Beyond lectures by Juan Carlos De Martin, Raimondo lemma, and Federico Morando, the course hosted the participation of Diego Valerio Camarda

(Regesta.exe) on linked open data, Lorenzo Canova (Nexa Center) on open data quality, and Stefano Gatti (CERVED) on open data business models. Students were evaluated by undertaking and individual assignment – a legal, technical, and business-oriented description of an open dataset of their choice – and an oral exam. All students passed the evaluation.

4.3 Topics in Internet & Society Interdisciplinary Studies

A course of excellence organized within Politecnico di Torino doctoral program.

Project website/page	http://nexa.polito.it/2015/06/doctoral-course
Status	concluded
Period	11 – 16 June 2015
Funding (of which Nexa)	2000 €
Funding organization	Politecnico di Torino Doctoral School
Person(s) in charge	Juan Carlos De Martin (<i>course coordinator</i>), Raimondo lemma (<i>project manager</i>), Selina Fenoglietto (<i>administration</i>).

Leveraging the presence of the Nexa Trustees for the annual Board, the Nexa Center organized a doctoral course on “Internet & Society” at Politecnico di Torino.

Background

It is commonly understood that the Internet now affects almost every aspect of society—from knowledge sharing to economic interactions – and of personal life (digital divide permitting). Understanding the relationship between Internet and society is a complex matter, since its shape and its evolution are not an immutable technological law, but instead the consequence of specific choices, both private and

public, that could – at least in principle – very well change over time.

Objectives

This course – addressed to students of all Doctoral Programs – is aimed at providing an interdisciplinary overview of a selection of Internet & Society topics currently addressed by scholars at global level, all of which have tangible implications in many domains, and may very well suggest new lines of reasoning to ongoing research of PhD candidates.

Results

Four days of lectures were organized, involving the Nexa

Trustees Brett Frischmann (Yeshiva University), Maria Chiara Pievatolo (Università degli Studi di Pisa), Stefano Quintarelli (Entrepreneur and Italian MP), Angelo Raffaele Meo (Politecnico di Torino), Luca De Biase (Nòva24 – IlSole24ore), Maurizio Borghi (Bournemouth University), Philippe Aigrain (Computer scientist and author), Jean-Claude Guéron (University of Montreal), and Bruce Sterling (Science-fiction writer), as well as Jasmina Tešanović (Activist and writer), and Araba Sey (University of Washington). See the full description and program at <http://nexa.polito.it/2015/06/doctoral-course>.

4.4 Other teaching activities

There are several links between the activities of the Cen-

ter and the teaching activities of the co-directors, faculty fellows

and other fellows of the Center, including Marco Ricolfi, Juan Car-

los De Martin, Ugo Pagallo, Alessandro Mantelero and several other fellows and associates.

Scholarly communication in the digital age

In May – June, Nexa co-director Juan Carlos De Martin held a doctoral course on “Scholarly communication in the digital age), aimed at providing students the main elements (historical, legal, economic, technological, social) to understand how scholarly communication is currently structured as well as the Internet is changing it, with a specific focus on open access.

WIPO Master (LLM)

The World Intellectual Property Organization and the University of Turin organize an LLM in Intellectual Property Law at the ILO International Training Center in Turin. The LLM is coordinated by Nexa co-director Marco Ricolfi and features several lectures from the Nexa network, e.g., Massimo Travostino, Giancarlo Frosio, and Federico Morando.

Lecture in Politecnico's Master in Smart Cities Management

In January, Nexa managing director Raimondo Iemma held a 8-hours lecture within the Master in Smart Cities Management of Politecnico di Torino. The lecture focused on the use of open content by public administrations, and on the social networks in the interaction with citizens and communities.

Last-JD (Ph.D.)

Some other teaching activi-

ties are taking place within the Last-JD Joint International Doctoral (Ph.D.) Degree in Law, Science and Technology, in which the Nexa Center is involved as an associate partner. In particular, Nexa Faculty Fellows Massimo Durante and Ugo Pagallo, and Federico Morando lectured during the Spring of 2015, when the students were spending a term (directed of Massimo Durante) in Turin.

Innovation and international transactions law

In 2014, Alessandro Mantelero started his graduate course on “Innovation and International Transactions Law”, featuring as a primary focus the digital arena. The course traditionally includes lectures about privacy and data protection in the digital environment, ISP liability, e-commerce, etc. In 2015, the course included guest lectures from Nexa researchers, e.g., Raimondo Iemma, who gave a lecture about smart disclosure, and Federico Morando, who gave several lectures about Open Data, Open Content, Open Source, and Open Access.

CopyrightX satellite

CopyrightX is a networked course, combining pre-recorded lectures, seminars, live webcasts, and online discussions. It is taught and coordinated by Prof. William Fisher and it is a joint initiative of Harvard Law School, the HarvardX distance-learning project, and the Berkman Center for Internet and Society. The course explores copyright law,

with an emphasis on normative aspects and on the debate about how to stimulate and sustain creative expression. Three groups of students take part in the course: a class of residential students at Harvard Law School, about 500 online participants, the students of 10 “satellite” courses, based in countries other than the United States (and each taught by a different copyright law expert). (For further information, see <http://copyx.org/>.)

In 2013/2014, the first of the satellite courses was affiliated with the Nexa Center for Internet & Society and taught by Nexa Faculty Fellow Giancarlo Frosio (see <http://copyx.org/satellites/turin-italy/>). Moreover, another satellite course, affiliated with the Institute for Information Law (Amsterdam, Netherlands) was taught by Nexa Fellow Thomas Margoni. These satellite courses also took place in 2014/2015.

Big Dive

The Top-IX consortium and other partners organize Big Dive, a five-week training program providing the key technical skills needed to dive into the big data universe, including some multidisciplinary knowledge useful to extract value from data.

As in the previous three editions, Alessandro Mantelero, Federico Morando and Raimondo Iemma will give lectures about some legal (data protection & intellectual property) and economic aspects of big data.

4.5 Outlook

The “Rivoluzione Digitale” undergraduate course will be held also in the next reporting period with some modifications arising from experience from past editions of the course.

The Data Engineering Master at Politecnico di Torino was a

one shot project, therefore the course on Open Data held in that context is not expected to be repeated.

The other aforementioned teaching activities, are expected to be confirmed in the next academic year.

Starting in September 2015, the Nexa Center is also expected to coordinate the contribution of the Politecnico to a Master on Free and Open Source supported by the Piedmont Region and coordinated by the University of Eastern Piedmont.

5. FUNDING, ORGANIZATION, RELATIONSHIPS & COMMUNITY

This section provides some financial and budgetary information, details about the internal functioning of the Nexa Center, including discussion on organizational aspects, and a synthesis of the relationships of the Center with its community and with other institutions..

5.1 Budget Summary

Table I below summarizes the **total costs** sustained by the Nexa Center in 2014.

Research personnel		237,000 €
Nexa Center staff	133,000 €	
Tenured personnel	104,000 €	
Other personnel		70,000 €
Other costs		132,000 €
Events organization and communication	17,000 €	
Travels (Nexa)	28,000 €	
Travels (guests/speakers)	7,000 €	
Equipment	10,000 €	
Functioning costs (heating, phone, cleaning, etc.)	5,000 €	
Use of the Center venue	12,000 €	
Surplus from projects to PoliTo personnel	12,000 €	
Indirect costs (contribution to the Politecnico di Torino budget, deducted from Nexa projects)	41,000 €	
Total costs		439,000 €

Table I: Nexa Center: costs sustained in 2014

“Other personnel” includes administrative personnel (Selina Fenoglietto), personnel dealing with events and communication (Giuseppe Futia), technical personnel (Luca Leschiutta) and an estimate of the cost of other managerial activities, which are not directly related to research

(e.g., 30% of the cost of Federico Morando, 40% of the cost of Raimondo Iemma). Some cost entries (e.g., tenured personnel) include in kind contributions (see also Table 2 below).

The contribution of the Nexa Center to the budget of Politecnico di Torino is calculated as the

share of the external funding deducted by the central administration or the Department of Control and Computer Engineering (DAUIN), mainly to cover indirect costs. This amount is increasing: it was 32,200 € in 2014, and it will be of at least 41,000 € in 2015.

5.Funding, Organization, Relationships & Community

Project / other source of funding	2014	2015	2016
Grant from Regione Piemonte	86,000 €	41,500 €	
EINS - Network of Excellence on Internet Science (including MorFEO)	73,500 €	61,800 €	
Open-DAI	25,600 €	700 €	
RRI-ICT Forum		9,500 €	55.000 €
SHARE 2.0	3,400 €	10,100 €	6,600 €
LAPSI 2.0	3,700 €	1,100 €	
Past projects leftover	7,000 €	11,900 €	19,000 €
Grant from Google Italy	2,900 €		
Grant from Google M-Lab (Google Inc.)	1,600 €	12,700 €	13.300 €
PASTEUR4OA	14,000 €	41,100 €	26,100 €
Grant from Telecom Italia (TellMeFirst)	8,400 €	6,200 €	14,800 €
Grant from Telecom Italia (the Law of Service Robots)	16,100 €	21,200 €	16,100 €
Grant from Telecom Italia (online privacy)	6,900 €	18,100 €	25,000 €
Global Network of Interdisciplinary Internet & Society Research Centers (NoC)	23,900 €	30,000 €	25,000 €
Grant from 5T (Smart Mobility)	7,200 €	900 €	
Grant from Cosvifor (Pragmatica degli Open Data nella PA)	7,400 €		
Grant from CSI-Piemonte		18,300 €	
ODINO (Piedmont ICT Cluster)	3,000 €	5,700 €	
Grant from eBay (Internet of Things)		15,600 €	46,400 €
Grant from ICANN (Internet Governance)		15,000 €	26,300 €
Contribution in kind from Politecnico di Torino (mainly personnel effort)	118,400 €	115,600 €	115,600 €
Contribution in kind from Prof. Marco Ricolfi	30,000 €	30,000 €	30,000 €
Total	439,000 €	467,000 €	419,200 €

Table 2: Nexa Center: expected funding in 2014, 2015 and 2016 (as of May 2015)

Table 2 provides an overview of the sources of funding in 2014 and some estimations of the expected funding in 2015 and 2016, which are based on relatively

conservative assumptions. In fact, only funding related to ongoing relationships and agreements (even without strict legal obligation to provide this funding, e.g.

because it is subject to the discretionary evaluations of some funding institutions) is reported. No funding is listed in case of simple submitted and unap-

proved project proposals. It is also worth mentioning that some of the funding threads are

likely to be available and used by the Center also beyond 2014. In those cases, the figures reported

do not capture the entire amount of the funding.

5.2 Accountability and transparency

(The 'Accountability and transparency principles' of the Nexa Center are here reported, as finalized in December 10th, 2013, in light of the debate involving Nexa directors and trustees, and reported in the following page <http://nexa.polito.it/transparency-and-accountability>).

The Nexa Center for Internet & Society is an independent research center. While the reputation of the center ultimately rests on the quality, consistency and integrity of its actions over the course of time, the Nexa Center also adopts several *ex ante* rules to support the independence of the center both in substance as well as in external perception. In this regard, the issue of funding is particularly sensitive. As a general principle, the Nexa Center does not accept funding that may limit the ability of the center to carry out independent and unbiased research. The Center strives to ensure that its funding comes from a range of entities, including public sector bodies, foundations, the private sector and individuals, to minimize the dependency from any specific actor (or category of actors). Since funding provided by for-profit entities is particularly sensitive, during each reporting period, including the one covered by this Report, the Nexa Center is committed to follow accountability and transparency guidelines concerning

for-profit funding. Such guidelines are formalized as follows:

1. The existence and the nature of all funding over €1,000 will be published on the website of the Nexa Center and regularly updated. Each year, the Nexa Center will also publish on its website the public version of its Annual Report, containing the same information.

2. In a given year, and as a matter of principle, funding coming from any single for-profit entity should not exceed 15% of the budget of the Center in that year. This threshold will be reexamined at each annual meeting of the Board of Trustees, according to the general principle that, if the Center budget increases, this threshold will be proportionally reduced.

3. The overall contribution coming from for-profit entities should in principle not exceed 1/3 of the overall budget of the Center in that year.

4. If the aforementioned thresholds are to be exceeded, the case will be brought to the attention of the Board of Trustees which will issue a binding recommendation to be included in the Annual Report.

5. In any case, the relationship with for-profit funders will explicitly provide that the Nexa Center accepts to undertake a certain research activity based

only on the scientific method and without being constrained by any previous indication or directive from the funder (e.g., in terms of expected deliverables and research products, apart from agreeing on the definition of the field of research and organizational details).

6. Consultancy and similar activities involving more specific directives from a third party, if undertaken, will be clearly labeled as such.

7. Any changes to these policies will be subject to the approval of the Board of Trustees.

Regarding the reporting period, the funding guidelines have been respected as far as point 1.–5. above are concerned. Regarding point 2., funding from a single for-profit entity (coming from Google Inc. and Telecom) remained below the 15% cap (implying a maximum funding of about € 65,850 in 2014). The same goes for the criteria expressed at point 3.

Considering current estimations of the 2015 budget, criteria at points 2 and 3 will be respected also in the next reporting period. Instead, the overall contribution coming from for-profit entities could slightly exceed 1/3 of the overall estimated budget of 2016 (138,300 €, i.e., 33%).

Funding coming from for-profit entities	% of 2014 budget (absolute value)	% of 2015 budget (absolute value)
Google	1.02 %	2.72%
Google Italy s.r.l., Corso Europa 2 20122 Milan	(2,900 €)	
Google Inc., 1600 Amphitheatre Parkway Mountain View, CA USA	(1,600 €)	(12,700 €)
Telecom Italia	7.15%	9,74 %
Telecom Italia S.p.A., Piazza degli Affari n. 2, 20123 Milano	(31,400 €)	(45.500 €)
5T	1.64 %	0.19 %
5T Srl, Via Bertola 34, 10122 Torino	(7,200 €)	(900 €)
Cosvifor Srl	1.69%	
Cosvifor Srl, Via XX Settembre 17, Torino	(7,400 €)	
eBay		3.34 %
eBay Sweden AB Stockholm		
C/O Recall Deutschland GmbH		(15,600 €)
Landsbergerstrasse 140 Leipzig 04157 Germany		
ICANN		3,21 %
The Internet Corporation for Assigned Names and Numbers (ICANN)		
12025 Waterfront Drive, Suite 300, Los Angeles; CA 900094 USA		(15,000 €)
Total from for-profit entities	11,50%	19,21%

Table 3: Funding coming from for-profit entities

5.3 Organizational aspects

During the reporting period, **new researchers entered the Nexa staff**: in chronological order, [Lorenzo Canova](#), who completed his Master's thesis on open data quality at Politecnico

di Torino, and continued his research work in the same thread, [Davide Allavena](#), master student of Physics, who started contributing to Nexa software projects, also managing Nexa's IT

infrastructure, and [Miryam Bianco](#), who recently graduated in law at Università degli Studi di Torino, and is currently continuing her research on the legal aspects of Internet of Things.

At the same time, two staff members concluded their collaboration with the Nexa Center: Claudio Artusio, staff research fellow between 2013 and 2015 – who will continue participating in the Nexa community as a Fellow – and Luca Leschiutta, Nexa IT manager between 2007 and 2015.

As usual, the Nexa Centers hosted interns who collaborated on specific projects: it is the case of Roberta Bruno (#Wiki-Trasparenza), Antonio Langiu (studying the terms of services of mobile Apps), Alessio Melandri (Neubot, and other software development projects), Carmine Perri (SeLiLi), Alessandro Quaranta (Neubot), and Nicola Rustignoli (#WikiTrasparenza).

A further effort to **reducing organizational overhead** has been devoted, mainly following two lines of action.

On the one hand, we continued **aggregating projects around thematic hubs** – such as the one on linked open data – and/or exploiting funded projects so to derive publications and other materials beyond standard deliverables. Moreover, we started creating “task forces” around specific projects, meeting periodically. This approach has also the effect to make staff members develop new knowledge and skills.

On the other hand, we started **rationalizing our IT infrastructure**, e.g., by turning websites of concluded projects into static web pages, and by adopting more efficient pipelines for our server maintenance. Further reflection is ongoing on how to balance the need of sustaining the Nexa community in all its aspects, and reducing organizational costs.

We also improved our understanding and use of tools to more easily structure information (such as **semantic wikis**), which were adopted in projects (including SeLiLi, in order to classify the wealth of cases addressed since 2007), and will become useful to structure information about the activities of Nexa as a whole (persons, projects, budget, publications), becoming in the future the actual, ‘schema-less’ back-end of the Nexa website.

Finally, we tried to keep improving the **involvement of the Nexa Fellows** in the Nexa community, not only by gathering them around projects of their interest (such as the one on legal aspects of robotics), but also collecting their plans and suggestions in a more structured way (see, e.g., the online form <https://nexa.polito.it/aggiornamento-fellows>).

5.4 Fellowships 2015 and Faculty Associates

A list of the current Fellows of the Center is available at page 70 ff. of this Report.

Since its creation, the Nexa Center took advantage of the cooperation of a group of more or less strictly connected fellows, who provided countless insights and enriched the knowledge-sharing activity of the Nexa Center. The explicit model for this kind of interaction was the network of fellows of the Berkman Center for Internet & Society at Harvard University, obviously with several adaptations and on a smaller scale.

While the Fellows of the Nexa Center typically contribute *pro bono* to the activities of the center, some of them, the “Research Fellows”, perform a re-

search specifically for the Nexa Center as a Ph.D. Student or with some kind of research grant (e.g., as “assegnisti di ricerca”). “Faculty Fellows” are tenured professors of the Politecnico di Torino or of the Università di Torino, which are the two universities forming the academic constituency of the Nexa Center. Since 2013, the Nexa Center created the position of “Faculty Associate”, i.e., scholars and lecturers whose field of research covers topics of interest for the Nexa Center.

Formally becoming a Fellow of the Nexa Center implies the membership in a closed mailing-

list devoted to the Fellows, the possibility of taking part to internal “closed-doors” meetings at the Center (for instance, brainstorming sessions, but also the meeting of the Board of Trustees) and, of course, the possibility of publicly using the title of Fellow of the Nexa Center for Internet & Society, and of appearing as such on the website of the Nexa Center. On top of that, depending on their research proposals, fellows may receive a limited amount of financial support (defined on a case by case basis) and reimbursement for travel and similar expenses related to their approved projects related to the Center.

nounce its Fellows for the next academic year (2014/2015). All the current Fellows (as listed at p. 70 ff. of this report) will be confirmed and **four new fellows will be added**:

Marco Torchiano is Associate Professor at the Department of Control and Computer Engineering of Politecnico di Torino. He has been post-doctoral researcher at the Norwegian University of Science and Technology (NTNU). He holds a BA and a PhD in Computer Engineering at the Politecnico di Torino. He authored or co-authored more than 100 articles published in journals and international conferences. Marco is co-author of "Software Development-Case studies in Java" (Addison-Wesley) and co-editor of the book "Developing Services for the Wireless Internet" (Springer). His current research interests include: design notation, methods of testing, development

"OTS-based", and data quality.

Claudio Artusio graduated in Law at the University of Turin in 2009. He collaborated with the Nexa Center since 2010 focusing studying Public Sector Information (PSI) and open data. Between 2013 and 2015, Claudio has served as Staff Research Fellow at the Nexa Center, performing research in the field of open content and open licensing, including front office assistance for Creative Commons Italia, management of SeLiLi – the Free Licenses Service clinic. In addition, he coordinated Nexa participation in the LAPS2.0 EU thematic network and the PAS-TEUR4OA EU coordination project, as well as the research performed on the Legal Aspects of Service Robotics, and on the exploitation of Open Data within the Italian Parliament.

Arturo Filastò is a member of Hermes center for transparency and digital human rights

a well known security researcher and regularly gives lectures at international conferences. He has trained activists in the use of security and censorship circumvention technologies. He is also the lead developer of OONI (Open Observatory of Network Interference), a project aimed at detecting and monitoring censorship in the world.

Alessio Melandri is a student of computer engineering at the Politecnico di Torino. Since 2014, he collaborates with the Nexa Center, and in particular with Simone Basso, to create a Node.js registry tool called Highgarden. Alessio furthermore contributed as developer to several other Nexa projects, including the course Rivoluzione Digitale, within which he held lectures on Wikipedia (being Alessio a Wikipedia user since 2012). Born 1992, Alessio Melandri is the youngest Nexa Fellow to date.

5.5 Visitors at the Nexa Center and Nexa Researchers Abroad

As in the previous reporting period, during the Fall 2014, Juan Carlos De Martin spent some weeks at Harvard University as Berkman Center faculty fellow.

Moreover, Alessandro Mantelero spent three months as visiting fellow at the Oxford Internet Institute.

With the support of the EINS mobility program, Lee A.

Bygrave, Director of the Norwegian Research Center for Computers and Law at the University of Oslo, visited the Nexa Center and gave a keynote speech in the symposium *The EU data protection reform – Privacy & consumer protection*, hosted by Nexa Director of Privacy, Alessandro Mantelero. Within the same program, Nexa fellow Elena Pavan spent a week at the Nexa Center in April.

In December 2014, Alessandro Mantelero gave a presentation on "Data Protection Authorities: the EU perspective", at the international seminar on the International Regulatory Trends on Personal Data Protection, organized by the NoC in Santiago de Chile at the Centro de Estudio en Derecho Informático, University of Chile, School of Law.

5.6 Partnerships

See <http://nexa.polito.it/partnerships> for a complete overview.

During the reporting period, the Nexa Center reinforced its **international relations**. On

top of various European proposals, involving historical and new partners (which are described in

Project Proposals, p. 59 ff.), the Nexa Center took the role of coordinator of the Global Net-

work of Internet & Society Research Centers (p. 34). Moreover, the Nexa Center continued being part of the Global Network Initiative as the first Italian participant in this NGO.

As far as the national and regional dimensions are concerned, the launch of <http://community.dati.piemonte.it/> represented an occasion to strengthen our collaboration with several partners that are active in the **linked open data domain**, and [Regesta.exe](#) in particular.

As for **software development** (see p.24 ff.) we have been cooperating with several partners to do joint network-measurements research and/or development.

In MorFEO, we cooperated with Arturo Filastò, developer of the OONI project for measuring network censorship, to write a library called liblight for running network measurements on mobile platforms.

Colleagues at the University of Pisa helped us to merge into

liblight code for mapping the Internet that they wrote for their Internet-mapping project, Portolan.

We are also cooperating with colleagues at the Dept. of Electronics and Telecommunications to follow a MoS thesis on network neutrality issues that will use Neubot to gather network measurements. Moreover, the Nexa Center is an associate partner of the Last-JD Joint International Doctoral (Ph.D.) Degree in Law, Science and Technology.

5.7 Outlook

The Nexa budget is relatively stable across the years, and allow to formulate the reasonable expectation to maintain at least the same volume of activities the next year.

Obviously, should a large EU project such as ExPONENT^E be

funded (as we hope), the Nexa priorities in the forthcoming years could be polarized towards network measurements.

More in general, the Nexa Center will continue working to reduce organizational overhead, and also to set up periodical col-

laborations with students and interns.

Importantly enough, we will seek to enhance development partnerships with both hackers and scholars at Politecnico di Torino and other universities.

6. OUTREACH

This section summarizes the activities of the Nexa Center aimed at increasing awareness about the Center and its main fields of research. Notice that some project-specific activities of this nature have been described in previous sections.

6.1 Introduction

In the last year, the Nexa Center has intended to strengthen outreach activities to highlight results of its research projects, creating new opportunities for debate, discussion, and collaborations.

To reach this purpose, the Nexa Center has organized several workshops and hackathons, in addition to its consolidated monthly meeting series.

Among the most important meetings we mention NNTools 2015, the multidisciplinary Workshop on Network-Measurement Methodologies and Tools Applied to Net Neutrality (<http://nexa.polito.it/nntools2015>

), during which also an hackathon session was planned.

In the field of Open Data, we note the ODQ2015 workshop (Open Data Quality: from Theory to Practice - <http://nexa.polito.it/2015/03/OpenDataQuality>) aimed at setting up a multidisciplinary dialogue on shared practices for quality assurance. We also mention the Linked Open Data hackathon organized in the context of the 2015 edition of the International Open Data Day. These meetings represent a chance to demonstrate practical implications of Nexa policy support activities, as well as creating

For more information, refer to...

<http://nexa.polito.it/newsroom>
<http://nexa.polito.it/press-releases>

chances for the dissemination of results.

During the last reporting period, the Nexa Center has also begun a process of digitization of works in the public domain, aiming to convey scientific culture values in the fields of Computer Science and Information technology (see the Italian translation of “Sketch of The Analytical Engine Invented by Charles Babbage”, by Luigi Federico Menabrea, available at: <http://nexa.polito.it/macchina-analitica-babbage>).

6.2 5th Annual Conference: The Evolution of the Internet Governance Ecosystem

For additional information, including the videos of the sessions, see <http://nexa.polito.it/noc/evolution-internet-governance-ecosystem>.

On October 2, 2014 the Nexa Center hosted an academic symposium on “**The Evolution of the Internet Governance Ecosystem**”, organized by the Global Network of Interdisciplinary Internet & Society Research Centers, as part of an ongoing Network of Centers (NoC) events series on the future of Internet governance.

The symposium gathered more than 100 participants, including researchers, professionals, students, and other experts.

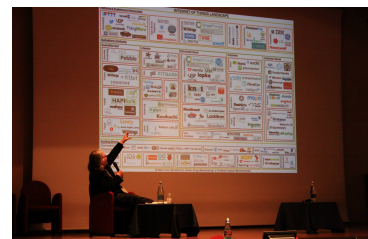
Considering the international vocation of the symposium, the adopted communication strategy has been based on a close collaboration between the Nexa Center and other NoC

members, in particular the Berkman Center for Internet & Society at Harvard University and the Alexander von Humboldt Institute for Internet and Society (Germany).

A great online coordination effort has been made to define and spread simultaneously the official press releases from different areas of the world. This proven dissemination strategy has been adopted following for the publication of results of “Multistakholder as Governance Groups” and “Governance of Online Intermediaries” NoC projects.

Communication activities related to the symposium have been accomplished through NoC official channels (the website, the mailing-lists, and the

social media) have been complemented by the effort of each NoC member: the symposium has been extensively communicated through the website, the mailing-lists and the social media channels of the Nexa Center and in close collaboration with the Communications Department of the Politecnico di Torino.



The symposium, that also featured a keynote speech by the science fiction author Bruce Sterling, has been broadcasted live on the Nexa Center website and supported by a live tweeting.

The web page of the symposium published on the Nexa Center website was one of the top 5 most visited pages during the

last reporting period.

The symposium has been organized with the support of

Compagnia di San Paolo, and under the patronage of the Agenzia per l'Italia Digitale (Agency for Digital Italy).

6.3 Nexa Wednesdays

An established tradition of continuing innovation and exchange of opinions!

The monthly meetings open to the public called “Nexa Wednesdays” became a usual appointment for the Nexa Center fellows and friends since September 2008. At the time of finalizing this report, 75 Nexa Wednesdays have taken place. The meetings are held on the second Wednesday of each month, from 18:00 to 20:00, and they are available in live streaming at: <http://nexa.polito.it/upcoming-events>. Videos of presentations are available at: <https://www.youtube.com/user/NexaCenter>. During the meetings, the audience following the live streaming can join the discussion via Twitter. The tweets are shown on a side screen. Attendance at Nexa Wednesdays as a rule exceeds 20 and sometimes 30 participants (thus, attendance frequently almost saturates the physical capacity of the Center's meeting room).

In order to promote an interdisciplinary exchange on the Internet & Society field, also introducing new people to the discussion, guests of the meeting are encouraged to use a simple language, avoiding unnecessary technicalities. You can find a list of all the Nexa Wednesdays at <http://nexa.polito.it/mercoledì>.

This is a short summary of Nexa Wednesdays that have taken place during the last reporting period:

64th Nexa Wednesday, Wikidata: from encyclopaedia to data: May 14, 2014; guest: **Lorenzo Losa**.

65th Nexa Wednesday, "Datagate", the surveillance in the age of the Internet: June 11, 2013; guest: **Carola Frediani**.

66th Nexa Wednesday, Neubot and net neutrality, reflections and perspectives: July 9, 2014; guest: **Simone Basso**.

67th Nexa Wednesday, News arising from data, how journalism is changing in the age of Internet: September 10, 2014; guest: **Alessio Cimorelli**.

68th Nexa Wednesday, Grillo, the M5S and the current analysis of content : October 8, 2014; guests: **Giuseppe Tipaldo and Matteo Pisciotta**.

69th Nexa Wednesday, Studying how. New learning tools for higher education: November 12, 2014; guest: **Andrea Angiolini**.

70th Nexa Wednesday, Into the filter: algorithms, propaganda

and democracy in the age of social networks: December 10, 2014; guest: **Fabio Chiusi**.

71st Nexa Wednesday, Platforms and Privacy: towards a new paradigm? January 14, 2015. Introduced by Marco Ricolfi, moderated by Juan Carlos De Martin.

72nd Nexa Wednesday, The draft of the Declaration of Rights on the Internet: the strengths and limitations: February 11, 2015; guests: **Mauro Alovio, Carlo Blengino, Marco Ciurcina, Monica Senor**.

73rd Nexa Wednesday, Principles and tools of whistleblowing: the GlobaLeaks case: March 11, 2015; guest: **Fabio Pietrosanti**.

74th Nexa Wednesday, Ubiquitous Commons. The transformation of Commons in the age of ubiquitous technologies and networks: April 8, 2015; guests: **Salvatore Iaconesi and Ugo Pagallo**.

75th Nexa Wednesday, Wireless Community Networks and Associative Internet Providers: May 13, 2015; guests: **Daniele Trinchero, Roberto Caso, Federica Giovanella**.

6.4 Nexa Lunch Seminars

Since May 2012, the Nexa Center launched a series of meetings entitled “Nexa Lunch

Seminars” held on the fourth Wednesday of the month, from 13.00 to 14.00. As in the case of

Nexa Wednesdays, it is possible to follow all the meetings live over the Internet by streaming

video at: <http://nexa.polito.it/upcoming-events>. Audience interactions and dissemination are dealt in the same way as for the Nexa Wednesdays. A list of the Nexa Lunch Seminars is available at <http://nexa.polito.it/lunch-seminars>. This is a short summary of Nexa Lunch Seminars that have taken place during the last reporting period:

21st Nexa Lunch Seminar, OONI: a framework for the measurement of Internet censorship: May 28, 2014; guest: **Arturo Filastò**.

22nd Nexa Lunch Seminar, INTOINO: innovation available to everyone: June 25, 2015; guest: **Marco Bestonzo**.

23rd Nexa Lunch Seminar, Hackathon on the transparency of public resources usage: July 23, 2014; guests: **Mauro Alovio**

and **Lorenzo Canova**.

24th Nexa Lunch Seminar, Transparency of PAs: the first results of a detailed analysis: September 24, 2014; guest: **Lorenzo Canova**.

25th Nexa Lunch Seminar, Free software for the implementation of the Italian Digital Agenda: October 22, 2014; guest: **Angelo Raffaele Meo**.



26th Nexa Lunch Seminar, What is “ownership” in an Internet of Things world? November 26, 2014; guest: **Hanne Melin**.

27th Nexa Lunch Seminar, Transparency of PAs: the results of a survey on new published datasets. January 28, 2015; guests: **Lorenzo Canova** and **Roberto Bruno**.

28th Nexa Lunch Seminar, Smart disclosure and “government as a platform”; February 28, 2015 guest **Giuseppe Ciacio**.

29th Nexa Lunch Seminar, Trademark law and Free/Open Source Systems; March 25, 2015; guest: **Carmine Antonio Perri**.

30th Nexa Lunch Seminar, Linked Data Platform: use the W3C recommendations in the real world; April 22, 2015; guest: **Diego Valerio Camarda**.

6.5 Other Meetings

Other meetings organized by the Center during the reporting period have been:

Governing Knowledge Commons, with Prof. **Brett Frischmann** (Yeshiva University), June 27, 2014.

Transdiegetic information: what it is and why it matters, with Prof. **Luciano Floridi** (University of Oxford), June 27, 2014.

Open access in the digital age. A new balance between publishers, libraries, and researchers, with Prof. **Jean-Claude Guéron** (Université de Montréal), June 30, 2014.

The EU data protection reform. Privacy & consumer protection, featuring the key-

note speech of **Lee A. Bygrave** (University of Oslo), October 7, 2014.

NNTools 2015 - Multidisciplinary Workshop on Network-Measurement Methodologies and Tools Applied to Net Neutrality, January 19-20, 2015.

“Più di cinquanta anni di storia di un grande amore”, lectio magistralis of Prof. **Angelo Raffaele Meo**, January 26, 2015.



Linked Open Data Hackathon on Piedmont data (International Open Data Day), February 21, 2015.

Controlling disruption: socio-legal aspects of 3D printing, with **Angela Daly** (Swinburne Institute for Social Research, Australia), March 13, 2015.

Internet and Democracy: the Nexa Center for Internet & Society at the Biennale Democrazia 2015, March 25-29, 2015.

ODQ2015 - Open Data Quality: from Theory to Practice, March 30, 2015.

The legal challenges of service robotics, May 11, 2015.

6.6 Website

In 2014 major changes were made to improve the user's browsing experience and the richness of the information provided (particularly in the research projects section <http://nexa.polito.it/research>). During the reporting period the website:

- collected a significant amount of traffic: about 24,000 visits from 16,900 different visitors. Since the previous report the site remained steady in visits with a slight growth in terms of different visitors (about 16,500 in the previous year – all data collected in may 2015 from Google analytics). It is worth noting that in 2014 - 2015 our website had two ex-

ceptional peaks in popularity due to the co-organization of the symposium “The Evolution of the Internet Governance Ecosystem” (October, 2014 - <http://nexa.polito.it/noc/evolution-internet-governance-ecosystem>) and the organization of the Lectio Magistralis of Prof. Angelo Raffale Meo (January, 2015 <http://nexa.polito.it/2015/01/lectio-magistralis-meo>). Both meetings were streamed on the Nexa Center website.

- has been extensively linked on the Web. According to Google web-master tools, 857 domains contain links to the Nexa Center's website. During the reporting period the

website obtained a good international exposure: if 78% of traffic came from Italy, about 3% came from the US, about 2% from Germany and the UK and about 1% each from France, Brazil, and Belgium.

The first graph (Figure 3) depicts the Nexa website page-views from October 2010 (beginning of measurements) up to now as registered by Google Analytics. The peaks are in conjunction with the annual conferences.

The second graph, relevant to the reporting period, (Figure 4) shows peaks in October 2014 and January 2015 as previously described.



Figure 3: Monthly page-views of the Nexa Website since its creation



Figure 4: Weekly page-views of the Nexa website during the reporting period

6.7 Media Exposure

Traditional newspapers and magazines, such as “La Stampa”, “Il Corriere della Sera”, “Il Sole 24 Ore”, “Il Venerdì di Repubblica”, spread the Nexa Center's press releases and gather opinions of Nexa community members on the “Internet & Society” topic.

During the last reporting pe-

riod, the initiative “Senza Fili, Senza Confini” of the Nexa Center fellow, Daniele Trinchero, was mentioned by the major Italian newspapers and by the New York Times (<http://www.ny-times.com/2014/12/03/world/europe/a-village-has-what-all-of-italy-wants-the-internet.html>).

The Italian draft Declaration of Internet Rights, published by the

Italian Chamber of Deputies, has received much attention from mainstream media and bloggers, both in Italy and abroad (<http://nexa.polito.it/declaration-internet-rights>). Juan Carlos De Martin, Stefano Rodotà, and Stefano Quintarelli are members of the study commission that has worked for the development of principles and guidelines on the

subject of Internet rights.

The co-directors of the Nexa Center gave various interviews on “Internet & Society” issues to newspapers and radios (e.g., Rai Radio 1 and Radio 24), both traditional and online. The lawyer Carlo Blengino was interviewed by “Il Corriere della Sera” on the acquisition of WhatsApp by Facebook, and on privacy issues on the Internet by “La Stampa”.

A noteworthy element is a 30-minute video interview to the Nexa co-director Juan Carlos De Martin by “Reteconomy”, a TV show broadcast on SKY plc.

Some of the Nexa fellows are contributors in blogs and online newspapers, addressing issues related to many research topics of the center. The Nexa fellow Fabio Chiusi, for instance, is one of the most important Italian

journalists that discuss issues related to control, censorship, and digital surveillance.

The co-director Juan Carlos De Martin continues his collaboration as op-ed contributor at “La Stampa”. Some of the matters discussed in the editorials of prof. De Martin gave rise to many discussions on social media and Nexa mailing list (See <http://nexa.polito.it/newsroom>).

6.8 Mailing lists and social media

The Center has three main mailing-lists:

- the **Nexa-Fellows** mailing-list is a private list connecting the core Nexa Center collaborators; it is used for various purposes, including confidential communications and to coordinate the activities of the fellows on specific projects; the list has about 42 members (Nexa Center fellows and staff) and relatively low traffic (about 249 messages since May 2014);
- the **Nexa mailing-list** is used to inform all the fellows and friends of the Nexa Center about the events and publications of the Center, and to circulate information regarding books, reports and other materials about “Internet & Society” in general; the list is open to anybody, upon subscription, and all the members can both read and post new messages; the list has about 570 members (529 one year ago) and collected almost 2,000 posts since May 2014 (in the previous reporting period they were about 1,200);
- the **Nexa-Announce** mailing-list is a low traffic list used to

spread information about Nexa Center public events and publications; it is open to anybody, upon subscription, in read only mode.

The Center also uses various internal mailing-lists to connect the members of the staff and/or some sub-sets of them working on specific projects.

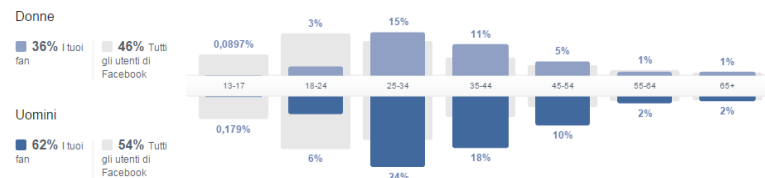


Figure 5: Gender and Age Statistics on Facebook fans

During the reporting period, the Center also increased the use of social networks Facebook (facebook.com/nexa.center) and Twitter ([@nexacenter](https://twitter.com/nexacenter)).

On Twitter, the center has 1893 followers (1503 the previous year) while, the total number of fans on Facebook is 1,117 (981 the previous year), with an age distribution shown in Figure 5.

The fans of the page come mainly from Italy (857) and the US (43), but also from the UK (28), France (23), Germany (20), and other European and non-European countries:

- **YouTube Channel:** Videos: 207; Created: Feb 6, 2009; Lifetime views: 16,470; reporting period: about 4055 views for a total of almost 633 hours watched.

It is worth noting that the growing success in social media audience might have caused the slight decrease in the website visits.

6.9 Outlook

In addition to the consolidated monthly meeting series, workshops and hackathons that

take place during the year also grew considerably, giving a further opportunity for operational

meetings related to the activities and research areas of the Nexa Center.

Pictures and videos of the meetings organized by the Nexa Center are systematically published on Flickr and YouTube, increasing the chance of reaching people who can not attend the meetings.

In our outreach activity, we wanted to improve the experience of people following Nexa Center activities on social media

implementing solutions such as Twitter Cards (<https://dev.twitter.com/cards/overview>).

Considering that the outreach tools of the Center as such are now quite mature, we will continue to develop the communication strategy of the Center in an increasingly organic way, and we will strengthen the use of social media whose users

are in tremendous growth in recent years.

We also plan to explore better Search Engine Optimization (SEO) techniques, in order to improve the ranking of the Nexa Center website on web search engines.



7. PROJECT PROPOSALS

In this section, project proposals issued by the Nexa Center (as coordinator or partner) during the reporting period are shortly described, also indicating the outcome of the submission (when already published).

7.1 ExPONENT^E

Engaging people in network neutrality experiments.

Project website/page	N/A
Status	submitted
Period	N/A (duration: 36 months)
Funding (of which Nexa)	1'999'887,5€ (459,375 €) for the entire project
Funding organization	European Commission (H2020 ICT10 – 2015, part b: Multidisciplinary research on collective awareness platforms (Internet Science))
Person(s) in charge	Simone Basso, Raimondo Iemma, Federico Morando, Juan Carlos De Martin

This research proposal, coordinated by the Nexa Center, focuses on the study of the sustainability of collective awareness platforms (CAPS) devoted to monitoring of network neutrality.

Background

Several network measurement projects, such as Neubot and OONI, to mention a few, can be considered as CAPS. However, so far CAPS on network measurements have failed to impact on society. This is mainly due to institutional and social reasons (related with incentives to cooperate), and lack of widespread awareness on the impor-

tance of network transparency. In fact, since tools address small, and very specific, sets of problems (traffic shaping of specific protocols, network performance, traffic manipulation and/or blocking), it is legitimate that each tool will only attract the already educated users that understand that specific problem and want to contribute.

Objectives

We focus on the CAPS centered around the personal (i.e., that you can run at home or from your mobile phone) network measurement tools aiming to increase network transparency, that is, aiming to reveal

the behavior of the network with network experiments, a super set goal of monitoring network neutrality. Specific project objectives are: defining sustainability models for CAPS in network measurements; creating online “user awareness journeys” on network transparency; designing user-aware information on how the network behaves; including user-centric tests into existing network measurement tools.

Results

As of June 2015, the proposal is under review.

7.2 Feasibility study for the open data portal of the Italian Ministry of Welfare.

An open data platform also using LOD.

Project website/page	N/A
Status	rejected
Period	N/A (duration: 12 months)
Funding (of which Nexa)	419'250,00€ (around 107,000 €) for the entire project
Funding organization	Ministry of Welfare – Directorate General for Services and Labor
Person(s) in charge	Raimondo lemma, Federico Morando

The Nexa Center participated in a feasibility study proposal – led by Regesta.exe – for the open data portal of the Italian Ministry of Welfare. The proposal, based on previous work in other contexts – was evaluated as not eligible for funding.

Background

The call for tenders pre-

sented high-level (technology neutral) functional requirements, and a starting price of 600'000€.

Objectives

Our proposal aimed at providing instruments to address both the transparency requirements of a complex public administration, and improvements in its internal efficiency, also us-

ing linked open data technologies, and considering the high potential impact of datasets interlinking in the domain of job markets and economic activities.

Results

The proposal was evaluated as not eligible for funding.

7.2 MAPO

MAchine Processable pOrtals

Project website/page	N/A
Status	submitted
Period	N/A (duration: 7 months)
Funding (of which Nexa)	57'137,50€ (17'100 €) for the entire project
Funding organization	Piedmont ICT Cluster
Person(s) in charge	Lorenzo Canova, Federico Morando

This is a feasibility study, led by CosViFor, for the standardisation of Internet portals of Italian public administrations, also using semantic technologies.

Background

Several new requirements related with data exposure (e.g., on the use of public resources)

have been promoted in Italy recently.

However, the level of quality, standardization, and interoperability of the data exposed is still insufficient.

Objectives

MAPO aims at defining stand-

ard structures for datasets describing cultural events, and datasets that have to be exposed by law in the “Transparent Administration” website section of each Italian public administrations.

Results

As of June 2015, the proposal is under review.

7.4 Previous proposals

As far as proposals submitted in the previous reporting period are concerned, the 7th EU Framework Program (FP7) proposal RRI-ICT Forum, coordinated by Sigma Orionis, was selected for funding and is currently up and running as a project involving the Nexa Center (p. 29).

ODINO, a feasibility study proposal on open data collaborative editing submitted

to the Piedmont ICT Innovation Cluster, received funding, and was actually carried during the reporting period (p. 17).

Other FP7 proposals were not sufficiently successful to be eligible for funding: in particular, it is the case of the coordination action on the legal issues hampering data exchange markets in the EU (OVERCEDE) led by the Nexa Center.

The same goes for the FP7 proposals in which the Nexa Center participated as a partner, that is, ACE (advanced cloud environment for European public administrations), KindActs (interdisciplinary research on the meaning of “digital kindness”), and M.ODER.NS (on the reuse of modern architectural cultural heritage).

ANNEX I – NEXA PEOPLE

Some pieces of biographical information about the co-directors, staff, trustees and fellows of the Center follow.

1.1 Directors

Juan Carlos De Martin - Founder and Co-Director

See dedicated box at page 5 of the Summary.

Marco Ricolfi - Founder and Co-Director

See dedicated box at page 6 of the Summary.

1.2 Trustees

Phillip Aigrain



Dr. Philippe Aigrain was trained as a mathematician and theoretical computer scientist, and holds a Doctorate and a "Habilitation à Diriger les Recherches" qualification from University Paris 7. From 1972 to 1981, he worked in software engineering research labs of software companies. He was a research fellow at U.C. Berkeley in 1982. Since then, and before joining the European Commission in 1996, he headed research teams in the field of computer processing, indexing, retrieval and user interface for audiovisual media (video, music, still images). He is the author of more than 50 research and technology assessment papers. He is presently CEO of Sopinspace, Society for Public Information Spaces, a company founded by

him in 2004. Sopinspace develops free software and provides commercial services for the organization of public debates and collaborative work over the Internet. In parallel, he is active as an analyst of the stakes of the information revolution and engaged in actions for the reform of intellectual rights regimes. He has authored books on this subject among which: "Cause commune: l'information entre bien commun et propriété", Fayard 2005 (translated in Italian and Arabic), and "Sharing: Culture and the Economy in the Internet Age", Amsterdam Univ. Press, 2012 (translated in Polish). His books and numerous papers on the information commons, access to knowledge and intellectual rights are accessible under CC licenses on his blog. Philippe Aigrain also writes poetry and short fiction pieces that are published on the Internet.

Yochai Benkler



Yochai Benkler is the Berkman Professor of Entrepreneurial Legal Studies at Harvard, and faculty co-director of the Berkman Center for Internet and Society. Before joining the faculty at Harvard Law School, he was Joseph M. Field '55 Professor of Law at Yale. He writes about the Internet and the emergence of networked economy and society, as well as the organization of infrastructure, such as wireless communications. In the 1990s he played a role in characterizing the centrality of information commons to innovation, information production, and freedom in both its autonomy and democracy senses. In the 2000s, he worked more on the sources and economic and political significance of radically decentralized individual action

and collaboration in the production of information, knowledge and culture. His work traverses a wide range of disciplines and sectors, and is taught in a variety of professional schools and academic departments. In real world applications, his work has been widely discussed in both the business sector and civil society. His books include *The Wealth of Networks: How social production transforms markets and freedom* (2006), which received the Don K. Price award from the American Political Science Association for best book on science, technology, and politics, the American Sociological Association's CITASA Book Award an outstanding book related to the sociology of communications or information technology, the Donald McGannon award for best book on social and ethical relevance in communications policy research, was named best business book about the future by *Strategy & Business*, and otherwise enjoyed the gentle breath of *Fortuna*. In civil society, Benkler's work was recognized by the Electronic Frontier Foundation's Pioneer Award in 2007, and the Public Knowledge IP3 Award in 2006. His articles include *Overcoming Agoraphobia* (1997/98, initiating the debate over spectrum commons); *Commons as Neglected Factor of Information Production* (1998) and *Free as the Air to Common Use* (1998, characterizing the role of the commons in information production and its relation to freedom); *From Consumers to Users* (2000, characterizing the need to preserve commons as a core policy goal, across all layers of

the information environment); Coase's Penguin, or Linux and the Nature of the Firm (characterizing peer production as a basic phenomenon of the networked economy) and Sharing Nicely (2002, characterizing shareable goods and explaining sharing of material resources online). His work can be freely accessed at benkler.org.

Maurizio Borghi



Maurizio Borghi is Professor of Law at Bournemouth University, where he is the Director of the Centre for Intellectual Property Policy & Management (CIPPM). Prior to joining Bournemouth he has been lecturer at Brunel University Law School, research fellow at Bocconi University of Milan and visiting scholar at the Center for the Study of Law and Society at the University of California, Berkeley. His research is primarily focused on developing a right-based understanding of law for the information society. In this vein, he has extensively published on the subjects of copyright, data protection, and the role of law in the digital age. His monograph 'Copyright and Mass Digitization' (co-authored with Stavroula Karapapa) has been published in 2013 by Oxford University Press.

Mario Calderini



Mario has a PhD in Economics from the University of Manchester and he has a BSc and an MSc in mechanical engineering from Politecnico di Torino. He is Full Professor at Politecnico di Milano and he served as Senior Advisor to the Italian Minister for Research and Innovation Policies and coordinated the 'Smart Communities' Working Group for the steering committee of the Italian Digital Agenda. He teaches Management of Innovation and Technology Strategy at undergraduate, master and postgraduate level and in the Alta Scuola Politecnica. Mario sits in the scientific committee of the PhD program in "Economics and Management of Technology" at Politecnico di Torino and University of Bergamo and of the PhD program in "Economics of Institutions and Creativity" at University of Torino. His main research interest is in the Economics and Management of Innovation. His numerous publications in international journals cover research and innovation management issues, technology policies and empirical studies on the determinants of innovative activity. He has been involved in several research projects and his research has attracted funds and sponsorships to Politecnico di Torino from several Institutions such as the European Commission, the Italian Ministry for Research, the Italian Ministry of Industry, the Italian Authority for Communications and several research foundations, private consultancy companies, banks and industry associations. Mario Calderini is the delegate for Public Policies of the Fondazione COTEC per l'Innovazione Tecnologica, under the Honorary Presidency of Giorgio Napolitano, President of the Italian Republic. He is the co-director of Fondazione Rosselli's Laboratorio di Economia dell'Innovazione "Franco Momigliano" and has a permanent cooperation with Fondazione Giovanni Agnelli. He is currently a member of the Intellectual Property Rights Commission at Politecnico di Torino and a member of the Dean's board for Politecnico's Fourth Faculty of Management. Mario Calderini is also a member of the Scientific Committee of "Quaestio", the Lombardy Region System for Research and Technology Transfer Centres Evaluation, and sits in the permanent product liability working group established by the European Community in order to monitor the impact of Directive 85/374/CE on liability for defective products. In 2005 he joined the expert group of the United Nations Conference on Trade and Development (UNCTAD) with the task of peer reviewing the UN's World Investment Report 2005. In 2006 he was nominated by the Italian Delegation as an expert to the Administrative Council of the European Patent Office (EPO). In the recent past, he was a member of the National Physics of the Matter Institute International Evaluation Panel and the national representative in the European Commission's Board for Regional Technology Advisor Centre.

Luca De Biase



Luca De Biase is a journalist and writer. He is the founder and chief editor of Nòva, the science and technology crossplatform section at Il Sole 24 Ore. He is the president of Fondazione Ahref, which is meant to research and help improve the information ecosystem emerging in the social media. He is author of "Economia della felicità", "Il mago d'ebiz" and "In nome del popolo mondiale". He blogs at blog.debiase.com and lucadebiase.nova100.ilsole24ore.com. He edited with Giorgio Meletti "Bidone.com". He contributed to the project and implementation of various initiatives, such as Skillpass, ScienceXpress, I nonni raccontano, EquiLiber, Reporters Online. He teaches Journalism and social media at Iulm in Milan. He

teaches Social media and international policy at Sciences Po, Paris.

Josef Drexl



Professor Dr. Josef Drexl, LL.M., graduated from the University of Munich and holds

a Ph.D. degree (1990) and a habilitation degree of the same University, in addition to an LL.M. degree from the University of California at Berkeley. Josef Drexl worked as a law professor at the Universities of Würzburg and Munich from 1997 to 2006; he continues to be a honorary professor at the University of Munich. Since 2002 he has been a director of the Max Planck Institute for Innovation and Competition in Munich. In 2003, Professor Drexl was elected the first chair of the Academic Society for Competition Law (ASCOLA). In 2010, he became a member of the Bavarian Academy of Sciences. As the Chair of the Managing Board of the Munich Intellectual Property Law Center (MIPLC) he is responsible for an internationally renowned LL.M. program in IP. He acted as a visiting professor at Oxford University, LUISS University (Rome) and New York University. He regularly teaches in the LL.M. program in EU law at the University of Paris 2 Panthéon-Assas. Professor Drexl is an expert in international and European competition law, intellectual property law, consumer law and WTO law.

Luciano Floridi



Luciano Floridi is Professor of Philosophy and Ethics of Information at the University of Oxford, where he is the Director of Research and Senior Research Fellow of the Oxford Internet Institute, Governing Body Fellow of St Cross College, Distinguished Research Fellow of the Uehiro Centre for Practical Ethics, Faculty of Philosophy, and Research Associate and Fellow in Information Policy of the Department of Computer Science. Outside Oxford, he is Adjunct Professor of the Department of Economics, American University, Washington D.C. His most recent books are: *The Fourth Revolution - How the infosphere is reshaping human reality* (Oxford University Press, 2014), *The Ethics of Information* (Oxford University

Press, 2013), *The Philosophy of Information* (Oxford University Press, 2011), *The Cambridge Handbook of Information and Computer Ethics* (editor, Cambridge University Press, 2010), and *Information: A Very Short Introduction* (Oxford University Press, 2010). He is Editor in Chief of *Philosophy & Technology* and of the *Philosophical Studies* book series (Springer). He is currently Chairman of Ethics Advisory Board of the European Medical Information Framework (EMIF), member of Google's Advisory Board on "the right to be forgotten" and member of the Advisory Board of Tencent's Internet and Society Institute. In 2012-13, he was Chairman of EU Commission's "Onlife Initiative" project. Among his recognitions, he has been elected Fernand Braudel Senior Fellow by the European University Institute; awarded the Cátedras de Excelencia Prize by the University Carlos III of Madrid, was the UNESCO Chair in Information and Computer Ethics and Gauss Professor of the Academy of Sciences in Göttingen. He is a recipient of the APA's Barwise Prize, the IACAP's Covey Award, and the INSEIT's Weizenbaum Award. He is an AISB and BCS Fellow, and a Fellow of the Académie Internationale de Philosophie des Sciences.

Brett Frischmann



Brett Frischmann is Professor of Law at the Benjamin N. Cardozo School of Law, Yeshiva University, where he teaches intellectual property and Internet law. He is currently the Director of Cardozo's IP and Information Law Program, an Affiliated Scholar of the Center for Internet and Society at Stanford Law School, and an Affiliated Faculty Member of The Vincent and Elinor Ostrom Workshop in Political Theory and Policy Analysis, Indiana University.

He received a BA in Astrophysics from Columbia University, an MS in Earth Resources Engineering from Columbia University, and a JD from the Georgetown University Law Center.

After clerking for the Honorable Fred I. Parker of the U.S. Court of Appeals for the Second Circuit and practicing at Wilmer, Cutler & Pickering in Washington, DC, he joined the Loyola University, Chicago law faculty in 2002.

Urs Gasser



Urs Gasser is the Executive Director of the Berkman Center for Internet & Society at Harvard University and a Professor of Practice at Harvard Law School. He is a visiting professor at the University of St. Gallen (Switzerland) and at KEIO University (Japan), and he teaches at Fudan University School of Management (China). Urs Gasser serves as a trustee on the board of the Nexa Center for Internet & Society at the Politecnico of Torino and on the board of the Research Center for Information Law at the University of St. Gallen, and is a member of the International Advisory Board of the Alexander von Humboldt Institute for Internet and Society in Berlin. He is a Fellow at the Gruter Institute for Law and Behavioral Research.

search.

Dr. Gasser has written and edited several books, and published over 100 articles in professional journals. He is the co-author of “Born Digital: Understanding the First Generation of Digital Natives” (Basic Books, 2008, with John Palfrey) that has been translated into 10 languages (including Chinese), and co-author of “Interop: The Promise and Perils of Highly Interconnected Systems” (Basic Books, 2012, with John Palfrey). Urs Gasser’s research and teaching activities focus on information law, policy, and society issues. Current projects – several of them in collaboration with leading research institutions in the U.S., Europe, and Asia – explore policy and educational challenges for young Internet users, the regulation of digital technology (currently with focus on cloud computing), ICT interoperability, information quality, the law’s impact on innovation and risk in the ICT space, cybersecurity, and alternative governance systems. He graduated from the University of St. Gallen (lic.iur., Dr.iur.) as well as Harvard Law School (LL.M. ’03) and received several academic awards and prizes for his research, including Harvard’s Landon H. Gammon Fellowship for academic excellence and the “Walther Hug-Preis Schweiz”, a prize for the best doctoral theses in law nationwide, among others.

Jean-Claude Guédon



Prof. Jean-Claude Guédon began his career at Glendon College (York University) in Toronto, Ontario in 1970 and has been a professor at the Université de Montréal since 1973, first in the Institut d'histoire et de sociopolitique des sciences, and, since 1987, in the Département de littérature comparée. He is a long-time member of the Internet Society serving as co-chair of the program committee in 1996, 1998 and 2000, and member of the same committee in 1997, 1999 and 2002.

In 1991, with Bill Reading and Walter Moser, he launched the first electronic scholarly journal in Canada: *Surfaces*. Between 1998 and 2003, he was Chair of the Advisory

Board for CNSLP (Canadian National Site Licence Project, now known as CRKN (Canadian Research Knowledge network). From 2002 until 2006, he was a member of OSI's Information Program sub-board. Between 2003 and 2007, he was a member of the Advisory Board of eIFL (Electronic Information for Libraries). In 2006 he was elected (until November 2008) Vice-President of the Canadian Society for the Humanities and Social Sciences.

He has advised numerous governmental bodies, including the Ministère de la Recherche (France) for their e-publication project in the humanities and the social sciences; the Agence de la francophonie for matters pertaining to new technologies; the Quebec Minister of Communication in charge of the information highway; and the Quebec Ministry of education for the integration of the new technologies into the curriculum. He regularly acts as expert for the European Commission. He is also on the editorial board of several journals, and his three books are all available in Italian.

Lucie Guibault



Dr. Lucie Guibault is associate professor at the Institute for Information Law of the University of Amsterdam (UvA). She studied law at the Université de Montréal (Canada) and received in 2002 her doctorate from the University of Amsterdam, where she defended her thesis on Copyright Limitations and Contracts: An Analysis of the Contractual Overridability of Limitations on Copyright.

She is specialized in international and comparative copyright and intellectual property law. Lucie Guibault has been carrying out research for the European Commission, Dutch ministries, UNESCO and the Council of Europe. Her main areas of interest include copyright and related rights in the information society, open content

licensing, collective rights management, limitations and exceptions in copyright, and author's contract law. She has been involved as legal partner in Creative Commons Netherlands since 2005 and in projects related to Europeana (EuropeanaConnect and Europeana Awareness) since 2009.

She is in charge of the coordination of the IViR International Copyright Law Summer Course. Dr. Guibault is member of the international editorial board of *Les Cahiers de propriété intellectuelle*, member of the editorial board of the *Journal of Intellectual Property and Information Technology (JIPITEC)*, and correspondent for the Netherlands for *Computer Law Review International (CLRi)*.

Anna Masera



Anna Masera graduated in History at Yale in 1983. In 1984 she was awarded a master degree in journalism from the Columbia University. In 1986 she started to work as journalist for “Italia Oggi”, an Italian daily newspaper. Then she worked for the press agency Reuters and later for Mondadori, writing for two monthly magazines: “Fortune Italia” and “Espansione”. In the meantime she was also a consultant for the talk show “Milano, Italia” of the Italian public broadcaster. She started to work for Panorama “life and style” section in 1994 when Internet started to gain widespread diffusion. Since then she is following the development of new media:

first she founded “Panorama Web”, then she was hired by “La Stampa” in 1999 to launch their website. At “La Stampa” she was deputy editor and social media editor (2012-2013). She also blogged on “The Guardian” from 2007 to 2011. Since January 2014, Anna temporarily left her position at “La Stampa” and to serve as Head of Press and Communications Officer of the Italian Chamber of Deputies.

Angelo Raffaele Meo



1961-1969 Assistant Professor of Electrical Engineering at Politecnico di Torino.

1970- Full Professor of Computer Science at Politecnico di Torino.

1970-1999 head of "Centro per l'Elaborazione Numerale dei Segnali" CNR.

1979-1985 director of the "Progetto Finalizzato Informatica", CNR.

1991-1996 scientific director of "Centro di Supercalcolo Piemonte".

He has published more than one hundred papers dealing with computer science. In particular, he investigated switching theory, hardware design, signal processing, speech analysis and synthesis, and pattern recognition. He has coordinated many academic and industrial national research projects on computer science. He was

president of the Academy of Sciences of Torino. In 2002 he was called by the Italian Minister of Technology to preside at a Commission entrusted with the task of promoting open source in the Italian Public Administration.

Charles Nesson



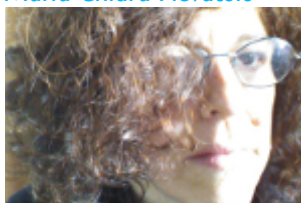
Charles Rothwell Nesson is the William F. Weld Professor of Law at Harvard Law School and the founder of the Berkman Center for Internet & Society and of the Global Poker Strategic Thinking Society. He is author of *Evidence*, with Murray and Green, and has participated in several cases before the U.S. Supreme Court, including *Daubert v. Merrell Dow Pharmaceuticals*. In 1971, Nesson defended Daniel Ellsberg in the Pentagon Papers case. He was co-counsel for the plaintiffs in the case against W.R. Grace that was made into the film *A Civil Action*.

Nesson attended Harvard College as an undergraduate, and then Harvard Law School where he joined the list of only a handful of people in history to have grad-

uated summa cum laude. Nesson was a law clerk to Justice John Marshall Harlan II on the United States Supreme Court, 1965 term. He then worked as a special assistant in the Department of Justice Civil Rights Division. His first case, *White v. Crook*, made race and gender-based jury selection in Alabama unconstitutional. Nesson joined the Harvard Law School faculty in 1966, and was tenured in 1969.

He is "currently leading a project to reify university as a meta player in cyberspace, to legitimize and teach poker and the value of strategic poker thinking, and to advance restorative justice in Jamaica". In 2006 he taught *CyberOne: Law in the Court of Public Opinion* with Rebecca Nesson and Gene Koo. He teaches courses in the law and practice of Evidence (how to prove the "truth"), Trials in Second Life, and a reading group with Fern Nesson on Freedom.

Maria Chiara Pievatolo



Maria Chiara Pievatolo is associate professor of political philosophy in the Department of Political Sciences at the University of Pisa. She has been theorizing and practicing the open access publishing in the field of humanities since the 90s of the last century, first as political philosophy editor of the *Sito Web Italiano per la Filosofia* (SWIF) founded by Luciano Floridi, and then as curator and founder of the "Bollettino telematico di filosofia politica", of the "Giuliano Marini" Archive, and of the book series *Methexis*. She is also a member of the open access Crui committee and one of the founding members of the Aisa (Associazione italiana per la promozione della scienza aperta). Since the end of 2014 she has been one of the

associate editors of the *Directory of the Open Access Journals* (Lund University). A detailed list of her works, many of which hypertextual, experimental, openly accessible, can be found at <http://www.sp.unipi.it/index.php/it/docenti-top/122-pievatolo-maria-chiara/118-pievatolo-maria-chiara-ricerca>.

Michelangelo Pistoletto



Michelangelo Pistoletto was born in Biella in 1933. He began to exhibit his work in 1955 and in 1960 he had his first solo show at Galleria Galatea in Turin. An inquiry into self-portraiture characterizes his early work. In the two-year period 1961-1962 made the first Mirror Paintings, which directly include the viewer and real time in the work, and open up perspective, reversing the Renaissance perspective that had been closed by the twentieth-century avant-gardes. These works quickly brought Pistoletto international acclaim, leading, in the sixties, to one-man shows in important galleries and museums in Europe and the United States. The Mirror

Paintings are the foundation of his subsequent artistic output and theoretical thought.

In 1965 and 1966 he produced a set of works entitled *Minus Objects*, considered fundamental to the birth of *Arte Povera*, an art movement of which Pistoletto was an animating force and a protagonist. In 1967 he began to work outside traditional exhibition spaces, with the first instances of that “creative collaboration” he developed over the following decades by bringing together artists from different disciplines and diverse sectors of society. In 1975-76 he presented a cycle of twelve consecutive exhibitions, *Le Stanze*, at Galleria Stein in Turin. This was the first of a series of complex, year-long works called “time continents”. Others are *White Year* (1989) and *Happy Turtle* (1992).

In 1978, in a show at Galleria Persano in Turin, Pistoletto defined two main directions his future artwork would take: *Division and Multiplication of the Mirror* and *Art Takes On Religion*. In the early eighties he made a series of sculptures in rigid polyurethane, translated into marble for his solo show in 1984 at Forte di Belvedere in Florence. From 1985 to 1989 he created the series of “dark” volumes called *Art of Squalor*. During the nineties, with *Project Art* and with the creation in Biella of *Cittadellarte - Fondazione Pistoletto* and the University of Ideas, he brought art into active relation with diverse spheres of society with the aim of inspiring and producing responsible social change. In 2003 he won the Venice Biennale’s Golden Lion for Lifelong Achievement. In 2004 the University of Turin awarded him a laurea honoris causa in Political Science. On that occasion the artist announced what has become the most recent phase of his work, *Third Paradise*. In 2007, in Jerusalem, he received the Wolf Foundation Prize in the Arts, “for his constantly inventive career as an artist, educator and activist whose restless intelligence has created prescient forms of art that contribute to fresh understanding of the world.”

David Post



David Post is currently the I. Herman Stern Professor of Law at the Beasley School of Law at Temple University, where he teaches intellectual property law and the law of cyberspace. He is

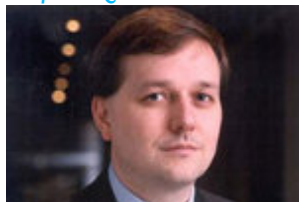
also a Fellow at the Center for Democracy and Technology, a Fellow of the Institute for Information Law and Policy at New York Law School, an Adjunct Scholar at the Cato Institute, and a contributor to the influential Volokh Conspiracy blog.

Professor Post is the author of *In Search of Jefferson’s Moose: Notes on the State of Cyberspace* (Oxford, 2009), a Jeffersonian view of Internet law and policy. He is also coauthor of *Cyberlaw: Problems of Policy and Jurisprudence in the Information Age*

(West, 2007), and numerous scholarly articles on intellectual property, the law of cyberspace, and complexity theory. He has been a regular columnist for the *American Lawyer* and *InformationWeek*, a commentator on the *Lehrer News Hour*, *Court TV’s Supreme Court Preview*, *NPR’s All Things Considered*, *BBC’s World*, and recently was featured in the PBS documentary *The Supreme Court*.

After receiving a Ph.D. in physical anthropology, he taught in the Anthropology Department at Columbia University before attending Georgetown Law Center, from which he graduated summa cum laude in 1986. After clerking with then Judge Ruth Bader Ginsburg on the DC Circuit Court of Appeals, he spent 6 years at the Washington D.C. law firm of Wilmer, Cutler & Pickering, after which he then clerked again for Justice Ginsburg during her first term at the Supreme Court (1993 - 1994), before joining the faculty of the Georgetown University Law Center (1994 - 1997) and then Temple University Law School (1997 - present). Professor Post’s writings can be accessed online at www.davidpost.com.

Stefano Quintarelli



Stefano Quintarelli is a serial entrepreneur (and prolific blogger), who pioneered the commercial development of the Internet in Italy. In 2013 he was elected to the Chamber of Deputies of the Italian Parliament as an independent candidate in the list “Scelta Civica”.

He graduated in IT science at the University of Milan. In 1989 he founded MI.NE.R.S. (Milano Network Researchers and Students), the student telecom association that developed the first e-mail independent system in Italy.

In 1994, he was one of the founder of I.NET, the first commercial ISP in Italy for professionals, that hosted the Milan Internet Exchange (MIX), the first and most

important exchange point of ISP traffic in Italy, he also contributed to the birth of AIIP the Italian association of Internet Providers.

He was one of the founding members of: CLUSIT, Italian association for IT security; AIPSI, Italian association of professionals of IT security (Italian division of ISSA.org); Equiliber, Association for balanced information on technology innovation; VolPex, consortium for interoperability, quality and transparency of IP services.

He has been a supporter of civic IT backing the first civic networks in Italy (e.g. RCM the civic network of Milan and ONDE - Online Desenzano). He promoted the birth of DMIN.IT, the forum on digital media development

in Italy, coordinated by Leonardo Chiariglione (the president of MPEG).

He is a supporter of network neutrality and knowledge sharing and he sustained since the beginning the activities of "Condividi la Conoscenza", the conferences organized by sen. Fiorello Cortiana and in 2005 he introduced in Italy the network neutrality topic in a congress with Lawrence Lessig and in other occasions.

He is author of many books and papers on Internet published on the most important Italian newspapers and he is scientific coordinator of updating workshops on technological topics for the Italian finance community.

He chaired the Italian ISP association (AIIP) till January 2007, he is a member of the Programming committee of Federcomin (innovation services of the Italian federation of industry).

He has been awarded by "Corriere della Sera-Economia" as one of the 30 most innovative Italian entrepreneurs.

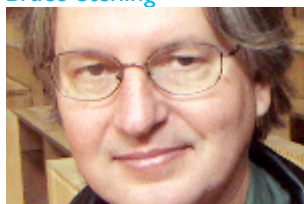
Stefano Rodotà



Prof. Stefano Rodotà: Professor of Civil Law, University of Rome; former Chairman of the Italian Data Protection Authority; former Chairman of the European Group of the Data Protection Authorities Chairman of the Commission on Genetic Testing and Counselling; Member of the European Group on Ethics in science and technologies, Member of the Convention drafting the Charter of Fundamental Rights of the European Union (2000); Former Member of the HUGO Ethics Committee (1997-2000); Member of the Ethics Committee of the National Research Council; Work in the field of the legal and social effects of scientific innovation (1972-2000); Important work in the field of bioethics (1989-2000); Author of several

books and editor of a number of periodicals; Member of the Italian Parliament (1979-1994); Vice-President of the Chamber of Deputies (1992); Member of the Parliamentary Assembly of the Council of Europe (1983-1994); Member of the European Commission's Group of Advisers on the Ethical Implications of Biotechnology (1994-1997); Member of the European Group on Ethics (since 1998); Chairman of the European Group of Authorities for the Protection of Privacy (1999-2000).

Bruce Sterling



Bruce Sterling, author, journalist, editor, and critic, was born in 1954. Best known for his ten science fiction novels, he also writes short stories, book reviews, design criticism, opinion columns, and introductions for books ranging from Ernst Juenger to Jules Verne. His nonfiction works include "The Hacker Crackdown: Law and Disorder on the Electronic Frontier", "Tomorrow now: envisioning the next fifty years" (2003) and "Shaping things" (2005).

He is a contributing editor of WIRED magazine and writes a weblog. During 2005, he was the "Visionary in Residence" at Art Center College of Design in Pasadena. In 2008 he was the Guest Curator for the Share Festival of Digital Art and Culture

in Torino, Italy, and the Visionary in Residence at the Sandberg Instituut in Amsterdam. In 2011 he returned to Art Center as "Visionary in Residence" to run a special project on Augmented Reality.

He has appeared in ABC's Nightline, BBC's The Late Show, CBC's Morningside, on MTV and TechTV, and in Time, Newsweek, The Wall Street Journal, the New York Times, Fortune, Nature, I.D., Metropolis, Technology Review, Der Spiegel, La Stampa, La Repubblica, and many other venues.

Sacha Wunsch-Vincent



Dr. Sacha Wunsch-Vincent is Senior Economic Officer under the Chief Economist at the World Intellectual Property Organization (WIPO). He is one of the main authors of the World Intellectual Property Report, and the Global Innovation Index, and has contributed to establishing the economic work of the Organization over the last four years. His primary research foci and current area of work are concerned with the interaction of innovation, intellectual property and economic development. Before joining WIPO, he was an economist at the OECD Directorate for Science, Technology, and Industry for seven. Before that he was a Swiss National Science Fellow at the Berkeley Center for Law and Technology (University of

California, Berkeley) and the Washington-based institute for International Economics. He served as advisor to organizations such as the World Bank and the World Economic Forum, and he has testified to national governments and parliaments, in particular on copyright. Sacha holds a Master's degree in international economics from the Maastricht Economic Research Institute on Innovation and Technology, University of Maastricht, and a PhD in economics from the University of St. Gallen, Switzerland. He teaches international economics at Sciences Po Paris and the World Trade Institute.

1.3 Staff

Federico Morando - Director of Research and Policy & Research Fellow

See dedicated box at page 7 of the Summary.

Raimondo Iemma - Managing Director & Research Fellow

See dedicated box at page 8 of the Summary.

Selina Fenoglietto - Administrative Manager

See dedicated box at page 9 of the Summary.

Simone Basso – Staff Research Fellow

See dedicated box at page 8 of the Summary.

Giuseppe Futia – Communication Manager and Research Fellow

See dedicated box at page 9 of the Summary.

Lorenzo Canova – Staff Research Fellow

See dedicated box at page 9 of the Summary.

Claudio Artusio - Staff Research Fellow

See dedicated box at page 9 of the Summary.

Luca Leschiutta - IT Manager (until Jan 2015)

See dedicated box at page 9 of the Summary.

Davide Allavena - IT Manager and Research Fellow (from April 2015)

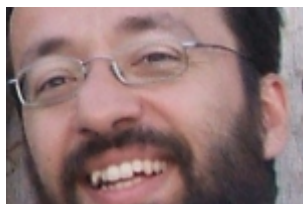
See dedicated box at page 8 of the Summary.

Miryam Bianco – Research Fellow (from May 2015)

See dedicated box at page 9 of the Summary.

1.4 Fellows

Alessandro Mantelero - Faculty Fellow 2011-2015 & Director of Privacy



Alessandro Mantelero is Aggregate Professor of Private Law and professor of Innovation and International Transactions Law at the Politecnico di Torino, Director of Privacy and Faculty Fellow at the Nexa Center for Internet and Society, Programme Coordinator of the Double Degree program in Management and IP Law (Politecnico di Torino, Tongji University of Shanghai) and Research Consultant at the Sino-Italian Research Center for Internet Torts at Nanjing University of Information Science & Technology.

His research has explored topics including data protection, cloud computing, big data, robotics, Internet law, e-government. Alessandro has published three books, as well as over seventy articles and book chapters. He is involved in national and international research projects. He was Visiting Researcher at Berkman Center for Internet & Society at Harvard University (2012), Visiting Fellow at the Oxford Internet Institute (2013 and 2014) and Visiting Professor at the Nanjing University of Information Science & Technology (2013). In 2015, he is Visiting Professor at the Internet Interdisciplinary Institute at the Open University of Catalonia. Webpage: <http://staff.polito.it/alessandro.mantelero/>.

Ugo Pagallo - Faculty Fellow 2011-2015



Ugo Pagallo is Professor of Jurisprudence at the Department of Law, University of Turin, since 2000, faculty at the Center for Transnational Legal Studies (CTLIS) in London and faculty fellow at the Nexa Center for Internet and Society at the Politecnico di Torino. Member of the European RPAS Steering Group (2011-2012), and the Group of Experts for the Onlife Initiative set up by the European Commission (2012-2013), he is chief editor of the Digitalica series published by Giappichelli in Turin and co-editor of the AICOL series by Springer. Author of nine monographs and numerous essays in scholarly journals, his main interests are AI & law, network and legal theory, robotics, and information technology law (specially data protection law, copyright, and online security). He currently is member of the Ethical Committee of the CAPER project, supported by the European Commission through the Seventh Framework program for Research and Technological Development.

Daniele Trinchero - Faculty Fellow 2013-2015



Daniele Trinchero is professor at Politecnico di Torino (Dept. of Electronics and Telecommunications), where he manages the iXem Labs (which he co-founded with Riccardo Stefanelli in 2004). His research interests encompass Wireless Networks, Sensor Networks, Internet of Things, and solutions to reduce digital divide in developing countries, and in marginal areas of developed ones. He is member of the Institute of Electrical and Electronics Engineers (IEEE).

Mauro Alovio - Fellow 2012-2015



Mauro Alovio graduated in Law at the University of Turin, Italy. He has specialized in Data Protection and New Technologies Law. Currently he is working at the Legal Office of the University of Turin.

During his professional activity he dealt with the privacy and the reorganization of the public administration through the use of the new technologies.

Mauro is author of scientific articles published in Italian journals and co-author on law books. He is the President of "Centro Studi di Informatica Giuridica" and he is a member of the "Commissione Informatica del Consiglio dell'Ordine degli Avvocati di Torino". As part of his Nexa fellowship, Mauro will focus on research topics

related to personal data in the EVPSI project and within the implementation of pilots in the Open-DAI project, also touching other issues related to public administrations in digital environment.

Giovanni Arata - Fellow 2013-2015



Giovanni Arata holds a degree in Communication Sciences (Università degli Studi di Siena, 2001) and a PhD in "Information Systems and Organization" (Università degli Studi di Trento, 2006). During his doctoral studies, he has been visiting fellow at the University of California - San Diego and at the University of Oslo, and hosted at the U.S. Department of State within the 'International Visitor Leadership Program'. Since 2008, he works as researcher and freelance journalist, focusing in particular on the social and organizational impacts of the Internet. He writes for Italian newspapers and blogs such as Il Sole 24 Ore (Nòva), Punto Informatico, e-Gov, and works as analyst at Formez-PA and Regione Emilia - Romagna. Since

2010, he has been developing #socialPA, a project aimed at surveying and analysing the social media presence of Italian public administrations. #socialPA is carried out in cooperation with the Nexa Center.

Eleonora Bassi - Fellow 2012-2015



Eleonora Bassi holds a Degree in Law (cum laude) and a PhD in Philosophy of Law and Legal Theory (University of Turin, Law School). Her main research fields are legal theory, privacy and data protection law, fundamental rights. She has been involved in the EVPSI project and in the LAPSI Thematic Network studying privacy issues related to open data policies. Currently she is post-doc Research Fellow at the University of Trento (DISI) and her work is on open data policies and big data legal issues.

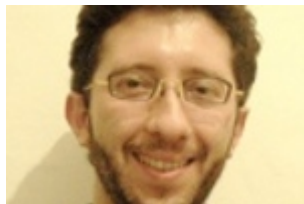
Lorenzo Benussi - Founding Fellow



Lorenzo Benussi, Laura Magistrale in Communication Sciences and PhD in Economics of Innovation, is advisor for digital policy at the TOP-IX Consortium where he develops projects and policies to support digital innovation. He was counsellor of the Italian Minister of Education and Research and member of task forces to promote online engagement and e-participation at the Ministry of Reforms and the Ministry of Foreign Affairs. Lorenzo is also member of the scientific board of Opencoesione, open data project of the Ministry of Treasury, and member of the board for innovation of the IREN Group. Lorenzo is fellow of the Nexa Center for Internet & Society at the Polytechnic of Turin where he conducts researches on

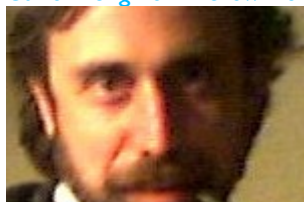
the economics of innovation, strategic management and economics of knowledge. Lorenzo main interest both as professional and researcher is the evolution of innovation models due to the pervasive diffusion of digital networks.

Enrico Bertacchini – Founding Fellow



Dr. Enrico Bertacchini is assistant professor at the Department of Economics and Statistics “S. Cogneiti De Martiis”, University of Turin, where he teaches Cultural Economics and Governance of Economic Processes. He graduated in Economics at the University of Turin and holds a Master in Economics from CORIPE–Collegio Carlo Alberto and a Ph.D. in Institutions, Economics and Law from the Universities of Turin and Gent. His main interests within the “Internet & Society” field concern Internet as an infrastructure for the production of and access to information goods and the economic analysis of the information society. He has multidisciplinary competences concerning the economics of culture and the economic analysis of intellectual property, with a particular focus on commons-based models for the production of and access to information goods. His works has been published, among others, in the Journal of Cultural Economics, International Journal of Cultural Policy, International Journal of Arts Management, Review of Law and Economics, Ecological Economics and Regional Studies.

Carlo Blengino – Fellow 2011-2015



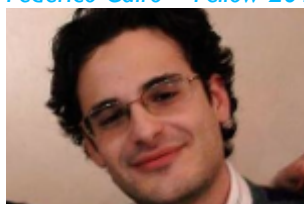
Carlo Blengino lives in Turin and is a lawyer and a partner of the legal firm “Studio Legale Catalano Penalisti Associati”. He deals exclusively with criminal law cases, with special reference to culpable crimes, professional liabilities, economics criminal laws, intellectual property rights, crimes involved with IT and new technologies, defense of privacy and personal data. Since the early nineties, he has debated in law courts the main issues of copyright, from CDs rental to campaigns for file sharing (among his many defenses, the one in the well-known sentence on downloading -Cass.149/07- and the defense of many users in the Peppermint case). He thus gained a concrete experience of sanctions in the area of copyright law. He is a member of the IT Commission within the Bar Council of Turin. He contributes to several on-line magazines, to the magazine “Diritto dell’Informazione e dell’Informatica” of the Calamandrei Foundation and his works are published by Giappichelli Editore, UTET Giuridica and EGEA.

Nicola Bottero – Founding Fellow



Nicola Bottero is a practicing lawyer with a degree in Law from the University of Turin with a thesis on comparative law. He also graduated in the Intellectual property Specialization Course jointly organized by the University of Turin and the WIPO Academy. On top of practicing private law, industrial law and commercial law, works with the Chairs of Commercial and Industrial Law at the Law Faculty of the Universities of Turin. He also teaches industrial law within some master degrees. He has been a member of the working group of Creative Commons Italy since its beginnings in 2003.

Federico Cairo – Fellow 2012-2015



Federico Cairo, graduated in Philosophy at the Collegio Superiore of University of Bologna in 2005 and in Media Engineering at Politecnico di Torino in 2008, received his Ph.D. degree from Politecnico di Torino in 2013. His research includes Natural Language Processing and Linked Data technologies for digital libraries. After collaborating with CSI-Piemonte and Politecnico di Torino on projects as CoOPERARE (2010), dati.piemonte.it (2010), OPSA (2011), Open-DAI (2012), he was awarded a “Working Capital - Premio Nazionale Innovazione 2011” by Telecom Italia for TellMeFirst, a tool for classifying and enriching textual documents via Linked Open Data. He currently lives in Washington DC, working as a project manager for Expert System USA. He's fellow at Nexa Center for Internet and Society, where he continues contributing to TellMeFirst as a technology supervisor.

Marco Ciurcina – Founding Fellow



Marco Ciurcina. Rome, Italy, 05.02.65. Italian lawyer, working in the field of commercial and contractual law, Information Technology law, Copyright, Patent and Trademark law. He teaches “Law and ethics of communication” at the Politecnico di Torino, Faculty of Information Science. Free software and digital freedoms ac-

tivist.

Alessandro Cogo – Founding Fellow



Dr. Alessandro Cogo received his degree at the Faculty of Law of the University of Turin on 2002 and holds a Ph.D. in Intellectual Property Law from the Universities of Pavia and Munich. He is assistant professor at the Law Department of the University of Turin and teaches intellectual property law at the University of Eastern Piedmont. Author of a book on Copyright contracts, essays, commentaries and case comments, he is currently focusing his studies on the liability for the infringement of IPRs.

Deborah De Angelis – Founding Fellow



Deborah De Angelis has a degree in Law from Luiss University in Rome; in January 2000 she became a lawyer specialized in digital music law. In 2001 she founded the legal office DDA. She also authored various publications in matters relating to authors' digital rights. In May 2004 became a member of the Creative Commons Italy working group. Since January 2008 she is the President of A-DJ, an international associations who cares legally protecting and promoting professional DJs.

She has a deep knowledge of all legal issues related to the working of collecting societies (with particular reference to the Italian Society of Authors and Editors, SIAE): this expertise is especially valuable within the Creative Commons and related projects.

In 2008-2009, she coordinated the Creative Commons Italy / SIAE Working Group.

Giulio De Petra – Fellow 2011-2015



Giulio De Petra received his degree in Economics from University of Siena, Italy. He worked in the service organization in BNL (Banca Nazionale del Lavoro), one of the top Italian banks, as expert in software design methodologies and in database administration. Later, he moved to the consulting division of IPACRI (Istituto per l'Automazione della Casse di Risparmio Italiane), where he was in charge of the research activities and projects. It has been senior consultant for the RSO Institute and it was for several years ICT advisor for the major of the city of Rome. Later, he became executive manager in AIPA (Autorità per l'Informatica nella Pubblica Amministrazione) - public local administration division. After he became director general for eGovernment at the Prime Minister's department of Public Administration where he promoted the first national plan for eGovernment. Afterwards he became general manager in CNIPA (Centro Nazionale per l'Innovazione della Pubblica Amministrazione) leading as a director the public local administration department. Giulio De Petra then became general executive manager for Innovation before for the Autonomous Region of Sardinia and later for the Calabria Region. It has been member of the Prime Minister's Committee for the Statistical Information Assurance and he was vice president of ASSINTER (National association of the regional public administration companies working in the ICT field). Since 2010 he has been working at Informatica Trentina, as executive manager.

Giulio De Petra founded and supported many national associations working on political and social issues of technological innovation, including "ICT for Democracy", "Network", "The NetCentury – for a Free Knowledge Society".

Giovanni B. Gallus - Fellow 2013-2015



Giovanni Battista Gallus is a lawyer, admitted before the Supreme Court, ISO 27001:2005 Certified Lead Auditor, founding member of the law firm "GM-LEX Studio Legale", and member of Array.eu, a network of IT Lawyers. He holds an LL.M. granted by the University of London - UCL, and a PhD by the University of Molise. He practices mainly in the field of Criminal Law, ICT Law, Copyright and Data Protection Law. He is teaching assistant in Information Technology Law and Advanced Information Technology Law at the School of Law of the University of Milan. President of the Italian Association of Cyberlawyers ("Circolo dei Giuristi Telematici"), and fellow of the Hermes Center for Transparency and Digital Human

Rights, and a passionate user and supporter of Free Software. Author and co-author of several books and arti-

cles, among which "Contenuti aperti, beni comuni" (McGraw-Hill, 2009) and "The new Information Technology Crimes" (Giappichelli, 2009).

Stefano Leucci - Fellow 2013-2015



Stefano Leucci holds a degree in IT Law. He focuses his studies on information security and computer-related crimes, with particular interest in corporate crimes and issues related to IPRs in the digital environment. He currently works as IT Law and forensics advisor at TrentoRISE, in the open data project in Trentino.

Thomas Margoni - Fellow 2008-2015



Thomas Margoni is a senior researcher at the Institute for Information Law. His research focus concentrates on the relationship between law (primarily copyright, designs, and patents), new technologies, and the Internet, from a comparative and international point of view. He is Marie Curie grant holder, and conducts a variety of research studies at the EU level. Thomas is regularly invited at international conferences, is a member of different initiatives connected with intellectual property, new technologies, and the Internet, and has served as an IP advisor for private and public entities. Since 2008 he has been a fellow at the Nexa center for Internet and Society, where he directs the free licences law clinic SeLiLi (<http://selili.polito.it>).

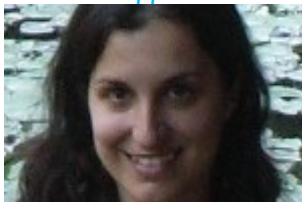
Elena Pavan - Fellow 2013-2015



Elena Pavan is the leading investigator and project manager of REACtION. She holds a degree in Communication Sciences (University of Padova, Italy, 2004) and a PhD in Sociology (University of Trento, 2009). She developed her expertise in the study and the use of social network analysis in various field of research (from supra national governance political processes to human-computer interaction) and in conjunction with other analytical techniques, such as lexicon-content analysis. Her most recent research interests pertain to the relationships between collective action/political participation and social media use. Within this area, she is working interdisciplinary to combine technical and social knowledges into the study of so-

cio-technical systems and is employing network analysis techniques and tools. She recently published in international journals and in relevant Italian journals. Her PhD dissertation on Internet governance and multistakeholderism has been released in January 2012 as a book for Lexington Publications. Elena is involved, on a pro bono basis, in the EINS Network for the Nexa Center, in particular within the research group focusing on "Virtual Communities".

Cristiana Sappa – Fellow 2011-2015



Dr. Cristiana Sappa holds a degree in Business Law, a post-graduate diploma in Intellectual Property and New Technologies and a PhD in Private Law, major Intellectual Property Law and Competition. Her main research fields are Intellectual Property Law and Competition Law, with a particular interest in digitization related legal issues. She was involved in projects related to Open Data: first, as project manager of the research project EVPSI and then as project coordinator of the LAPSI and the LAPSI 2.0 Thematic Network. She taught Business Law at ESCP Europe, as

well as in other Business Schools and Faculties both in France and in Italy.

Monica A. Senor – Fellow 2012-2015



Monica A. Senor is partner of Studio Legale Catalano Penalisti Associati law firm since 2001. She is a criminal lawyer, specialising in legal issues concerning data protection and criminal law related to new technologies; from a criminal procedure point of view, she specializes in digital and biometric forensics. She's a member of the IT Commission of the Turin Bar Association and because of this role she works with the Court of Turin on the implementation of the digitalization of the criminal

proceeding. She's the scientific coordinator and also teacher of a private training course for lawyers' state licensing exam. She contributes to online magazines, such as Medialaws and Penale.it and her papers have also been published by Giappichelli, EGEA, Springer and UTET Giuridica. She holds lectures and presentations on IT law matters.

Massimo Travostino – Founding Fellow



Massimo Travostino graduated in law from University of Turin (1993) and has a post-graduate degree in international and comparative law (1996). He is a practicing lawyer at Studio Legale Pecoraro-Travostino and assists public entities and private companies in commercial and contract law, with a focus on intellectual property/information technology and telecommunication sectors. He carries out regular teaching activity and is author of articles and essays.

Giuseppe Vaciago – Fellow 2012-2015

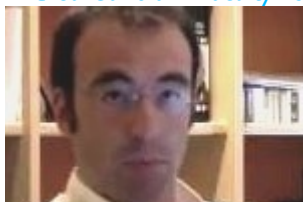


Giuseppe Vaciago has been a lawyer of the Milan Bar since 2002 and he is actually a partner of R&P Legal Firm. For the last 10 years his primary focus has been IT Law with a focus on cyber crime. He has assisted many national and international IT companies. Academically, he received his PhD on Digital Forensics from Università di Milano and he is a Professor at Insubria University (Varese and Como) where he holds a course on IT law. He attended Fordham Law School and Stanford Law School as a Visiting Scholar to expand his studies in his own particular research area. Giuseppe Vaciago is the author of many publications on cybercrime, including both scientific journals and textbooks, which have been adopted by the University

where he teaches. He has also delivered many lectures and presentations in both Italy and abroad. He is fellow at the Cybercrime Institute of Koln and member of the Editorial Board of Journal of Digital Investigation. As part of his Nexa fellowship, Giuseppe will propose research topics related to digital forensics and fundamental rights from an "Internet & Society" perspective and big data and social control.

1.5 Faculty Associates

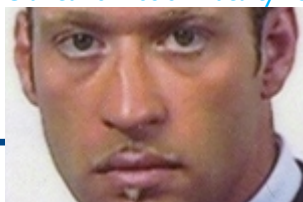
Andrea Cairola – Faculty Associate



Andrea Cairola is a journalist and an expert in international cooperation in the field of media development and promotion of freedom of expression. His didactic activities include teaching video-journalism at the School of Journalism of the Catholic University of Milan as well as in other academic settings and in grass-root projects. He holds a first advanced degree in Economics at the Bocconi University of Milan, a MA in International Journalism from the City University of London, and a certificate as Media Law Advocate by the Programme in Comparative Media Law and Policy of the Oxford University. He has participated to several conferences/academic-seminars in Europe and Asia on issues related to journalism

and information; as well as he contributed, edited or reviewed publications about comparative media law, press freedom, investigative journalism, Internet and society, and freedom of information. Since 2012, he is holding the position of "Communication and Information Adviser" at the Beijing Office of UNESCO, the United Nations agency with the mandate to promote free flow of information. For UNESCO, he also worked based in Kazakhstan, and Afghanistan and in the "Freedom of Expression Division" at the Paris-headquarter, dealing with media-development and press freedom in Afghanistan, Central African Republic, Balkans and the Transcaucasian countries and in other conflict/post-conflict/transition environments. Andrea also worked as a print and broadcast journalists, authoring video contributions aired on "Report" and "Presadiretta", prime-time investigative programmes on the Italian public broadcaster RAI; producing and hosting a current-affairs TV series for Current Tv Italy; collaborating with national newspapers and magazines such as La Stampa, D di Repubblica, and Il Fatto. In 2003, he has written and co-directed the award-winning documentary Citizen Berlusconi, produced by a pool of European and US public service televisions and aired in more than 20 countries around the world. He has participated to several conferences/academic-seminars in Europe and Asia on issues related to journalism and information; as well as he contributed, edited or reviewed publications about comparative media law, press freedom, investigative journalism, Internet and society, and freedom of information.

Giancarlo Frosio – Faculty Associate



Giancarlo F. Frosio is a qualified attorney with a doctoral degree (Scientiae Iuridi-

cafe Doctor, S.J.D.) in intellectual property law from Duke University Law School in Durham, NC. Additionally, he holds an LL.M. with emphasis in intellectual property law from Duke University Law School, an LL.M. in information technology and telecommunications law from Strathclyde University in Glasgow, and a law degree from Università Cattolica in Milan. His research focuses on copyright law, digitization, history of creativity, public domain, open access, Internet and user based creativity, intermediary liability of Information Service providers, network information economy, access to knowledge (A2K), and identity politics. He has served as the Deputy Director and Lecturer of the LL.M. in Intellectual Property law jointly organized by WIPO and the University of Turin for the past three editions. He is also a fellow of the Nexa Research Center for Internet and Society in Turin, where he acted as Chief Editor and author of the Final Strategic Report of COMMUNIA, the European Thematic Network on the Digital Public Domain funded by the European Commission within the eContentplus framework. Recently, he has also been appointed to the post of Research Fellow at the University of Nottingham. The post is one of the research projects of the new Centre for Copyright and New Business Models in the Creative Economy (CREATe) funded by the UK Research Councils. In August 2013, Giancarlo will join the Center for Internet and Society at Stanford Law School as a research and teaching fellow. He is the author of numerous legal articles and publications. At the moment, he is working on his book “Cumulative Creativity: From the Oral Formulaic Tradition to Digital Remix.”

Giorgio Ventre – Faculty Associate



Giorgio Ventre is Professor of Computer Networks in the Department of Electrical and Information Engineering of the University of Napoli Federico II where he is leader of the COMICS research group on computer networking and multimedia communications. He owns a laurea degree in Electronic Engineering and a PhD in Computer Engineering, both from the Federico II. From 1991 to 1993 he was with the Tenet Group at the International Computer Science Institute and the University of California at Berkeley. In 1993 he joined the University of Napoli Federico II first as an assistant professor. In 1999 Giorgio Ventre was co-founder of ITEM, the first national research laboratory of the Italian University Consortium for Informatics (CINI), and from 2004 to 2011 was President of CRIAI, a industrial research centre on ICT in Napoli. He is now Director of ITEM and member of the board of CINI. He has been principal investigator for a number of national and international research projects and in four EU-funded research projects on the Future Internet. Giorgio Ventre has co-authored more than 200 publications and he is senior member of the IEEE and of the ACM, and he is member of AICA and of IET. He is area editor for the Computer Networks journal, Elsevier. His researches are sponsored by the European Commission, the Italian Government and by several national and international companies. He has also launched four start-up companies from the research activities developed in his lab.

1.6 Alumni

Robert Bruno – Intern 2015
 Fiorenza Oppici – Intern 2013
 Alberto Segà – Staff 2013
 Maria Serena Ciaburri – Intern 2013
 Nadia Tecco – Staff 2012-2013
 Silvia Bisi – Fellow 2010-2012
 Elias Carotti - Research Fellow 2009-2012
 Irene Cassarino - Fellow 2009-2012
 Davide Bardone – Research Fellow 2009-2011
 Carolina di Vonzo – Fellow 2009-2011
 Corrado Druetta – Research Fellow 2009-2011
 Valentin Vitkov – Fellow 2009-2011
 Maria Crea – Staff 2011
 Federica Cedriano – Staff 2009-2011
 Antonella Giulia Pizzaleo – Research Fellow 2009-2010
 Ilaria Buri – Staff 2009-2010

Anna Piccitto – Staff 2009-2010

Maria Teresa Medina Quintana – Staff 2006-2008

Andrea Glorioso – Staff 2006-2007

ANNEX II – NEXA PUBLICATIONS

This section includes published articles, but also other products of the research of the Nexa fellows, encompassing reports and some selected blog-posts and presentations. Please, notice that the list is not comprehensive and just includes a set of contributions signaled by the Nexa fellows themselves.

All Nexa Staff members and Fellows are listed in bold type.

Research Publications

(books; articles; papers)

M. ALOVISO, *Mobile enterprise; sicurezza in movimento* (article), in Community Oracle, <http://c4s.clusit.it/views/Homepage.html>

M. ALOVISO, *Prima vittoria di Uber in Italia* (article), in Quotidiano giuridico, http://www.quotidianogiuridico.it/Civile/escluso_l_esercizio_abusivo_di_taxi_prima_vittoria_di_uber_in_italia_id1167253_art.aspx

M. ALOVISO, *Dare della Milf ad una collega configura causa di licenziamento* (article), in Quotidiano Giuridico http://www.quotidianogiuridico.it/Civile/dare_della_milf_ad_una_collega_su_facebook_configura_una_giusta_causa_di_licenziamento_id1166774_art.aspx

M. ALOVISO, *L'occhio di Droni, security e protezione dei dati personali: l'Italia all'avanguardia* (article), in La voce del diritto, 2014

M. ALOVISO, *L'utilizzo dei droni da parte dei Comuni* (article), in Quotidiano Giuridico, 2015

M. ALOVISO, *Cyberbullismo il tentativo di codice di autoregolamentazione*, 2014

E. BASSI, **D. LEONI**, **S. LEUCCI**, **J. PANE**, **L. VACCARI**, *Opening Public Deliberations: Transparency, Privacy, Anonymisation* (book chapter), in *AI Approaches to the Complexity of Legal Systems*, 2015
Simone Basso (2014)

S. BASSO, **J. C. DE MARTIN**, *Neubot: A Software Tool Performing Distributed Network Measurements to Increase Network Transparency* (PhD Thesis). 2014

E. BERTACCHINI, **C. DALLE NOGARE**, *Public provision vs. outsourcing of cultural services: Evidence from Italian cities*, in *European Journal of Political Economy*, 2014, <http://aperto.unito.it/handle/2318/149317#.VV4Mj9-uPCI>

L. MESKELL, **C. LIUZZA**, **E. BERTACCHINI**, **D. SACCONE**, *Multilateralism and UNESCO World Heritage: decision-making, States Parties and political processes*, in *International Journal of Heritage Studies*, 2014
<http://aperto.unito.it/handle/2318/149831#.VV4Rbt-uPCI>

E. BERTACCHINI, *Commons, Anticommons, and Semicommons* (encyclopedia voice), in *Encyclopedia of Law and Economics*, 2014 <http://aperto.unito.it/handle/2318/154689#.VV4Skt-uPCI>

V. FALLETTI, **E. BERTACCHINI**, *Gli amici dei musei tra legame col territorio e mecenatismo*, in *I pubblici della cultura*, 2014
<http://aperto.unito.it/handle/2318/158196#.VV4Tvd-uPCI>

L. CANOVA, **R. IEMMA**, **F. MORANDO**, *#WikiTrasparenza - Chi apre davvero i dati sulle risorse pubbliche* (working paper), 2015, <http://nexa.polito.it/working-paper/2015-1>

L. CANOVA, **R. IEMMA**, **F. MORANDO**, *Trasparenza della Pubblica Amministrazione: i primi risultati di un'analisi di dettaglio* (working paper), 2014, <http://nexa.polito.it/working-paper/2014-2>

L. CANOVA, **ANTONIO VETRÒ**, **MARCO TORCHIANO**, **R. IEMMA**, **F. MORANDO**, *OpenCoesione and Monithon - a Transparency Effort* (conference paper), *Share PSI 2.0 - Samos Summit*, 2014

O. RODRIGUEZ ROCHA, **I. VAGLIANO**, **C. FIGUEROA**, **F. CAIRO**, **G. FUTIA**, **C.A. LICCIARDI**, **M. MARENGO**, **F. MORANDO**, *Semantic Annotation and Classification in Practice* (article), in "IT Professional", 2015

A. COGO, *Proroga del diritto d'autore e sorte dei diritti futuri* (article), in *AIDA. Annali italiani del diritto d'autore, della cultura e dello spettacolo*, 2015, <http://aperto.unito.it/handle/2318/155085#.VV7Ajd-uPCI>

A. COGO, *Annotazioni in tema di tutela dell'opera inedita* (case comment), in *Giurisprudenza commerciale*, 2014, <http://aperto.unito.it/handle/2318/147081#.VV7Ajt-uPCI>

A. COGO, *Linking e framing al vaglio della Corte di giustizia dell'Unione Europea* (case comment), in *Giurisprudenza italiana*, 2014, <http://aperto.unito.it/handle/2318/155086#.VV7Ajd-uPCI>

R. IEMMA, F. MORANDO, M. OSELLA, *Breaking Public Administrations' Data Silos. The Case of Open-DAI, and a Comparison between Open Data Platforms* (article), in *eJournal of eDemocracy and Open Government (JeDEM)*, Vol 6, No 2, 2014

R. IEMMA, *Data Ingredients: smart disclosure and open government data as complementary tools to meet policy objectives. The case of energy efficiency* (conference paper), 8th International Conference on Methodologies, Technologies and Tools enabling e-Government, 2014

A. MANTELERO, *Il futuro regolamento EU sui dati personali e la valenza 'politica' del caso Google: ricordare e dimenticare nella digital economy*, in G. Resta, V. Zeno-Zencovich (eds.) *Il diritto all'oblio su Internet dopo la sentenza Google Spain*, Roma (book chapter) 2015

A. MANTELERO, *Toward a New Approach to Data Protection in the Big Data Era*, in U. Gasser, J. Zittrain, R. Faris, R. Heacock Jones (eds.) *Internet Monitor 2014: Reflections on the Digital World*, Cambridge, MA (book chapter) 2014 <https://thenetmonitor.org/research/2014>

A. MANTELERO, *Responsabilità del provider*, in F. Delfini, G. Finocchiaro (ed.), *Diritto privato dell'informatica*, Torino (book chapter), 2014.

A. MANTELERO, G. VACIAGO, *Social Media and Big Data*, in B. Akghar, A. Staniforth, F. Bosco (eds.), *Cyber Crime and Cyber Terrorism Investigator's Handbook*, Elsevier (book chapter), 2014.

A. MANTELERO, *The future of consumer data protection in the E.U. Rethinking the "notice and consent" paradigm in the new era of predictive analytics*, in *Computer Law and Security Review* (article), 2014, 30(6) <http://www.sciencedirect.com/science/article/pii/S026736491400154X>

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