



STAY TUNED TO THE FUTURE

Impact of Research Infrastructures for Social Sciences and Humanities and beyond

CONFERENCE BOLOGNA JANUARY 24-25, 2018

Organised by ESFRI Strategic Working Group on Social and Cultural Innovation in collaboration with Fondazione per le scienze religiose "Giovanni XXIII" (Fscire), Bologna

PURPOSE OF THE CONFERENCE

- To map the varieties of impact of SSH RIs (scientific excellence, economic, societal, cultural)
- To discuss the possible measurement of the impact (social and cultural innovation indicators and benchmarking)
- To elaborate how to increase the impact (how can we increase impact: reflection and data on paths of impact, etc.)

There is a growing consensus that it is important to be able to assess the value of research infrastructures, not only for research, but also for the society at large. But currently there is no unified framework for the impact assessment of investment in research infrastructures. Various conceptual frameworks exist in parallel comprising a range of observable direct and indirect effects and longer-term impacts, in particular economic impacts. However, most of these studies and frameworks do not concentrate on Social Sciences and Humanities. SSH Research Infrastructures are the most proper tool to take into account the future of society. Their experiences and variety stress the impact of SSH RIs beyond research: it affects the vision of decision makers and social actors. Furthermore core aspects of RI benefits, such as their impact on human and social capital formation and innovation, are not sufficiently explored. In this conference we want to focus on the societal impact of RIs for SSH, i.e. we want to discuss the broad scale of types of impact and methodologies for their assessment. On this background we invite discussion about ways to increase impact, in SSH and beyond.

PROGRAMME

<i>First day</i>	<i>Wednesday, January 24th</i>
12.00-13.15	Arrival and registration , followed by lunch until 13.15 Fscire, via san Vitale 114
13.30-14.00	Welcome and introduction (Welcome addresses and all working sessions during the two days of the Conference will take place at Teatro San Leonardo, via san Vitale 63) <u>Welcome addresses:</u> <ul style="list-style-type: none">- Alberto Melloni, Fscire, Italy- Massimo Inguscio, CNR, Italy- Giorgio Rossi, ESFRI / Università di Milano, Italy- Jacques Dubucs, ESFRI SWG-SCI, France- Bente Maegaard, Programme Chair / University of Copenhagen, Denmark <u>Introductory speech:</u> Ales Fiala , European Commission

14.00-16.00	<p>Session 1: Keynote session</p> <p><u>Chair:</u> Stefania Giannini, RISE Expert, European Commission</p> <ul style="list-style-type: none"> - Milena Zic-Fuchs, Croatian Academy of Sciences and Arts, Croatia - Patrizio Bianchi, Regione Emilia Romagna / Università di Ferrara, Italy - Yves Gingras, Université du Québec à Montréal, Canada
16.00-16.30	Coffee break, Fscire
16.30-18.00	<p>Session 2: Conceptualisation of impact</p> <p><u>Chair:</u> Jacques Dubucs, ESFRI SWG-SCI, France</p> <ul style="list-style-type: none"> - Elena Esposito, Universität Bielefeld, Germany - David Budtz Pedersen, Aalborg University, Denmark - Jelena Angelis, European Future Innovation System Centre, Belgium - Leonie van Drooge, Rathenau Institute, The Netherlands
19:00-22.00	<p>Gala Dinner, Villa Guastavillani</p> <p>Toast by Francesco Ubertini, Rector of Alma Mater-Università di Bologna</p> <p>Dinner Speech by the Hon. Romano Prodi, President of Fondazione per la Collaborazione tra i Popoli</p>

Second day	Thursday, January 25th
09.00-10.30	<p>Session 3: Measurement of impact of research infrastructures</p> <p><u>Chair:</u> Georg Lutz, FORS, University of Lausanne, Switzerland</p> <ul style="list-style-type: none"> - Matthew Woollard, University of Essex, United Kingdom - Riccardo Pozzo, Università di Verona, Italy - Jean Moulin, BELSPO, Belgium
10.30-11.00	Coffee break, Fscire
11.00-12.30	<p>Session 4: The demand for SSH research</p> <p><u>Chair:</u> Gilberto Corbellini, CNR, Italy</p> <ul style="list-style-type: none"> - Klaus Schindel, Federal Ministry of Education and Research, Germany - Matthias Reiter-Pázmándy, BMWFW, Austria - Alberto Melloni, Fscire, Italy - Juan De Dios Llorens Gonzalez, Ministry of Energy, Tourism and Digital Agenda, Spain
12:30-13.30	Lunch, Fscire
13.30-15.00	<p>Session 5: The five Social Science and Humanities ERICs and their impact</p> <p><u>Chair:</u> Bjorn Henrichsen, NSD-Norwegian Centre for Research Data, Norway</p> <ul style="list-style-type: none"> - Ron Dekker, CESSDA ERIC, Norway - Franciska de Jong, CLARIN ERIC, The Netherlands - Laurent Romary, DARIAH ERIC & Inria, Germany - Rory Fitzgerald, ESS ERIC, United Kingdom - Axel Börsch-Supan, SHARE ERIC / Max-Planck-Institute for Social Law and Social Policy, Germany
15.00-15.30	Coffee break, Fscire

15.30-17.00	<p>Session 6: Increase of impact through interaction of domains</p> <p>Chair: Bente Maegaard, University of Copenhagen, Denmark</p> <ul style="list-style-type: none">- Minh-Quang Tran, EPFL, Switzerland- Gelsomina Pappalardo CNR, Italy- Gabriela Pastori, BBSRC, United Kingdom- Jacques Dubucs, ESFRI SWG-SCI, France- José Luis Martinez, CSIC-ICMM, Spain- Ana Proykova, Sofia University, Bulgaria
17.00-17.45	<p>Closing session: Looking forward and wrapping up</p> <p>Closing words: Jacques Dubucs, ESFRI SWG-SCI, France, and Bente Maegaard, University of Copenhagen, Denmark</p>



SPEAKERS BIO AND ABSTRACT

Jelena Angelis

European Future Innovation System Centre

A topic of the socio-economic impacts of investments into the Research Infrastructures is hot on the international and national agendas at various levels: the funders, operators of RIs, users and society at large. Although several impact assessment approaches exist, a question remains if it is possible and sensible to have a more systemic view on the relationships between the impacts, accounting for the time-scale of impact diffusion and their cumulative effects. The ambition of the H2020 project RI Impact Pathways is to develop a logical model in a participatory co-design manner engaging RIs and other stakeholders in making explicit their assumptions and elaborating the logical chains in how they see various socio-economic impacts emerge and diffuse over time and across boundaries.

Dr Jelena Angelis is a qualified economist working in the field of evaluation and innovation policy formation since early 2002 - with SQW Consulting and Oxford Innovation in the UK, Technopolis Group (in 2011-2017) and since autumn 2017 as Research Director at a think-tank EFIS (European Future Innovation System) Centre. Over the last 7 years her focus has been on the topic of Research Infrastructures (RIs). She is also a member of the OECD expert group on socio-economic impacts of RIs. Jelena has been involved in evaluations, impact assessments and studies of programmes and measures linked to RIs in various scientific fields. Currently she is involved in two H2020 projects linked to RIs. eInfraCentral aims to define a common catalogue of services offered by European e-Infrastructures and to create a single neutral online gateway for users to browse and choose services. RI-PATHS project is set to develop models describing the socio-economic impact of RIs. Jelena holds a PhD from the Judge Business School at the University of Cambridge and a Master's from the Economics Faculty of the University of Vilnius (Lithuania).

Patrizio Bianchi

Regione Emilia Romagna / Università di Ferrara

A rich and heterogeneous literature defines the current phase as the 4th industrial revolution; most of this literature, however, reduces this great social transformation to technological change. History teaches us that the same technology can have different social impacts in different social context.

On the other hand, the great English industrial revolution, described by Adam Smith in 1776, has its roots in the political, scientific and cultural revolution of a hundred years earlier: with the Glorious Revolution, with Newton's Principia Mathematica, with the Two Treatises on Government of Locke a new vision of world and society was affirmed and this transformation in social relations allowed those technological innovations to become tools for the development of the country.

Today, we cannot understand the new industrial revolution based on internet, on robots, on artificial intelligence if we do not explore the great social, scientific and cultural transformations that are reshaping societies in the age of economic globalization without political globalization.

We cannot even evaluate the impact of these technologies on society if we do not have the tools to analyze the transformation of society in the long run, if we do not have the tools to analyze deeply the transformations of the sense that men have of their own humanity.

For these reasons the Emilia Romagna region is investing heavily in two pillars of development, on the one hand the Bologna Big Data Technopole, to have a world-class center to develop all the tools to tackle the big global goals, from climate change to the transformation of production systems; on the other hand the Foundation for religious sciences, as a hub of the European network of universities that study the great movements of societies that mark collective identities in today's world.

Europe must invest in large research infrastructures in the human and social sciences not only to strongly mark our own identity, so as to reduce the fears linked to global openness, that is to increase our social resilience to the global changes. Europe must make these investment in human and social research infrastructures to be able to face those global challenges that require powerful scientific and technological tools with a vision of the future that has at its center the real life of people, both individuals and the community; a vision built with all the intellectual tools that our culture has developed over the centuries behind us but that live in our current research.

Patrizio Bianchi is Full Professor of Applied Economics and Public Policy. He studied at the Bologna University and at the London School of Economics and Political Sciences. Professor at Bologna University, in 1997, he moved to the ancient University of Ferrara to found the Department of Economics and Management, that now is listed among the best economic research centres in Italy. He has been Rector of

the University of Ferrara and President of the Foundation of the National Conference of the Italian University Rectors. Since 2010 he is Minister of University and Research of the Regional Government of Emilia Romagna. He has worked as expert with European and International institutions on industrial and economic policies. He has published about 200 scientific articles and almost 40 books on economic and social analysis of structural change, economic dynamics and public policies for development.

Axel Börsch-Supan

SHARE ERIC / Max-Planck-Institute for Social Law and Social Policy

SHARE, the Survey of Health, Ageing and Retirement in Europe, is an infrastructure of longitudinal micro data to better understand ageing and its social and economic challenges. It measures individual health, economic and social living conditions in 27 European countries and Israel. Data cover about 230.000 interviews of about 120.000 respondents aged 50 and over. They include detailed income and assets, social environment, physical health, blood and cognitive batteries.

After studies in mathematics and economics at Munich, Bonn and M.I.T. and professorships at Harvard, Dortmund and Mannheim, Axel Börsch-Supan became Director of the Munich Center for the Economic of Aging (MEA) at the Max Planck Society. He leads the Survey of Health, Ageing and Retirement in Europe (SHARE), is member of several academies of science and is active in policy consulting at the national level, the EU, OECD and World Bank, among others.

Gilberto Corbellini

CNR

Franciska de Jong

CLARIN ERIC

CLARIN aims to deliver infrastructural support for the study of language and speech as data that reflect social phenomena and cultural dynamics. The societal impact that can be expected from this data infrastructure is therefore as diverse as the angles of study covered by SSH. The open science paradigm helps to cater for the diversity within the communities of use. But the emerging support for reuse and repurposing beyond disciplinary boundaries also brings a growing potential for research in multidisciplinary settings and for integrating datasets from multiple linguistic origins and regions. The increasing potential for data integration can in principle stimulate comparative research across linguistic, national, cultural and temporal borders, but this requires reinforced collaboration between scholarly domains on the development of models for the integration of heterogeneous data types and on conceptual frameworks that can help to validate the outcomes of research in the social sciences that is (partly) based on language data. The SSH RIs can support and stimulate this development.

Franciska de Jong is the executive director of CLARIN ERIC, the research infrastructure for language resources that provides scholars in the humanities and social sciences with seamless access to digital language data and processing tools. She is a professor of e-research at the department of Humanities at Utrecht University and has background in language and speech technology. She has been involved in a wide range of projects aiming at advancing the access to digital libraries, ranging from news data, folk tales, oral history collections and scientific information.

Ron Dekker

CESSDA ERIC

The Consortium of European Social Science Data Archives (CESSDA) is a distributed social science data infrastructure with currently 17 members (www.cessda.eu). We work on FAIR data and are developing a social science data platform as part of the EOSC.

CESSDA is an ESFRI Landmark, and in June 2017 it became a European Research Infrastructure Consortium (ERIC).

CESSDA's goal is to bring together the expertise of the CESSDA Service Providers and realise an infrastructure that enables researchers to perform high quality research.

It has a small Main Office in Bergen and each Member assigned a Service Provider that functions as a national social data archive and data services organisation. Via CESSDA these Service Providers join resources and expertise to realise this top data infrastructure for social science data, and the national Members discuss and create an overarching CESSDA strategy.

A key challenge is to realise the EOSC - using the FAIR principles, taking into account the distributive character of infrastructures within social sciences, and the sensitivity of many social science data - requiring safe & secure access.

At CESSDA we follow a stepping stone strategy in realising the social science data cloud. We are using the FAIR principles and have realised the 'F'. The CESSDA Data Catalogue currently contains 100.000+ studies and will become available in Spring 2018. We have pathfinder projects on the other principles and on secure access. Our stepping stone strategy is to work out the other FAIR principles: especially legal aspects of Accessibility, development of data clusters to improve Interoperability, and tools to increase the Reuse of data - including reuse of sensitive data.

We also stress the importance of Skills and elaborate on Training activities - taking the data life cycle as starting point. This means providing tools for data owners, but also focus on users, e.g. by creating user communities around data clusters, and how to share expertise in a distributed data infrastructure.

To realise the Social Data Cloud, CESSDA will cooperate with the other SSH ERICS and international infrastructures.

Ron Dekker is the director of CESSDA ERIC, the Consortium of Social Science Data Archives, with its main office in Bergen, Norway. CESSDA is a European Infrastructure with 17 members (countries) and combines the work and expertise of these countries' social science data service providers, see www.cessda.eu.

Ron studied econometrics and worked for ten years in labour market research at Dutch universities. He was at the national research council for almost twenty years - running a data agency, program committees and in general management (institutes, infrastructure and open science). This included secondment to the Dutch government for project leadership on Open Science of the Dutch EU Presidency in 2016 and as national expert at the European Commission in Brussels in 2017.

Jacques Dubucs SCI-SWG

The very notion of the impact of research (infrastructures) is still dominated by the paradigm of technological innovation and patent taking which characterizes manufacturing industry. We need today a broader notion of impact, suitable to service industry, knowledge societies and Human and Social Sciences (HSS). To achieve this objective, one should firstly take into account the economic value of large sets of data as linguistic and iconic corpora or collections of informations dealing with the social, sanitary and ideological situations of citizens, but one has also to appreciate and, if possible, to measure the value of such data for inclusiveness and resilience of societies.

Jacques Dubucs' field of research is philosophy, logic and cognitive science. He is Senior Scientist at the Centre National de la Recherche Scientifique (CNRS), member of the "Sciences, Norms, Decision" Research Lab (Paris Sorbonne Université/CNRS), member of the French National Committee for Philosophy of Sciences (Academie des Sciences) and the Head of the Human and Social Sciences Department at the French Ministry for Higher Education, Research and Innovation. He is also the Chair of the Societal and Cultural Innovation Strategic Working Group of ESFR

Elena Esposito Universität Bielefeld, Fakultät für Soziologie

'The Impact of Big Data'

The spread of Big Data involves a transformation in the use and meaning of data for sciences and for society as a whole, and in particular for social sciences and humanities. Referring to a theory of society and to performativity studies, the presentation shows how the problem of assessing the impact of infrastructures in different areas of society is changing, and specifically how the forms and methods of prediction are changing. Assessment tends to be understood as a learning tool.

Elena Esposito is Professor of Sociology at the University Bielefeld (D) and at the University of Modena-Reggio Emilia (I). She published many works on the theory of social systems, media theory, memory theory and sociology of financial markets. Her current research projects focus on a sociology of algorithms. Esposito's recent publications include *Artificial communication? The production of contingency by*

algorithms, «Zeitschrift für Soziologie», 2017; *Algorithmic memory and the right to be forgotten on the web*, «Big Data & Society», 2017; *Critique without crisis: Systems theory as a critical sociology*, «Thesis Eleven», 2017.

Ales Fiala
European Commission

Rory Fitzgerald
ESS ERIC

The ESS has over 100.000 registered users and there are over 3000 publications that have used ESS data. The ESS recently commissioned an impact case study that used a range of qualitative and quantitative measures to assess the impact of the infrastructure. This presentation will give an overview of the methodology used in the study and present some of the key findings.

Rory Fitzgerald is Professor of Practice in Survey Research at City, University of London UK and Director of the European Social Survey (ESS) ERIC. The ESS is a rigorous comparative biennial survey of changing attitudes and values in up to 34 European countries. Rory directs the ESS Core Scientific Team and its National Coordinators Forum. In 2013 the ESS became an ERIC and in 2016 was declared a landmark infrastructure by the European Strategy Forum for Research Infrastructures in Europe (ESFRI). Rory is a survey methodologist with expertise in Total Survey Error, questionnaire design and pre-testing as well as survey non response. He is also the Coordinator of the H2020 cluster project 'Synergies for Europe's Research Infrastructures in the Social Sciences'.

Stefania Giannini
RISE Expert

Yves Gingras
Université du Québec à Montréal

'The Specificity of Social and Human sciences and its impact on Research Evaluation'
Any attempt at measuring the "impact" of research in Social and Human Sciences must start with the recognition of the specificity of these fields compared to the natural sciences. We will analyze the perverse effects on research in SHS generated by the use of impact indicators designed for the natural sciences and which are not consistent with the nature of SHS research.

Yves Gingras is scientific director of the Observatory of Science and Technology (OST), which celebrates in 2017 its 20th anniversary of foundation. He is also professor in the History Department and Canada Research Chair in History and Sociology of Science at the Université du Québec à Montréal. He has published many books in history and sociology of science and papers in the field of bibliometrics. His most recent books are *Bibliometrics and Research Evaluation. Uses and Abuses*, (Boston, MIT Press, 2016) and *Science and Religion. An Impossible Dialogue* (London, Polity Press, 2017). His research covers the transformation of the universities, science policy, research evaluation and the dynamic of scientific disciplines.

Bjorn Henrichsen
NSD-Norwegian Centre for Research Data

Massimo Inguscio
CNR

Juan De Dios Llorens Gonzalez
Ministry of Energy, Tourism and Digital Agenda

Scientometrics and impact evaluation are currently scientific disciplines with a quite long history (Lotka, Bradford, Merton, Price, Gardfield, ...). It is a huge challenge. Our approach is far humbler. We use language technologies (LT). LT are a diverse set of technologies that are paving the way for an ever deeper automatic understanding of human language. This session will present tools based LT that allow large collections of texts to be automatically analyzed for the purpose of discovering the subjects they deal with and establishing a metric to measure topic distance between texts. These tools have been used to design the new Spanish State Plan for Scientific and Technical Research and Innovation. They are also being used to obtain an overview of the subjects, and their evolution over time, of applications for public aids, and to narrow the scope of application's evaluators' search to similar applications by subject. They have also served to characterize the ICT job offer thematically and to detect companies that carry out e-commerce by taking advantage of the textual information on web pages. The distinctive feature of these tools is that they use text as a source, although they can be combined with structured information (metadata) to refine information retrieval. The presentation will continue with conclude with the presentation of the Spanish Plan for the Advancement of Language Technology (www.plantl.es).

Granadinian. Telecommunications Engineer. Civil servant. 21 years of public service working in diverse areas ranging from technical monitoring of electromagnetic emissions to language technologies, including cybersecurity, electronic ID and electronic invoicing, among others. The main lesson learned is the value of multidisciplinary work. The main satisfaction, the public service.

Georg Lutz
FORS, University of Lausanne

Bente Maegaard
University of Copenhagen

José Luis Martínez
CSIC-ICMM

Physics and Engineering is a Research domain where Large Research Infrastructure (RI) is part of the core business with an extended tradition. RI in physics, and extremely large and costly projects is imbibed in the working procedures of the Physics researchers from long time ago. Also, the Physics RIs are usually large and single site facilities, and very rarely dual site or distributed. During many years, the socio-economical impact of the Physics RI was "granted", but really there was no tradition to calculate or to demonstrate it. Only relatively recently, the socio-economical impact of the RI in Physics is studied and calculated systematically. In principle, the Socio-Economical Impact (or the Cost Benefit Analysis, CBA) was considered easy to calculate to this type of installations. However, beside the contribution to the knowledge progress (preprints and scientific publications) and the Human Capital formation, the other elements as Technological spill-overs, cultural effects or existence values are more difficult to estimate. Even very recent documents from OECD (2014, 2016) and European Commission (2014) point out the intrinsic difficulty and complexity of this type of evaluation.

José L. Martínez, presently is Professor at Institute of Material Science of Madrid, belonging to the Spanish Research Institution, CSIC. Formally, he was Deputy Director General for Research at the Spanish Ministry for Research. Also, Associated Director at the Institut Laue Langevin in Grenoble (France). Recently, he was Executive Director of ESS-Bilbao, the Spanish institution in charge of the Spanish participation at the European project European Spallation Source (ESS-ERIC), under construction in Lund (Sweden). J.L. Martínez is member of the Spanish delegation in ESFRI forum, since 2013, and previous member of the Executive Board of ESFRI. Presently is Chair of the Physics and Engineering Strategic Working Group (PSE-SWG) of ESFRI.

Alberto Melloni
Fscire

'The demand for SSH research'

The demand for SSH research has two origins: on one side, a fertile and stable activity in the many fields of SSH research; on the other, the capability to understand which line of research can play a role in making society more social and more human. My test case comes from the research experience of our institute and our EU/Mena/Russian research community. As it is in the climate change and global warming issues, also in the religious climate change and the religious global warming of the past 40 years scholarship is a key issue. The same triangle - scientists, decision makers, public opinion - which brought common resolutions on emissions, can be activated to produce fertile and stable activity, open access to resources, and increase the understanding of the EU as a place of rights and freedom coming from a history where one of the most divisive issue - (ir)religiosity and its diversity - through historical research appears like a repository of social and human understanding.

Alberto Melloni is an historian of Christianity known especially for his work on the Second Vatican Council of the Roman Catholic Church. He is Professor of History of Christianity at the University of Modena and Reggio Emilia, holder of the Unesco Chair for Religious Pluralism and Peace at the University of Bologna. He has been a member of Fscire since 1982, Vice-Secretary from 2002 to 2006 and General Secretary since 2007. Founded in 1953, the Foundation is one of the most important research centers on the history of Christianity in Europe.

Jean Moulin
BELSPO

'Measurement of impact of research infrastructures'

A set of quantitative and qualitative indicators of direct and indirect impact that are currently collected and used by RIs will be reviewed, including the specificities of the SSH RIs and of the e-RIs. The respective needs of science policy makers, funders, hosting organisations and RI managers will be discussed.

Jean Moulin, PhD in physics, spent most of his career in the Belgian Federal Science Policy Office (BELSPO) where he has been involved in international cooperation on Research Infrastructures since 1990: member of ESFRI (2002-2016), chair of the WG on Innovation (2012-2015), delegate to EU FP Programme Committees (1989-2014), delegate to the OECD Megascience and Global Science Fora (1992-2014), member of the Council of the European Synchrotron (ESRF) (2002-2015), chairman of ESRF's Council (2011-2013). He is currently expert for the GSF on RI matters, member of the H2020 Advisory Group for RIs and involved in European projects.

Gelsomina Pappalardo
CNR

The assessment of socio-economic impact for large distributed RIs, as in the case of Environmental RIs, lacks well-established models. Beside the impact on innovation, related to the cooperation with the private sector, and the impact on the specific research area related to the improvement of knowledge (excellent research), it should be considered that Environmental RIs play a key role in terms of services for society, and this impact should be properly assessed.

Many of the most urgent challenges human societies are facing, such as climate change, energy use, water availability, food security, land degradation, hazards and risks, life in mega cities and human health are closely related to complex interactions with the environment and ENV RIs provide new knowledge and methodology in environmental sciences to tackle these environmental challenges. A stronger impact is expected with the proper link of ENV RIs data to other disciplines (e.g. societal scientists) under a holistic approach.

Dr Pappalardo is the chief scientist of the CNR-IMAA Atmospheric Observatory (CIAO) at the Institute of Methodologies for Environmental Analysis of the National Research Council of Italy. She is the coordinator of the EU H2020 project ACTRIS 2 (Aerosols, Clouds, and Trace gases Research Infrastructure), the EARLINET (European Aerosol Lidar Network) speaker and co-chair of GALION, the GAW Aerosol Lidar Observation Network. She is member of the Scientific Advisory Group for Aerosols of the Global Atmosphere Watch (GAW) aerosol program of WMO and of the Scientific Advisory Group on Volcanic Ash

(VA-SAG) of WMO and IUGG supporting ICAO (International Civil Aviation Organization). She is the Chair of the ESFRI Strategic Working Group for Environmental Science and Italian delegate in the ESFRI Forum.

Gabriela Pastori
BBSRC

The ESFRI Health and Food landscape of Research Infrastructures (RIs) considers the current and future challenges in Europe and the role of RIs, notably in the provision of healthcare and of sustainable and healthy food in the context of an ageing population, a changing climate and limited land availability and resources. The assessment of socio-economic impacts stemming from RIs' activities is important to provide evidence of the specific societal and economic benefits derived from Health and Food distributed RIs, to demonstrate effective use of resources, accountability for public money and increased efficiency, to inform future decision making and evidence for policy-making, and towards securing their sustainability. A coherent methodological framework to capture social and economic impact and benefits of RIs at domain level and at the interface between domains is required.

Dr Gabriela Pastori is Head of International Relations at the Biotechnology and Biological Sciences Research Council (BBSRC) in the UK. Gabriela has a PhD in life sciences, and obtained her Habilitation à Diriger des Recherches at the University of Paris XI in 2003. After working several years as academic and researcher, Gabriela moved to BBSRC's Head Office with a portfolio on Engineering and Biological Systems, and then on International Relations. Gabriela is appointed by the Minister of Research to represent the UK as ESFRI Forum delegate, and is Chair of the ESFRI Strategic Working Group on Health and Food. Gabriela is member of the UK Research and Innovation Infrastructure Advisory Board, overseeing the process for a new UK Roadmap. Gabriela is regular reviewer and sits at a number of national evaluation panels in EU countries.

David Budtz Pedersen
Aalborg University

The contributions of science to society are so varied, and mediated by external factors, that indicators used in impact assessment cannot be universal metrics. Instead, they need to be developed for given contexts and used alongside qualitative assessment. In this presentation I will introduce key building blocks for designing Responsible Impact Assessments by allowing research organisations to have significant influence on how their impact is represented and communicated. Moving beyond simplistic indicators for publications or economic benefits, the presentation outlines a new approach to assessing research impact and its consequences for wider networks of policy-making, funding and research support.

David Budtz Pedersen is Professor and Co-Director of the Humanomics Research Centre in Copenhagen, Denmark. His research focuses on research management, impact assessment, and science-based policy-making. Dr Budtz Pedersen is Strategic Adviser to the Danish Ministry of Higher Education and Science. David has about 100 entries on his list of publications ranging from research papers, research monographs, edited volumes, policy reports, op-ed columns and newspaper articles. He has given 200+ academic talks and invited lectures. He is the recipient of several research grants from the Danish Council for Independent Research (2008-2011), The Velux Foundation (2012-2019), The Danish Ministry of Higher Education and Science (2016-2017), The European Commission Horizon 2020 (2016-2019) and The Obel Family Foundation (2016-2019). David regularly works as a science policy adviser, dealing with impact, evaluation, policy, strategy and science communication. He tweets as @Humanomicsmap.

Riccardo Pozzo
Università di Verona

'Cultural innovation' sounds like an oxymoron, no doubt. It is not, though. It is something real that tops up social and technological innovation. In fact, integration requires spaces of exchange in which citizens engage in the process of sharing their experiences while appropriating common goods content. We are talking of public spaces such as libraries, museums, science centres, but also of any place in which co-creation activities may occur. At this level, social innovation becomes reflective and generates cultural innovation. Insisting on reflexivity helps to raise awareness for the importance of framing issues around engaging with science and society, identifying problems and defining solutions. How can we measure 'cultural innovation'? The answer is, as a result of co-creation.

Riccardo Pozzo received his M.A. at Università di Milano in 1983, his Ph.D. at Universität des Saarlandes in 1988, and his Habilitation at Universität Trier in 1995. He has been Chair of the History of Philosophy at Università di Verona and Director of the Institute for the European Intellectual Lexicon and History of Ideas of the National Research Council of Italy. From 2012 to 2017, he served as Director of the Department of Humanities and Social Sciences, Cultural Heritage of the National Research Council of Italy. Elected to the Institut International de Philosophie and appointed member of the Horizon 2020 Programme Committee Configuration Research Infrastructures.

Romano Prodi

Fondazione per la Collaborazione tra i Popoli

Ana Proykova

Sofia University

The development of a Research Infrastructure that links various local efforts regarding Open Access in the SSH domain is clearly needed. The SSH domain differs from the science, technology & mathematics (STM) domain, notably when it comes to using books and monographs as an important vehicle for scientific output. Moreover, one can expect that in the near future we will see other forms of scientific communication emerge. Matters are complicated by the fact that different languages are used in scientific communication, unlike the STM domain where the English language is currently de facto a standard.

A pragmatic view in the development of a SSH RI: Shared services, focusing on enhancing and improving the services offered locally; EOSC integration, with emphasis on development of metadata and machine-readable content; global services for certification, resource discovery, and multi-party collaboration.

Ana I. Proykova, Ph.D., Doctor Habil, is a Full Professor at the University of Sofia and the Head of the High Performance Computing Laboratory of the Sofia Tech Park. In her professional career she has worked at universities around the world, including Belgium, Germany, Israel, Italy, the USA, Japan, Singapore, Taiwan and in the 1980s - the USSR. She has over 30 years of experience in the field of computational physics with achievements in phase transitions of low-dimensional systems, simulation techniques and data analysis. She coordinated the Work Package on Modeling and Simulation of the CoNanomet FP7 project. Currently she coordinates the WP Advancement in research e-infrastructure in the GATE H2020 project on Big Data for Smart Society and is the Advisory Board member of the InRoad H2020 project. Dr. Proykova is a member of the Program Committee on the Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing, and Biotechnology (H2020) and a member of the Scientific Committee on Health, Environmental and Emerging Risks (SCHEER), European Commission. She is the Chair of the ESFRI Strategic Working Group on Data, Computing and Digital Research Infrastructures and Bulgarian delegate in the ESFRI Forum.

Matthias Reiter-Pázmándy

BMWF

The presentation will give an overview about the demand for SSH-research infrastructures in Austria indicated by the number of institutions and individual researchers that are using them. The use of SSH-RI in Austria is currently being looked upon by a project of the Austrian Federal Ministry for Education, Science and Research. The aim of the project is an analysis of the use of international research infrastructures by Austrian research organisations between 2013-2018. The research organisations that are looked at are primarily the 22 universities in Austria, the Academy of Sciences, the Institute for Science and Technology (IST) Austria, and other selected non-university research organisations. The analysis should support decision-making in the negotiations on the performance contracts with the Austrian universities and other strategic processes. A preliminary result of the analysis will be presented, including institutional as well as individual user numbers from research infrastructures from the ESFRI-Scientific Domain of "Social and Cultural Innovation" in Austria.

Matthias Reiter-Pázmándy is Deputy Head of the Department for Social Sciences and Humanities in the Directorate General for Scientific Research and International Relations in the Austrian Federal Ministry for Education, Science and Research (BMBWF). After studying Sociology he worked several years in Market and Opinion Research after joining the Ministry. He has been representing Austria in several committees in the

field of research policy and SSH. Currently he is delegate in the Programme Committee for Societal Challenge 6 in Horizon 2020, in the General Assemblies of the research infrastructures CESSDA (Consortium of Social Science Data Archives in Europe), ESS (European Social Survey) and SHARE (Survey of Health, Ageing and Retirement in Europe), as well as in the ESFRI Strategic Working Group on Social and Cultural Innovation.

Laurent Romary
DARIAH & Inria

In our short presentation, we will try to show how impact can take a variety of forms that may not be intended in a strictly technocratic sense of the term. In particular, we will address issues related to the dissemination of knowledge, which lies at the core of a distributed infrastructure for the humanities such as DARIAH. We will also insist on the important role and duty we may have in designing open science policies for our communities.

Laurent Romary is Directeur de Recherche at Inria (France), within the team ALMAnaCH, and director general of DARIAH. He carries out research on the modelling of semi-structured documents, with a specific emphasis on texts and linguistic resources. He has been active in standardisation activities within ISO committee TC 37 and the Text Encoding Initiative. He has also been working since many years on the advancement of open access.

Giorgio Rossi
Università di Milano / ESFRI

Klaus Schindel
Federal Ministry of Education and Research

Germany's Federal Ministry of Education and Research is highly engaged in the development and application of digital technologies in social sciences and humanities. Scientific progress of new kind is achieved by linking self determined identification of research targets to user-driven technology development, often interdisciplinarily. Germany's strong role in multi European research infrastructures proved being long-term oriented and beneficial for building the European Research Area.

Klaus Schindel is the officer in charge of strategic planning and funding of Digital Humanities in Germany's Federal Ministry of Education and Research (BMBF). He is deeply involved in European research infrastructures for social sciences and humanities e.g being a member of the ESFRI Strategic Working Group on Social and Cultural Innovation and of several ERIC bodies. In his scientific education and early academic career as a biologist he graduated from Trent University/Canada (B.Sc.), Freiburg University/Germany (Dipl. Biol.) and Göttingen University/Germany (Dr. forest.). He worked as a science councillor to the BMBF and entered the Ministry in 2002. Ever since, he held various positions in the Sustainability Department and International Department.

Minh Quang Tran
EPFL

A description of the activities of the ESFRI SWG will be first given. They include the technical assessment of past ESFRI projects as well as projects. Another important work of our Group is the preparation of the Landscape analysis in the field of energy. I would like to give then some personal views on the importance of Social Sciences and Humanities for Energy development, specially for new technologies.

Minh Quang Tran is member of the ESFRI SWG on Energy since 2014. He is Prof. Emeritus of Plasma Physics at the Ecole Polytechnique Fédérale de Lausanne and is active in the design of the future fusion DEMONstration reactor. In his career, he has been responsible for the joint European activities in the field of fusion plasma. One of the activities was in the field of Socio-Economics studies for fusion, which encompassed cost of electricity and societal acceptance.

Francesco Ubertini
Alma Mater-Università di Bologna

Leonie van Drooge
Rathenau Institute

'The impact of research (infrastructures) starts at the end'
It is not enough to understand Research infrastructures (RIs) as contributing to academic impact only; their reason to exist relates to broader impacts on the economy, society, culture, and/or human capital. However, impacts may be manifested in many different ways. Also, it is not always evident what evidence to provide in case of assessments. Leonie van Drooge and her colleagues participate in the ACCELERATE project, with the objective to develop an impact assessment approach for RIs. Given that meaningful evaluation takes into account objectives, the approach starts at the end: a generic objective or impact. From there, a joint understanding is developed of the necessary preconditions for the specific impact to occur. Indications that relate to the emergence of this impact are identified: practices, policies, results, cases, examples. These indications can serve as evidence.

Leonie van Drooge is a senior researcher at the Dutch Rathenau Institute. She has extensive experience in the field of science policy, in particular in the area of societal impact of research, impact of challenge oriented and research intensive initiatives and research evaluation. She has been/is involved in a number of projects dedicated to the organization and evaluation of societal impact, such as FP7 SIAMPI, COST action ENRESSH, H2020 ACCELERATE (impact of research infrastructures) and Valorisation of social science and humanities research.

Matthew Woollard
University of Essex

This presentation has two key aims. First, to explain, promote and communicate methods of measuring impact (defined below) in European Research Infrastructures. Second I shall examine some of the commonalities of approach in using impact measures as a factor in funding, and refunding (sustainability) RIs. By implication I shall promote the maturity of the SCI community in this area and also by implication I want to try and turn the impact of a service into a mechanism which funders can use to continue their investments into data service infrastructure.

Matthew Woollard is the Director of the UK Data Archive (University of Essex) and the Director of the UK Data Service. His primary responsibility is in providing leadership and strategic direction for the UK's national social science data service, the UK Data Service (which is also a Service Provider to the new CESSDA ERIC). He is also responsible for setting and ensuring the strategic goals of the UK Data Archive which include the promotion of best practice in data curation, data management and data security; driving archival innovation, advancing the professionalization of data service infrastructures and integrating these activities into the UK Data Service. He is a historian by training, but has spent most of his career in data service infrastructure.

Milena Žic Fuchs
Croatian Academy of Sciences and Arts

The envisaged topics and breadth of the conference dedicated to "Impact of Research Infrastructures on SSH and Beyond" cover the most important issues needed to streamline the concept of 'impact', and possibly achieve a deeper understanding of what it is, and what its implications are. One of the issues that, to my mind, is of exceptional importance and which needs further elaboration and development, refers to the concept of 'scientific excellence', or more precisely, how scientific excellence is measured in the context of research infrastructures. More specifically, the question arises as to how to adequately integrate efforts, activities and work done within RIs into the still very much bibliometrically oriented evaluation of 'scientific excellence'. Secondly, what we see emerging within the ESFRI landscape are infrastructures that are in their nature 'multidisciplinary' (often with SSH disciplines) and which still have to find their rightful place, especially seen from the point of view of the possible impact that they may have in the sphere of research, but also in the sphere of social and cultural innovation.

Milena Žic Fuchs is Full Professor at the University of Zagreb. In 2010, she was elected Fellow of the Croatian Academy of Arts and Sciences and, in 2013, a member of Academia Europaea. She served as the Croatian Minister of Science and Technology from 1999 to 2000. From 2009 to 2012, she was Chair of the Standing Committee for the Humanities of the European Science Foundation. From 2013 to 2015 she was Chair of the Scientific Review Group for the Humanities of the ESF. During her mandates, she instigated policy incentives for Multi- and Transdisciplinary Research as well as Digital Humanities. From 2012 to 2013, she was member of the EC Expert Group for ESFRI Roadmap, and is at present member of numerous Science Advisory Boards at European level in the domains of Research Infrastructures and SSH. From 2008, she was member of the ERC Advanced Grant Panel SH4 “The Human Mind and Its Complexity” and chaired the Panel from 2014. From November 2016 she is member of the High Level Group on Maximising Impact of EU Research and Innovation Programmes, set up by the European Commission, chaired by Pascal Lamy.



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