



NESSI - the European Technology Platform for Software, Services and Data

Dear NESSI Member,

We are glad to present to you to the May-June edition of the NESSI News 2014. This issue will focus on the NESSI Summit 2014 that was held on the 27th of May in Brussels and on the next NESSI Member's Day that will be held on 20-21 November in Barcelona. This newsletter will also present NESSI 's current activities, the latest developments concerning Software Engineering and Software Services, as well as policy developments for Big Data Value in Europe under the research programme Horizon 2020.

As always, we hope that you find this edition of NESSI news interesting and would welcome you to follow us on Twitter (@ NESSI_ETP) or to check out our website www.nessi-europe.eu.

Best regards,
NESSI Office

NESSI Summit 2014

Report of the event

On the 27th May, Sofitel Hotel in Brussels, more than 80 people participated in interesting discussions about the European software industry, software engineering and "Big Data Value" for Europe. Researchers, policy makers, and industry representatives from Europe were present at the NESSI Summit 2014 and contributed to make the conference a great success with many very interesting presentations and a very good atmosphere for discussion.

After a welcome speech by Jan Sundelin, co-chair of the NESSI Board, and an opening speech by Mario Campolargo, Director of Directorate E "Net Futures" in DG CONNECT, the participants had the opportunity to

NESSI's current activities

As presented during the NESSI Summit 2014, the NESSI ETP is proposing to the European Commission a **contractual Public-Private Partnership (cPPP)** on Big Data Value. The aim of the cPPP is to increase the amount of productive European economic activities and the number of European jobs that depend on the availability of high quality data

attend to three enriching panel discussions and exchange with the speakers.

The first addressed the major statement of the ISTAG report 2012 "Software Technologies, the Missing Key Enabling Technology", outlining that "Missing the strategic importance of software technology as a key enabling technology will lead to a significant drawback for global competitiveness". The two members of the European Commission present in this panel, Giuseppe Abbamonte, director for media and data in DG Connect, as well as Jorge Gasos, head of sector for Cloud and Software Research and Standards, provided their policy expertise to tackle these issues. Giuseppe Abbamonte outlined that research and innovation was fundamental for the future of Europe and that Software is a key driver for productivity and growth. Mr. Gasos presented the great potential of Cloud computing, and explained that Europe's cloud strategy aims at supporting industrial and public sector innovation by providing new business opportunities. The second panel focused on research and innovation potentials for software, services and cloud. Another statement from the ISTAG Report, claiming that "*A Strategic Agenda for Software Technologies in Europe should be created in cooperation with Industry, Academia and Public sector*", was discussed. It was moderated by Josef Urban, Head of Software and Security Research at Nokia, who pointed out that today the telecommunication equipment providers' [revenue share based on Software and Services](#) was much more important than the revenue share based on hardware. Michel Cosnard, Chairman and CEO of INRIA, insisted on the fact that NESSI's responsibility was to raise awareness of Software importance in Europe and to put this topic higher on the agenda, explaining that "*Software is now everywhere*". Andreas Metzger (Head of Adaptive Systems and Future Internet Applications, Paluno, The Ruhr Institute for Software Technology, the University of Duisburg-Essen, gave a [presentation](#) about the Software Engineering White Paper (see column NESSI's current activities), underlying the fundamental importance of Software Engineering in developing key sectors such as Cloud computing, Cyber Physical Systems, and Big Data. He also pointed out the need to define a clearer Software Engineering Research Strategy. On the Panel were also present Ken Ducatel, (Head of Unit E2, Software and Services, Cloud, DG Connect, European Commission) and Michal Skubacz, (Head of Business Analytics & Monitoring Research, Corporate Technology, Siemens).

The last panel tackled the issue of Big Data Value innovation for Europe, discussing the following statement to single out the opportunities and challenges in this area: "Big Data - possibly one of the few last chances for Europe's software industry to take true leadership" (K.-H. Streibich, CEO, Software AG). This session was moderated by Edward Curry, Research Scientist and Unit leader at

assets and the technologies needed to derive value from them. Research and innovation in technology and socio-economic areas will be strengthened, as well as the collaboration between different data-related actors, such as large software companies, SMEs and other sectors like healthcare, transport, energy, media and content or environment.

NESSI members are also finalising the **Strategic Research and Innovation Agenda (SRIA)**, which should serve as a baseline for the definition of the research and innovation activities of the proposed cPPP. Following the announcement at the European Data Forum on the 21st of March 2014, NESSI, together with partners from the FP7 project Big, ran from 9 April to 15 May 2014 an online consultation on this SRIA and received more than 190 inputs from different ICT and software companies, research institutes, and universities. The aim was to validate the main research challenges and needs for advancing Big Data Value in Europe in the next 5 to 10 years as they were identified in the early draft of the SRIA.

Furthermore, The **NESSI Software Engineering White Paper** which presents NESSI's input to the forthcoming Horizon 2020 Work Programme (ICT/LEIT WP2016-2017) will be published soon. This White Paper presents the relevance of Software from a societal, economic and technologic point of view. It also underlines the need to develop improved and new software engineering principles, methods and tools to leverage new technologies, especially in the fields of Cloud, Cyber-Physical Systems and Big Data Value. In addition to that, it

Insight, National University of Ireland, Galway. Professor Stefan Wrobel from Fraunhofer presented the benefits of a [potential data-driven economy](#). He underlined Europe's current weaknesses in improving the value of its Big Data market. Indeed, he pointed out that US companies are actually in the lead in using Big Data, followed by Latin American ones. He presented a survey which shows that 68% of the companies in the US had undertaken at least one Big Data initiative in 2012, whereas only 45% of companies in Europe were involved in such a project. He identified some barriers in the European Big Data market, such as the lack of skilled people in gathering, developing and creating business value from data, the complexity of privacy regulation, the insufficient budget concerning research and innovation on data, as well as the issue of interoperability, reliability and access to large data sets. Mr. Wrobel then explained how a contractual Public-Private Partnership could solve these problems and strengthen the European Big Data market. Michael Beigl, Professor at the Karlsruhe Institute of Technology (KIT), gave afterwards a presentation about the [Smart Data Innovation Lab](#), a German initiative which aims at transferring knowledge between industry and research and which would be one of the core elements of the Big Data Value Partnership.

Emmanuel Miconnet (Research Director, Thales) and Gabriela Cattaneo (Senior Associate Vice President, IDC European Government Consulting) gave then two interesting presentations, respectively about the [transformation of software in Europe](#) and about the [European Big Data market](#). Mr. Miconnet showed that open source was now the standard for software development and that clouds are the new server paradigms. Gabriella Cattaneo pointed out that the worldwide development of the amount of data constitutes a huge potential for improving Europe's competitiveness and delivering social benefits. Indeed, the Big Data market is expected to grow significantly during the next years, providing many opportunities for large companies and SMEs. Finally, participants had the opportunity to exchange with two Work Group leaders for two of NESSI's key activities. Indeed, they could discuss the White Paper on "Software Engineering: Key Enabler for Innovation" with Dr. Andreas Metzger and the "Strategic Research and Innovation Agenda on Big Data Value" with Julie Marguerite, European research cooperation manager of Thales. These face-to-face meetings were the occasion to better understand NESSI's current activities. Moreover, the inputs received by Mr. Metzger and Ms. Marguerite were taken into account in the finalization of these two documents.

You can find more information about the event on our [website](#), including the agenda with all the participants, the presentations of the panelists and some pictures.

calls for the creation of joint software engineering research and innovation projects of industry and academia to handle growing complexity, dynamism and multi-disciplinarity. Moreover, it emphasizes that Software engineering research and innovation funding should be increased to ensure Europe's competitiveness.

Upcoming Events

8-9 July 2014, Venice

[Digital Agenda Assembly](#)

8-9 July 2014, Paris

[Second International Conference on Advances in Computer, Electrical and Electronic Engineering](#)

10 July 2014, Brussels

[Advanced Manufacturing & ICT public hearing](#)

10 September 2014, Brussels

[Software Services and Cloud Computing Concertation Meeting](#)

10-12 September 2014, Salerno

[CCPI'14: Workshop on Cloud, Computing projects and Initiatives](#)

17 September 2014, Munich

[2nd European Conference of Future Internet](#)

9-10 October 2014, Florence

[ICT Proposer's Day](#)

18-20 November, Barcelona

[Smart City Expo World Congress](#)

20-21 November 2014,

Barcelona

NESSI Member's Day

NESSI Member's Day 2014

NESSI will be organizing the NESSI Member's and International Cooperation Day on 20-21 November at the "Universidad Autònoma de Barcelona" (Bellaterra, Barcelona).

NESSI invites its members and members of other Technology Platforms: NEM (New European Media), NetWorld (telecommunications) and PLANETIC (Spanish ICT-based Technology Platform) and also invites organizations and researchers from countries that participate in on-going FP7 funded projects in ICT INCO: MOSAIC and MED-Dialogue (Mediterranean countries), CONECTA 2020 (Latin American countries), EAST HORIZON (Commonwealth of Independent States) and CONNECT2SEA (South East Asia).

The purpose of the event is to set-up a "Proposal development & consortium formation" Workshop in view of the H2020 call in April 2015 with the aim at enhancing the collaboration between NESSI members, other ETP members and also third countries organisations through an open dialogue aiming to discuss and elaborate proposal ideas and start building proposals under the ICT topics identified. The event is expected to reinforce industrial cooperation on ICT research, development and Innovation through a better networking between European ICT Technology Platforms and other entities in third countries.

Big Data in Europe under Horizon 2020

- **Big Data in the Work Programme 2014-2015**

The work programme 2014-2015 of Horizon 2020 targets Big Data activities under two calls: ICT15 and ICT16. The ICT 15 call ("Big data and Open Data Innovation and take-up" – Budget EUR 50 million) is closed since 23 April 2014. However, the ICT16 Big Data research call will open on 15 October 2014 and close on 14 April 2015. It addresses fundamental research problems related to the scalability and responsiveness of analytics capabilities (such as machine learning, language understanding, data mining and visualization). Special focus is on industry-validated, user-defined challenges like predictions, and rigorous processes for monitoring and measurement. The budget is divided in two themes: Innovation Actions (38 million euro) and Coordination and Support Actions (1 million euro).

For more information, you can consult the [2014-2015 Work Programme](#), as well two presentations made by the European Commission on ICT15 and ICT16 on this [webpage](#).

- **Latest developments from the European Commission**

On the 2nd of July 2014, the European Commission published a communication entitled "[Towards a thriving data-driven economy](#)". This communication outlines that the Big Data Market, which is expected to grow worldwide to USD 16.9 billion in 2015 at an annual rate of 40%, is a great opportunity to create new jobs and

growth. However, it also points out that Europe has been slow in embracing this revolution, compared to other competitors like the USA. The communication addresses this challenge by sketching the features of the European data-driven economy of the future and setting out some operational conclusions to support and speed up the transition towards it. In order to bring about this data-driven economy, the Commission claims that strategic cooperation through a contractual Public-Private Partnership (cPPP) can play an important role in developing a data community and encouraging exchange of best practices. Indeed, according to the Commission, a sufficiently well-defined cPPP would be the most effective way to implement the research programme Horizon 2020 in the field of Big Data, notably given the required scale of impact, the resources involved and the importance of a long-term commitment. The NESSI ETP is actually proposing to the European Commission a definition of a cPPP in this area. If evaluated successfully, the Commission stated that it could be launched by the end of 2014. Finally, the European Commission outlines a raft of measures aimed at helping SMEs exploit Big Data to win new commercial opportunities. A dedicated page on this topic is also available [here](#).

Moreover, the European Commission published on the same day a [press release](#) which urges national governments to embrace the potential of Big Data. The main problems identified by the Commission in the field of Big Data are the lack of cross-border coordination, insufficient infrastructure and funding opportunities, a shortage of data experts and related skills, as well as a fragmented and overly complex legal environment. To solve these problems, the Commission proposed several concrete actions, such as creating an open data incubator to help SMEs set up supply chains based on data and use cloud computing more, establishing a series of Supercomputing Centres of Excellence to increase the number of skilled data workers in Europe, as well as establishing a Big Data public-private partnership that funds “game-changing” big data ideas, in areas such as personalised medicine and food logistics. A third press release, entitled “[Making the most of the Data-Driven Economy](#)”, was also published on the 2nd of July. It summarizes the strategy of the European Commission in addressing the challenges of the implementation of a single European Data market in Europe.

