

NESSI Response to the ISTAG report

Software - The Missing KET

Towards a Strategic Agenda for Software Technologies in Europe



NESSI welcomes the ISTAG report on Software as a Key Enabling Technology for Europe

The publication of the ISTAG (Information Society Technology Advisory Group of the European Commission DG Connect) on the need for a Strategic Agenda for Software Technologies in Europe in December 2012 coincides with the preparation of the first work programme 2014 of the Horizon 2020 Research Framework Programme. NESSI, the Networked European Software and Service Initiative, welcomes the ISTAG initiative to highlight the relevance of software for the European economy and society. Particularly naming software a Key Enabling Technology illustrates that software is essential for value and wealth creation by accelerated innovation in industry, business and the public sector. NESSI fully recognizes and supports the notion and understanding of software as a Key Enabling Technology for Europe.

The size of the economic sector of the software industry adds value of 180 billion euro and employs more than 2.75 million people¹ and its impact on economic productivity emphasises the relevance of software. Indeed, the report also highlights the importance of software for advanced products and services being the basis for Europe’s competitiveness. This is even more evident when both industry and the public sector become more interconnected and service-oriented, based on advanced software infrastructures and applications providing these services. NESSI welcomes the intention of the report to specifically emphasise this causality.

OECD statistics from have shown that the software sector spends in average 15% of its revenue on R&D² which accounts for the highest number in the IT industry together with semiconductors. Nevertheless, many inhibitors, such as the fragmented digital single market, need to be tackled until the European software industry can play a major role beyond the current disappointing 30 European software companies being amongst the global top 500. NESSI contributed to the European software strategy in 2009 by highlighting the challenges such as strengthening the skill base and building innovation capacity in order to shape the future Internet.

Software in Horizon 2020 and for the Competitiveness of European Industry

NESSI aims at further contributing to building up the innovation capacity and technology excellence of the European software and service industry by proposing focus areas for the first work programme of Horizon 2020.

The ISTAG report focuses on the essential role that software plays for parallel computing, cloud computing, high performance computing, building data values, social computing, internet based applications, embedded systems, human centric computing and multimedia and enterprise applications. NESSI agrees that Europe should develop scientific foundations, systems design methodologies, development processes and tools to create robust, flexible and scalable software for leading European offerings for the global market.³

¹ The Missing KET, Toward a Strategic Agenda for Software Technologies in Europe, ISTAG Report on 2020 Key Software Technologies, p. 3.

² OECD Information Technology Outlook 2010 (available online at: <http://www.oecd.org/internet/interneteconomy/oecdinformationtechnologyoutlook2010.htm>)

³ “Sizing the Cloud”, Forrester Research Inc, Stefan Ried and Holger Kisker and 21 April 2011, Figure 3, p.9. and Commission Staff Working Document accompanying the document Unleashing the Potential of Cloud Computing (Brussels, 27.9.2012 SWD(2012) 271 final) p.8, (available online at: http://ec.europa.eu/information_society/activities/cloudcomputing/docs/com/swd_com_cloud.pdf)

NESSI is convinced that Europe has to look beyond tools and methodologies that without doubt are the basis for a successful European software industry. Recent reports highlight that the biggest market segment of e.g. Cloud growth is not to be found in infrastructure but in the Software as a Service (SaaS) segment with the by far largest share of the market.

Over the next decade more sophisticated value chains will emerge in the software sector delivering value by combining software solutions on the machine, infrastructure, platform, application, and businesses and social network level. These value chains critically depend on strong European software and services platforms providing the foundation for agile enterprises to innovate. NESSI sees the development of eco-systems around these platforms as one of the central missions for the European software industry and governments.

NESSI is looking forward to further develop the ideas towards a strong and innovative European software industry and will outreach to provide complementing views to relevant stakeholders.