

Impact of PICASSO in the EU-US policy dialogue related to the technical core fields

The global Internet Governance issues provide challenges and opportunities for the three PICASSO technology domains: Big Data, IoT/CPS and 5G Networks. This is why the PICASSO Policy Expert Group has analysed challenges of horizontal importance to all three technology domains - Privacy, Security, Standards, Spectrum and Digital Communities - and provided recommendations for enhanced policy support.

ICT is already today an integrated part of society as we know it. Digital services are rapidly becoming the norm and many of these services are used without us noting anymore. It is also clear that developments are increasingly driven by Communities – that are not determined by borders, jurisdictions per se. Exchange of good practice experience between Communities in the EU and the US should be supported on policy level; many societal challenges are common to both regions and different types of communities and the potential of many solutions that have already been devised for adaptation elsewhere and optimisation in situ remain under-explored.

What is the PICASSO project about?

The PICASSO project "ICT Policy, Research and Innovation for Smart Society: towards new avenues in EU-US ICT collaboration" has been running from January 2016 to June 2018, funded under the European Union Horizon 2020 programme. The project brought together EU and US prominent specialists. Their aim was to reinforce EU-US ICT collaboration in **pre-competitive research about the key enabling technologies related to societal challenges of common interest** – 5G Networks, Big Data, Internet of Things and Cyber Physical Systems – and to support the **EU-US ICT policy dialogue**.

Who are the Policy Expert Group members?

Policy Expert Group members come from industry, research, and internet/telecoms technical communities with deep experience on policy matters. There are also involved in policy preparation on both sides of the Atlantic. With involvement over the stretch of the year from:

- Maarten Botterman GNKS Consult BV, former RAND, ICANN Board Director, IGF DC IoT Chair (Expert group chair)
- Dave Farber Carnegie Mellon University, Stevens Institute of Technology, University of Delaware, Keio University Cyber Civilization Director, former RAND, Internet Hall of Fame)
- Jonathan Cave Warwick University, UK Regulatory Committee, Alan Turing Institute, former RAND, participant to several European related projects
- Dan Caprio The Providence Group, IGF USA co-organiser
- Avri Doria Technicalities; IETF working group chair; ICANN Board Director
- Ilkka Lakaniemi former FI-PPP Chair, Aalto School of Business, Finland Chamber of Commerce VP Digital Economy and growth
- Robert Pepper Aspen Institute (stepped down when he joined Facebook Inc)

The Policy EG also actively reached out to policy makers in government positions that are actively interested in the specific topics at hand on both sides of the Atlantic and beyond, as the transatlantic relationship is part of a global development. They also inform them, and invite them to participate to discussions, where and when appropriate: in the PICASSO context or in other relevant networks.





What are the outcomes of the Expert Group actions?

The Expert Group has developed five policy briefs and discussed them in policy webinars with the wider community, next to engagement with external parties during international events. Over 100 stakeholders from research, industry and policy participated in the webinars over the last years and more than 200 were kept informed on the briefings. The following are the five transversal topics analysed and conclusions as presented in the policy briefs:

> Privacy and data protection:

In particular with regards to Big Data and IoT/CPS developments, solutions need to be found to facilitate the development and deployment of needed and desired services, while respecting the (European and US) privacy and data protection frameworks. This will require policy collaboration that is looking forward to joint and sustainable solutions aimed at ensuring an even higher-level goal than preserving privacy: that of preserving "human dignity" in a digital age, ensuring that we can still live as humans in our digital environment.

> ICT security:

Recognising basic security is key to whatever we want to ensure: set up joint EU/US research collaboration to develop biologically inspired security. With IoT and underlying interconnections, there is a significant risk with IoT devices providing a back door to enterprise systems and data. Using biological constructs (in particular those relating to immune responses and contagion), we may be able identify attacks before they become widespread and respond in a proportionate and dynamic fashion by directing resources to the appropriate area.

> ICT Standards:

Stimulate participation of sponsored research and innovation in global (IETF, ITU, IEEE etc.) rather than focus on regional standardisation platforms alone, for EU/US collaboration.

> Spectrum:

Set up joint EU/US research collaboration on developing agility in spectrum allocation and management to ensure that ubiquitous connectivity enabling digital services to work becomes possible, not being held back by (slow and ineffective) spectrum allocation negotiations.

> Digital Communities:

Support exchange of good practice experience between Communities in EU and US will be an important facilitator of focused, relevant collaboration. Many societal challenges are common to both regions and different types of communities and the potential of many solutions that have already been devised for adaptation elsewhere and optimisation in situ remain under-explored. Learning from practice will help address issues that matter to people, in a global context – not limited but merely being informed by differences in legislation and cultures.

In addition, it was recognised that collaboration in ICT R&I best takes place in an ambience of "joining efforts, based on shared values" than on one or the other region aiming "to become the leading region" - by seeking common grounds based on joint values the ICT R&I collaboration between the USA and EU will have a higher influence on global ICT developments.

The work on these topics led to a number of strategic recommendations that have been expressed and substantiated in the **PICASSO Policy Whitepaper** that is now released and open for comments: see http://www.picasso-project.eu/outreach/project-reports/

The Policy Expert Group members will continue to share their insights in their networks, recently they further expanded to Japan. These issues are truly global in nature, even if there are specific factors relevant for the US and EU policy contexts.





PICASSO Project Website: www.picasso-project.eu

Twitter: @picasso_ICT - LinkedIn: PICASSO – EU/US ICT research

About the PICASSO Project:

PICASSO is co-funded by the European Commission under the Horizon 2020 programme. **Start Date:** 1st January 2016 - **Duration:** 30 months **Project coordinator:** Svetlana Klessova, inno TSD, France: <u>s.klessova@inno-group.com</u>

PICASSO Consortium Members:

nno	inno TSD, France – one of Europe's leading innovation management consultancy firms, specialised in helping major private and public stakeholders design and implement R&D and innovation projects. https://inno-tsd.fr/en
technische universität dortmund	TECHNISCHE UNIVERSITÄT DORTMUND, Germany – a leading German technically oriented research university with strong research groups in big data, communications, smart grids, e-mobility and cyber-physical systems http://www.tu-dortmund.de
WIRELESS TECHNOLOGIES I	THHINK WIRELESS TECHNOLOGIES LIMITED, United Kingdom - an ICT company founded in 2009 after more than a decade of research and development in wireless and energy harvesting technologies. <u>http://www.thhink.com/</u>
CARTERS TECHNOLOGY CENTER	ATC SA, Greece - an SME and Technology Centre in the field of ICT participating in 3 ICT European Technology Platforms: NESSI (Steering Committee member), NEM (member) and NETWORLD2020 (member), and founding member of European Big Data Value Association. <u>http://www.atc.gr</u>
APRE Agency for the Promotion of European Research	AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA, Italy – a non-profit research organisation, grouping together more than 100 members, including public and private research centres, industries, industrial associations, chambers of commerce, science parks and more than 50 universities, with the main objective to promote the participation in national and European RTD programmes. <u>http://www.apre.it/</u>
Honeywell	HONEYWELL INTERNATIONAL INC, United States – a multinational company and global leader that invents and manufactures technologies to address some of the world's toughest challenges initiated by revolutionary macrotrends in science, technology and society. The company's products and solutions are focused on energy and the environment, safety and security, and efficiency and productivity. <u>http://honeywell.com/</u>
GNKS Consult	GNKS CONSULT BV, Netherlands - conducting strategic and policy research and evaluation, building on excellence in understanding of the impact of the emerging Global Networked Knowledge Society http://www.gnksconsult.com/
TECHNISCHE UNIVERSITÄT DRESDEN	TECHNISCHE UNIVERSITÄT DRESDEN, Germany - a full-scale university with 14 faculties, covering a wide range of fields in science and engineering, humanities, social sciences and medicine. <u>https://tu-dresden.de/</u>
FICU FLORIDA INTERNATIONAL UNIVERSITY	FLORIDA INTERNATIONAL UNIVERSITY, United States - The Miami-Florida Jean Monnet Center of Excellence, (MFJMCE), a member of the global network of EU-sponsored Jean Monnet centers, has the mission to promote teaching, research and outreach activities relating to the EU. <u>http://www.fiu.edu/</u> ; <u>https://miamieuc.fiu.edu/</u>
Technological Leadership Institute	UNIVERSITY OF MINNESOTA, United States – The Technological Leadership Institute bridges the gap between business and engineering. TLI's mission is to develop local and global leaders for technology enterprises. <u>https://tli.umn.edu/</u>