Industry Associations Unveil First Electronic Components & Systems (ECS) Strategic Research Agenda Spanning the Full Value Chain

An initiative by AENEAS, ARTEMIS-IA AND EPoSS, targeting Economic and Societal Benefits for Europe

Paris/Eindhoven/Berlin, January 25 2018 – For the first time, three European industry associations - AENEAS, ARTEMIS-IA and EPoSS **-** representing large companies, SMEs, universities and research institutes from across the entire electronic components and systems (ECS) value chain have joined together to produce a common Strategic Research Agenda (SRA). This common framework for Research, Development and Innovation (R&D&I) identifies key research priorities, technology challenges and application areas to foster Europe's transformation into a digital society, and to deliver societal and economic value. The ECS-SRA incorporates the work of over 200 experts and feedback from the ECS community gathered at the European Forum for Electronic Components and Systems 2017 (EFECS 2017) held in Brussels in December 2017. This will be a living document, fine-tuned annually and subject to a major review every three year.

Given increasing protectionism in the USA and China, it is crucial for Europe to have its own capabilities and sovereignty to meet the rapidly-growing demand for electronic components, embedded-/cyber-physical-systems and smart integrated systems. As digital technologies expand into almost every aspect of industry and daily life, Europe's future will depend on its capacity to generate knowledge and transform this into innovation. ECS (hardware and software) will be essential for Europe's competitiveness, societal well-being and sustainable economic growth. The electronics are not only at the heart of all Information and Communication Technologies (ICT), but fundamental to a digital Europe, either in products or as enablers for new services. Smart cities, smart industry, smart life: these and other 'smart' systems all rely on semiconductor chips running embedded software in an integrated electronic system.

R&D&I in ECS are vital for this digital transformation, calling for major economies of scale, European cross-border cooperation and higher joint investments. At a time when international competition is more intense than ever, Europe needs trustworthy ECS. It also needs to shorten time to market along the complete ECS value chain and to bring innovation to the next level in the sectors where R&D is growing most strongly in Europe and worldwide: ICT producers (+14.4%), ICT services (+12.7%), Health industries (+7.9%) and Automobiles (+6.7%).*

The creation of a full value chain: the ECS-SRA marks an important milestone in shaping the technical future of Europe, offering a guide for national and European investment, and providing a vision of how to move forward. The framework addresses directly the challenges of sustainable living. It supports Europe's

societal goals of zero carbon dioxide emissions and zero road fatalities, which call for disruptive solutions. Additionally, it is aligned with European ambitions to bring back manufacturing to Europe through European and national initiatives such as Industry 4.0, 'Industrie du futur' and Digitising European Industry.

The ECS-SRA also addresses the emergence of new business models such as 'Everything-as-a-Service' (also known as XaaS) and 'Mobility-as-a-Service' (or MaaS) that put users and the user' experience at their heart. These have shorter innovation cycles than traditional businesses and they are increasingly performing transactions using new technologies such as blockchain to improve security and increase trust, as well as being more environmentally aware and focused on the complete product lifecycle. The framework covers 'game changing' technologies and applications that will transform how we live and work. In particular, it looks at the needs of emerging ecosystems around embedded intelligence and artificial intelligence technologies, blockchain and security, the Internet of Things (IoT), stand-alone and embedded High Performance Computing, ever-growing miniaturisation, additive (or '3D') manufacturing – all of which contribute to the emergence of the smart economy and society through smart mobility, smart health, smart energy, smart industry and smart living. By focusing on strategic priorities, the ECS-SRA aims to align and coordinate research policies in Europe, thereby enabling collaborative projects that bring together all stakeholders, and defining the necessary environment to transform research results into successful solutions.

Source: http://iri.jrc.ec.europa.eu/scoreboard17.html - based on 2500 companies investing the largest sums in R&D in the world in 2016/17, including 567 EU companies which account for 26% of the total - data from late 2015 to mid-2017

Note for editors, not for publication: for interview requests, questions and/or additional information, please contact:

Maud Vazquez
AENEAS Office
Communications Director
vazquez@aeneas-office.org

Iris Hamelink
ARTEMIS Industry
Association
PR & Communications
iris.hamelink@artemis-ia.eu

Sebastian Stagl
EPoSS Office
PR & Communications
sebastian.stagl@vdivde-it.de

About the associations

AENEAS is an Association, established in 2006, providing unparalleled networking opportunities, policy influence & supported access to funding to all types of R&D&I participants in the field of micro and nanoelectronics enabled components and systems.

See https://aeneas-office.org

ARTEMIS Industry Association strives for a leading position of Europe in Embedded Intelligence. The multidisciplinary nature of the membership provides an excellent network for the exchange of technology ideas, cross-domain fertilisation, as well as for large innovation initiatives.

See https://artemis-ia.eu

EPoSS, the European Technology Platform on Smart Systems Integration, is an industry-driven policy initiative, defining R&D and innovation needs as well as policy requirements related to Smart Systems Integration and integrated Micro- and Nanosystems.

See www.smart-systems-integration.org