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# Co-summit **2013**

Focused on the theme 'Software innovation: boosting high-tech employment and industry', the Co-summit 2013 was hosted at the SCANDIC Infra Business Center in Stockholm, Sweden, on 4-5 December. Collaboratively organised by ARTEMIS and ITEA, the two-day event was designed to boost STI innovation across Europe

**SHOWCASING TRANSNATIONAL ARTEMIS** Showcasing transnational ARTEMIS and ITEA 2 projects and their results, the event encouraged innovation, business-based impact and research exploitation. Propelling science, technology and innovation advancements across Europe, the conference was designed as a platform to enhance hi-tech product and service development in industry and provide opportunities for employment, while presenting attractive prospects for collaboration.

Almost 650 delegates from around 80 leading European companies and institutions were in attendance at the Co-summit, including keynote speakers who participated in a high-level panel discussion on hi-tech innovation. Alongside the engaging project exhibition area, a new project-based element was incorporated into the event, consisting of four 'Speakers corners' in which representatives were given an opportunity to introduce their initiatives, organise debates on relevant topics and provide tours of their exhibition booths.

The event offered representatives an opportunity to interact with one another and develop collaborations with participants from industry and academia, government officials and media representatives from all around Europe in order to devise mutually beneficial solutions that meet the challenges of the 21st Century.

## ITEA

ITEA, the EUREKA cluster for software-intensive systems and services, fosters vital growth for Europe's economy and drives innovation in many of the continent's most competitive areas, including the automotive, communications, healthcare, aerospace and consumer electronics industries. ITEA is a unique management programme led by an industrial community in collaboration with government authorities. Its goals are to help Europe maintain its status as a global leader in ICT and to provide critical support for the development of innovative ideas that boost the emerging services revolution. SMEs, research institutes and universities participate in ITEA in collaborative R&D that is critical for the effective functioning of the European economy and society.

ITEA 3 is the third phase of the ITEA programme. It aims to bolster further European leadership in software-intensive systems and services through innovative R&D and international collaboration. Beginning in January 2014, ITEA 3 will run until 2021 with a budget of €3 billion. Contributing to research excellence, ITEA 3 also aims to anticipate technological trends and paradigm changes while addressing societal needs. A key objective will be to deliver results and to translate its knowledge to mobilise 20,000 person-years of research.

This new phase has much in store for the ITEA programme. In its first month alone it received ISO 9001 accreditation for its quality management system. ITEA 3 is an agile organisation that has not only been designed to adapt to the changes that lie ahead, but it is a living roadmap, permanently updating its baseline for innovation to ensure it stays at the cutting-edge. One of the most exciting developments of ITEA 3 is that it has restructured its annual call calendar and can now take an idea to project start within 10 months. ITEA 3 also benefits from strong partnerships with the other EUREKA clusters such as ARTEMIS, the EIT ICT Labs and some national competitiveness clusters.

## ARTEMIS

ARTEMIS Industry Association (ARTEMIS-IA) represents R&D actors in embedded systems – specialised computer systems that have a specific function within a larger system or machine – with over 200 members and associates from across Europe, including 23 member states. The Association comprises a multidisciplinary research community involving industry, universities and research institutes participating in the ARTEMIS Joint Undertaking (ARTEMIS JU). The programme focuses on downstream research, or the translation of technological R&D to create innovative products and services ready for market. Encouraging research activities through open calls for submissions, the Joint Undertaking scheme will last 10 years with a budget of €2.5 billion invested in the development of embedded computing systems. The ARTEMIS network of communication, cross-disciplinary collaboration and dissemination fosters the development of innovative initiatives and technological ideas that will positively impact European hi-tech industries.

In 2014, ARTEMIS JU will merge with ENIAC JU and the EPoSS Technology Platform to form Electronic Components and Systems for European Leadership (ECSEL), a 10-year programme beginning in early 2014. ECSEL will build further on the successes of these instruments in order to help Europe maintain and strengthen its position in the hi-tech sector.

## ITEA ARTEMIS-IA
## High-Level Vision 2030

The ITEA ARTEMIS-IA High-Level Vision 2030 'Opportunities for Europe' report has been developed in response to the disruptive societal changes forecasted, including lifestyles and business practices, from now until 2030. This timescale has been established based on the estimation that the global population will surpass eight billion people in 2030; 23 per cent of which will live in either Europe or the Americas.

The report describes seven areas of major change, referred to as 'Grand Challenges': globalisation and demographic change; management of scarce resources; climate change; urbanisation; mobility; healthcare; and digital society. In response to these issues, ARTEMIS and ITEA have highlighted the need for research and innovation that will benefit the economy, provide job opportunities and improve European ecosystems.

The leading roles predicted for digital technologies in society in the next 15 years has further signalled the need for Europe to develop innovative and purpose-built ICT-based systems in order to respond effectively to the increasing demands of global competitiveness.

## Co-summit 2013
## Exhibition Awards

The Co-summit 2013 included ARTEMIS and ITEA Exhibition Awards based on posters and demonstrations designed by project partners to showcase their objectives, results and overarching accomplishments. To win the annual prizes, posters had to represent the project and its goals vividly, demonstrations had to be clear and convincing and representatives had to be able to communicate their work and its business value effectively.

AMALTHEA won the ITEA Exhibitions Award, demonstrating its development of a consistent, open and expandable tool platform for use in automotive engineering. The CRitical sYSTem engineering AcceLeration (CRYSTAL) project was awarded the ARTEMIS Exhibition Award, which establishes workflows based on current and emerging technologies for use in engineering environments to reduce system design costs.

## 'Smart Cities'

One of the focal points of the Co-summit 2013 was an exhibition area dedicated to projects associated with 'Smart Cities', with both ARTEMIS and ITEA discussing the impact of innovation in software and embedded systems in urban spaces. During the event, ARTEMIS projects ARROWHEAD, ACCUS, ENCOURAGE and DEMANES, among others, disseminated their work on the implementation of smart technologies in European cities. ITEA projects showcasing their results in the focus area were for example: SUS and IMPONET. Topics included the driving of collaborative automation via network-enabled devices for the provision of energy; the innovative development of smart grids; urban transport and traffic; effective energy usage in buildings; and large-scale monitoring systems. A panel discussion provided the representatives with an opportunity to discuss the impact of smart technologies in order to better understand issues such as suitability, sustainability, performance and security. The scale of many of these undertakings will require joint endeavours between European projects, to ensure that the most effective and necessary innovations and solutions are developed.
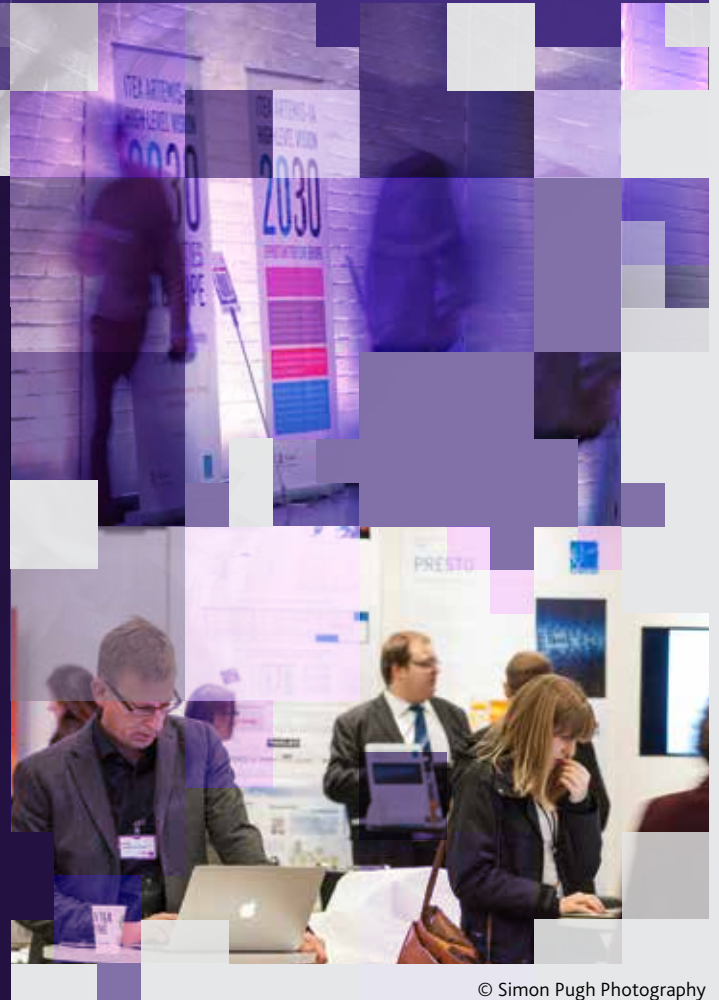
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# Digital Technology and the 'Grand Challenges'

ARTEMIS and ITEA coined the term 'Digital Technology' to represent ICT – including hardware, software, IT services, internal IT and embedded software – to facilitate discussions on hi-tech innovation. Here, International Innovation highlights the shift in Digital Technology within the context of some of the key High-Level Vision 2030 'Grand Challenges

The global Digital Technology market is estimated to be worth US **$3.3 billion** – providing 50 million jobs.

**9.1 million** jobs in Digital Technology are located in Europe – **8.9 million** jobs are in software and services, and **1.1 million** jobs are associated with embedded systems.

From 2010-30, GDP will increase by **70%** in developing countries and **30%** in developed countries.

In less than **20 years**, emerging markets will account for more than half of all global GDP.

Global energy consumption will rise by **39%** between 2010 and 2030.

By 2030, there will be a shortage of hi-tech metals, threatening the advancement of future technologies such as photovoltaic cells, hybrid propulsion and energy-efficient flat screens.

There will be a 59% increase in the number of people living in cities in 2030, with the urban population growing from **3.5 billion** in 2011 to **4.9 billion** in 2030.

In 2013, the internet will be prevalent in almost **100%** of developed countries.

The internet penetration rate rose from **51%** in 2005 to **72%** in 2010.

**Sources:** http://itea3.org ; ITEA ARTEMIS-IA High-Level Vision 2013