

ITEA Magazine **17**

JANUARY 2014

**HAPPY 8 NEW  
YEARS**



**ITEA 3**

The uniqueness of ITEA explained

The impact of digital technology

ITEA Happiness

# Contents

3

## Editorial

Rudolf Hagenmüller

4

## The uniqueness of ITEA explained

What does ITEA stand for?

5

## Welcome to ITEA 3

Welcome messages from ITEA DC and Board

8

## The impact of digital technology

on business and employment in Europe

10

## A blend of all things ITEA

Co-summit 2013

14

## ITEA happiness 'a two-sided meaning'

- ITEA Community  
Wilbert Schaap & Frank van der Linden
- Better life of the end-user

18

## ITEA Success story: EAST-EEA

A revolution in automotive software development

22

## News

ITEA news facts

23

## Calendar

Upcoming events

24

## Europe and beyond

The EUREKA Network

26

## EUREKA News

EUREKA at the Co-summit 2013



# The uniqueness of ITEA explained

# 4

# The impact of digital technology

# 8

# ITEA happiness

# 14

# Editorial

Dear colleagues & friends,  
Dear members of the ITEA family,

This magazine heralds a new era of ITEA. With this magazine we kick-off ITEA 3.

We do this at a moment when the exciting Co-summit 2013 in Stockholm is still fresh in our minds, where our updated High Level Vision 2030 on the impact of software innovation on revenue and jobs was very well received by industry leaders, public authorities, EUREKA, the European Commission and our family members. We received a lot of encouragement and the Swedish State Secretary Daniel Johansson called us not only enablers but also a part of the solution to overcome the challenges ahead of us.

ITEA 3 is built on top of a rich heritage from ITEA 1 and ITEA 2. Based on this heritage we enter into ITEA 3 with refreshed body and soul:

- ITEA 3 is an **agile organisation** to ensure adaptability to the changes ahead of us. In January 2014 our Quality Management System will receive the ISO 9001 certificate.
- ITEA 3 has a **living roadmap** as a permanently updated baseline for innovation.
- ITEA 3 has **strong partnerships** with the other EUREKA clusters, with ARTEMIS, the EIT ICT Labs as well as some national competitiveness clusters.
- Last, but not least, we have restructured our annual call calendar to be able to achieve a time of **10 months from idea to project start**.

These are all results of the Road to ITEA 3 which we completed in Stockholm.

So, is this now all done?

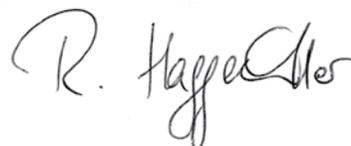
With pleasure I say no, and announce a happy new year full of further hard work:

- Together with our ITAC partners we will promote ITEA 3 within our traditional partner countries.
- Together with EUREKA we will initiate a more global approach to research and innovation.
- Together with our partners from industry and public authorities we will work towards our ambition to double the investment in ITEA projects.
- Together with ITAC and our project leaders we will realise a time of 10 months from idea to project start.
- Together with all our project partners we continue to work towards our high level ambitions: “innovation, business impact, fast exploitation, seizing the high ground and happiness”.

Dear members of the ITEA family, let us work hard and with happiness to achieve our ambitious goals.

With this in mind, I wish you a successful 2014.

Sincerely yours,



Rudolf Haggenmüller

# The uniqueness of ITEA explained

There is a wide consensus that from now to 2030 change and disruption will be permanent features in society, with the way of living and doing business becoming fundamentally different from what it is today. In 2030 the world population will reach the magic number of 8 billion people, only 23% of whom will live in Europe and the Americas, so it is important to adopt a global view. In positive terms, this development should be seen as '8 billion opportunities'.

Digital Technology, encompassing the notions of hardware, software, IT services, internal IT and embedded software, has a major role to play in mastering the changes. For Europe, an industry strong in software innovation is a prerequisite for maintaining global competitiveness and in securing high-value jobs in Digital Technology and in other, more traditional industries that are dependent on Digital Technology.

ITEA is the EUREKA Cluster programme supporting innovative, industry-driven, pre-competitive R&D projects in the area of Software-intensive Systems & Services. ITEA stimulates the creation of an open community of R&D actors, companies, research institutes and countries active in SiSS. The ITEA community is founded in Europe based on the EUREKA principles and is open to participants worldwide.

ITEA's mission is to be the recognised partner for European industry, optimising support for companies and R&D actors active in ITEA projects in the area of SiSS, thus making best use of funding made available by the ITEA supporting countries. To ensure optimum support, ITEA stands for:

## Focus

ITEA's focused ambitions are

- Innovation
- Business impact
- Fast exploitation
- Seizing the high ground  
*to ensure that European industry continues to be at the leading edge worldwide*
- Happiness  
*For the community and the added-value of project results to improve the lives of end-users*

## Openness

ITEA is open to partners from large industry, small and medium-sized enterprises (SMEs), research institutes, universities and user organisations (profit or non-profit). ITEA is managed by industry in close and trustworthy cooperation with the national public authorities of participating countries.

## Bottom-up approach

ITEA's bottom-up project creation and approval process ensure that the programme adheres to the actual market demand and the business needs of the companies involved. An innovative proposal by at least two companies from at least two countries can be submitted; there is no need to get further support from other countries or central institutions.

## Trusted framework

ITEA stimulates a clear community spirit ensuring that the ITEA values are shared. It provides a trusted framework in which new participants can easily find their way. There are standard project collaboration agreements available following best practices applicable to industry, including the complex domains of confidentiality and intellectual property.

## Quality-focused project evaluation & monitoring

ITEA follows a two-step approach for proposal submission, which ensures better quality of the proposals through advice by industrial experts from large European industries. Furthermore, ITEA supports the initiation and evaluation of project ideas by providing the ITEA Living Roadmap to its participants, including a State-of-the-Art database with public deliverables of ITEA projects. For ongoing projects, ITEA provides project evaluation and monitoring in a peer-to-peer mode in order to improve quality and value creation. A clear change request process is used to better adhere to the continuous market evolution while staying true to the project's ambition

**ITEA is very honoured to have received the following personal welcome messages to the community from the public authorities (ITEA DC & ITAC members) and the ITEA Board members.**

**Leo Van de Loock**  
*ITEA DC Member - Belgium*

IWT, the agency for innovation of the Flemish government, stimulates (through funding, advice and coordination) knowledge building to develop innovation, new products, processes, services and concepts with added economic and social value in Flanders.

Based on the results of the last years, we can firmly state that ITEA is an excellent eco-system for fostering innovations in the field of software-intensive systems. This is why we look forward to (the results of) 8 years of ITEA 3.

**Aart van Gorkum**  
*Former ITEA Board member - Philips*

Dear ITEA colleagues,  
At the start of ITEA 3, already the third generation of ITEA, I feel honoured and proud to have been part of three generations of ITEA. This programme has shown how a great set of dedicated and motivated people can make a difference in this very important area of ICT, software and services. We have together moved with the changes in our industry, always ahead of new developments, leading our industries, large and small, and institutes and universities, along a path sketched out by our Roadmap. Reinventing ourselves, constantly improving, still staying lean and focused on project results. This has brought us very far, and I am sure now that our grandchild is about to be born, it is time for me to leave. I wish all of you, participants in the programme, a great and renewed future, building capabilities and employment in this important area.

**Kari Komulainen**  
*ITEA DC member - Finland*

Tekes' mission is to improve productivity, renew the industries and increase the wellbeing of people and the environment. We believe that great business opportunities are created when digital technology is integrated with industrial products and when global value networks are managed digitally. Therefore we at Tekes are committed to continue to support ITEA 3 for European advancement.

**Cécile Dubarry**  
*ITEA DC member - France*

I would like to welcome the launch of the new ITEA 3 programme. This programme is one of the main tools at the disposal of the European public authorities to support the development of key enabling technologies in software, such as HPC, big data or embedded systems. I hope that ITEA 3 will therefore be able to contribute significantly to the competitiveness of the European industry and to the growth of all the countries involved.

**Aviv Zeevi Balasiano**  
*ITEA DC member - Israel*

Through the ITEA 3 programme, we hope many start-ups and successful industries together with young and experienced researchers will create new ways into industries and enterprises in Europe with the aim to create innovation and knowledge together.

**Thomas Schönenberg**  
*ITEA Board member - Bosch*

ITEA is for Bosch an ideal basis for mastering the complexity of future cyber physical systems together with likeminded partners within a very competent community. We appreciate the continuation of the ITEA programme and wish all participants great success and brilliant results for seizing the high ground in Europe and strengthening the European industry. Despite all the work and effort to be done we hope that we do it with pleasure. In this spirit we will continue driving the programme and invite all of you to participate in the ITEA activities.

**Sylvain Prudhomme**  
*ITEA Board member - Airbus*

As a historical participant in the ITEA programmes, Airbus sees Software-intensive Systems and Services as a key lever for value creation in aeronautics, both for airborne products like avionics and for industrial systems and infrastructures. ITEA 3 is a great opportunity to deploy collaborative R&D activities in this direction, with a significant potential for synergies with other industrial sectors.

**Cecilia Sjöberg**  
**Tomas Aronsson**  
**Jonas Bjarne**  
*ITEA DC and ITAC members - Sweden*

In our time we are facing a number of global challenges, e.g. an ageing population, urbanisation and climate changes. However, these challenges also trigger new opportunities! Combining expert skills from many industrial sectors and research disciplines into new applications enables the solutions. International cooperation is the only valid approach for reaching the goals.

Digitalisation is the main driver for this renewal. As ICT becomes the enabling technology, software will migrate from being a secondary concern to the most important aspect for adding value. The results will be experienced by everyone, but foremost in other sectors than the ICT-sector, e.g. for smart factory & smart automation, e-health, smart cities, e-learning.

ICT is indeed the “steam engine” of our time. With the global challenges increasing the pressure, we welcome ITEA 3 to fuel the innovations that enable the momentum!

**Khalil Rouhana**  
*ITEA DC member - European Commission*

Dear Rudolf, dear ITEA community, It is with pleasure that I welcome the initiation of ITEA 3, which will be the continuation of the important ITEA programme. Software-intensive systems and services are essential for the growth of Europe’s economy and the wellbeing of its society.

I am also happy to see the reinforced collaboration of ITEA with ARTEMIS as illustrated at the recent Co-summit in Stockholm. This was also the case in the joint preparation of the High Level Vision 2030 by the ITEA community and the ARTEMIS Industry Association. This document highlights the importance of software innovation on growth and jobs in Europe and identifies the orientations for future developments of the field.

In Horizon 2020, a major effort will be devoted to ensure European leadership in software-intensive systems and notably embedded and cyber-physical systems. We see ITEA 3, the ECSEL JTI and support to ICT in the normal calls of H2020 as complementary schemes to implement a European strategic agenda for the sector. This will be essential in our view to achieve critical mass and maximise the impact of our investment in research, development and innovation.

I am looking forward to a successful collaboration and wish you an excellent start of ITEA 3.

**José Ángel Alonso Jiménez**  
*ITEA DC member - Spain*

The Secretary of State for Telecommunications and Information Society fosters those R&D projects which enhance the range of technologies, services, applications and contents in the field of information and communication technologies.

During these years ITEA has shown itself to be a great eco-system to remove barriers that stand in the way of the internationalisation of stakeholders and the development of the information society. As a result, ITEA has become a structural instrument in the fulfillment of our functions and we are committed to support the ITEA 3 programme.

**Jean-François Lavignon**  
*ITEA Board member - Bull*

ITEA 2 has provided a great help to Bull to create innovative IT solutions and to bring them to the market. Bull is confident that ITEA 3 will still improve your ability to innovate. Keeping the strength of the bottom-up approach of EUREKA and adding more flexibility and speed in the processes, ITEA 3 will become a key instrument for success in our changing world for companies like Bull.

**Jean-Luc Beylat***ITEA Board member - Alcatel Lucent  
Bell Labs*

ITEA and ITEA 2 count an impressive track record of successes with huge impacts for industry and societies. I am enjoyed to see the opening of this third era of the programme, with yet increased ambitions in terms of agility, of project starting speed-up, of connections with other clusters, features which I believe are key for the ITEA community to handle the challenges and opportunities of our industries and to 'seize the high grounds'. Innovation is key for Europe, with ITEA 3 we have a powerful platform to contribute.

**Semih Incedayi***ITEA Board member - Turkcell*

Welcome to ITEA 3! At Turkcell Technology we strive to lead software innovation and turn societal challenges into exciting business opportunities. We believe ambitious software projects that have large impact on European and global prosperity call for industry wide pre-competitive research. Born out of this community spirit, ITEA programmes have a proven record on collaborative research and economic impact. With the ITEA 3 programme, we are looking forward to smart infrastructure projects for accelerated time to market and resource efficiency, and to smart services projects for superior user experience and market adoption.

**K. Melike Sevimli***ITEA DC member - Turkey*

Under the fierce global competition, to keep Europe ahead in the global market, building cooperative networks among large companies, SMEs and academia together has a vital importance. EUREKA Clusters are important elements of such networks. ITEA, with its proven track record in funding of ICT-based innovations, will continue to contribute to the competitiveness of jobs and businesses and to strengthen Europe's economic impact and competitiveness in the ICT sector via ITEA 3 initiative. As Turkey, we believe in the added value of the continuation of ITEA as ITEA 3 in the future strength of the European ICT sector.

**Dries van Loenen***ITEA DC Member - The Netherlands*

The launch of ITEA 3 marks a new step in European collaborative R&D. It coincides with the start of Horizon2020. Within the changing European playing field, ITEA 3 can, and should, play a leading role in providing breeding ground for bottom-up initiatives. Such efforts are essential in developing ecosystems and exploring new avenues of technology. We expect to witness excellent results from the community and look forward to a fruitful cooperation during the next 8 years.

**Patrick Candry***ITEA Board member - Barco*

I would like to welcome all the colleagues and friends of the ITEA community to the new ITEA 3 programme, and invite the ITEA community to continue its efforts to define and execute market-oriented R&D projects with strong business impact. In view of the changing global challenges it is more than ever necessary to bundle our competences and R&D capacity to realise innovations and achieve together new business successes. ITEA 3 will provide the structure and guidance to achieve this important goal.

**Laila Gide***ITEA Board member - Thales*

ITEA proved, through the successive years, to be an efficient EUREKA Cluster and an excellent tool, yielding outstanding and tangible results, visible in the Living Roadmap now in use. With ITEA 3, we look forward to consolidate the successes of ITEA 1 and ITEA 2 and hopefully start a new era, where the projects activities and results would generate more growth and more jobs. This is a thrilling period, and with great enthusiasm we will contribute! Good Luck ITEA 3 where innovation will meet happiness.

# The impact of digital technology

## on business and employment in Europe

**In the Co-summit in Stockholm last December, Rudolf Haggenmüller, Chairman of ITEA, and Heinrich Daembkes, President of ARTEMIS-IA, presented the hard facts of benefits that industry and society gain from digital technology as described in the joint Vision 2030 document and as showcased in the exhibition of projects and series of keynote speeches, presentations, panel discussions and plenary sessions.**

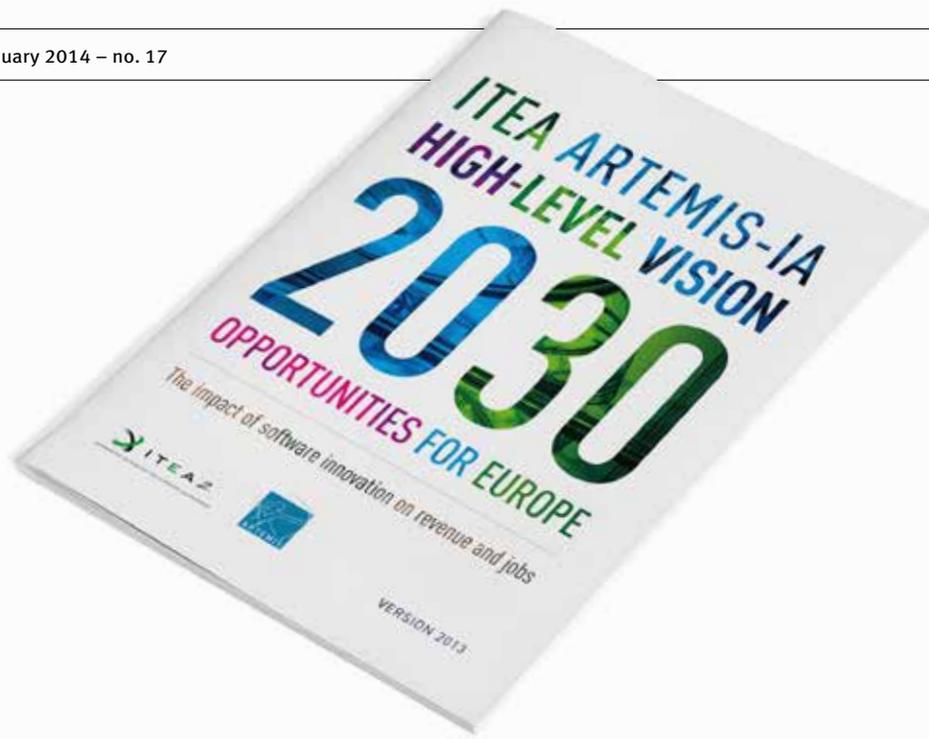
The 'High Level Vision 2030: Opportunities for Europe - the impact of software innovation on revenue and jobs' is an updated position paper that includes real, hard facts about the impact that ITEA and ARTEMIS are having on industry and society in Europe in terms of employment and business opportunity. The clear message conveyed by Rudolf Haggenmüller was evident in his call to the public authorities and industry to double investment to reap the very rich rewards in the future. "We have shifted the focus very emphatically towards the quantitative aspect. What does all our work and innovation mean in terms of revenue and jobs? You only have to consider the fact that 37% of growth in Europe depends on digital technology to realise the importance of the kind of impact that our innovation can have." This is a claim backed up by Heinrich Daembkes, who says that "the hard and measurable facts about the impact of our sector on the economy in this

independent survey along with interviews with key industry representatives make it very clear that our industry not only plays a crucial role in the business success in Europe today but will become even more important in the future."

### **The big picture**

"Let's take a look at the big picture," Rudolf said, as he reeled off a compelling series of figures. "The global market for digital technology is estimated at 3,300 billion US dollars and 50 million jobs. The industry ranges from hardware to software, services and embedded software. ITEA and ARTEMIS address the software and services component, and that's worth 2,600





billion US dollars and 44 million jobs. The majority of the market therefore. Our goal is to get as much of this revenue and employment to Europe. Results from the EUREKA Impact Assessment working groups and econometric impact studies of EUREKA show that a million euros of funding creates ten million euros of revenue and generates 37 jobs. So, extrapolate this to the ITEA 3 programme and you get the creation of a further 44,000 jobs and 11 billion euros of revenue.” Citing the example of the Digital Cinema project, Rudolf pointed to the fact that ten years ago analogue ruled the roost before Barco engaged in funded research to develop digital technology for cinema. Today close to 10% of Barco’s workforce in Europe is active in the area of Digital Cinema (direct and indirect). “This is a concrete example where €1 million of funding contributed to generating and supporting approximately 350 jobs in Belgium.”

#### A proving ground

The Co-summit in Stockholm provided the proving ground for testing the concept as the role of software innovation in boosting high-tech employment and industry was explored from a variety of perspectives, by speakers from industry, European and national public authorities. In this time of crisis and unemployment, especially among younger people, Stockholm provided an opportunity to consider the initiatives being taken by the ITEA and ARTEMIS programmes to address this issue. All the keynote speakers praised the role of ITEA

and ARTEMIS in boosting high-tech employment and industry, reiterating the need for adequate investment to secure the future. For example, the European Commission representative at the Co-summit, Werner Steinhögel, confirmed that the Commission welcomes this joint Vision 2030, and Pedro de Sampaio Nunes, head of the EUREKA Secretariat, praised the efforts of the ITEA programme in stating this impact on business and society in such clear terms and in creating real opportunities for the future. Such proclamations of support lent more weight to the notion shared by all the speakers at the Co-summit that investment – from public authorities, the European Commission, industry and research institutions – is vital to ensuring that Europe creates the conditions to enable innovation, and therefore industry, to flourish for the ultimate benefit of society.

At the plenary session later during the Co-summit, the message from the High-level Vision 2030 document continued to resonate as Carsten Rossbach, partner at Roland Berger Strategy Consultants, which provided the hard facts and figures for the positioning paper, underlined the need for Europe not to get left behind by North America and Asia, whose innovation investments outstrip Europe’s while Max Lemke, of the European Commission’s directorate-general CONNECT, pointed out that investment was being increased, although not as much as Rudolf Hagenmüller’s appeal for a ‘doubling of investment’. Still he underlined the

need for cooperation and collaboration, and ‘to use the funds efficiently’.

#### Seizing the high ground

“As we enter the new phase of ITEA 3,” Rudolf explained, “we will be addressing all those categories of Digital Technology which are needed to master the changes ahead of us:

- Industrialised non-differentiating services
- Customised services
- Smart products
- Smart services
- Innovative engineering
- Smart infrastructure
- Security of systems and services.”

#### Happiness

Having outlined the focus of the specific areas in which this mastery is the aim, Rudolf turned to the ‘softer’ but equally essential factors in ensuring the recipe for success. “Of course, we focus on seizing the high ground but we do so with happiness,” Rudolf said. “Happiness in terms of our communities and happiness in society. By generating jobs and revenue, the results of our projects will help to make this happen.” This underlying theme of happiness is one that all the keynote speakers and other invited guests received very warmly. Happiness in all its guises, whether personal or professional. The general gist of opinion was that in a period that has been punctuated by gloomy news and forecasts over the past few years, there has come a time to pursue life and work in such a way that a sense of happiness pervades. It is in such an atmosphere that the best collaboration thrives and generates innovation that can really make society a happier place to be.

In summing up the essence of the Vision 2030 document, Rudolf expressed the underlying principles of ITEA. “Software innovation is our business. Seizing the high ground is our ambition. And happiness is our spirit.” He also pulled no punches when he appealed to “the public authorities here in the audience, let me take the opportunity to stress the call to action that is at the end of our positioning paper: to double the investment in ITEA 3!”

# A blend of all things ITEA

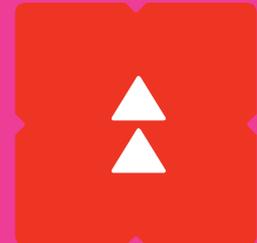


Co-summit in Stockholm,  
4-5 December, 2013

A bustling two-days of bold statements, impassioned pleas, fascinating forums, pulsating presentations, top-class projects and a pervasive sense of happiness enveloped the Scandic Infra Conference Centre in Stockholm on 4 and 5 December.



## Software innovation: boosting high-tech employment and industry



### A very positive energy

At the very start of the event, Rudolf Haggemüller, Chairman of ITEA, called for a doubling of investment in software innovation to build a stronger European industry and more sustainable society. In this he was backed up by his Co-summit 'twin', Heinrich Daembkes, President of the ARTEMIS Industry Association. They had the facts and figures to hand in the *HIGH-LEVEL VISION 2030: OPPORTUNITIES FOR EUROPE, the impact of software innovation on revenue and jobs* to support their claim that innovation in digital technology is helping to create jobs and opportunities in Europe. Full backing for this call also came in the shape of keynote speakers such as Daniel Johansson, State Secretary to the Swedish Minister for Enterprise, Energy and Communications, Charlotte Brogren, Director General VINNOVA,

Swedish Governmental Agency for Innovation Systems, and Ulf Wahlberg, VP for Industry and Research at Ericsson, all of whom underlined the need for software innovation to give European business a leading edge in the global marketplace.

### Excellence

So, with a very positive tone set right from the beginning, over the next two days the buzz was tangible and the exhibition underlined the significance of the transnational ITEA and ARTEMIS innovative projects in propelling Europe to boost its high-tech industry and employment and in keeping Europe prosperous. The outstanding achievements of the projects were highlighted in the presentation of the ITEA Awards of Excellence. In his introduction, Philippe Letellier cited a

number of projects whose results are already part of our daily lives and underlined the very tangible benefits that industry and society gain from the research and innovation generated through the ITEA programme. Philippe invited Pedro de Sampaio Nunes to say a few words before the presentation ceremony. He pointed out that he was present not only as a sign of the commitment from EUREKA to its clusters but also to see the projects themselves and how the public money is being used. "Back in Brussels," he said, "we deal with files and know the names but we don't really know what is happening on the ground. And I am absolutely amazed by what I have seen here. I see not only the vision but also the reasons why these projects have been such success stories. It is clear to me that ITEA 3 bears all the promises of being very successful."



David Faure and Jean Vanderdonck were highlighted for the way in which their UsiXML project took ‘Standardisation’ to the next level by developing a standard language and a universal engineering framework that will

provide benefits in terms of time-to-market, productivity, reuse, propagation-of-change and usability/accessibility guarantees. The impressive results will move the state-of-the-art forward and have a strong worldwide impact. While the ITEA 2 project may have finished, work on UsiXML will continue towards a stable UsiXML 2.2 version and Jean invited those present to join the user participation group and stressed the “need for company involvement and adoption, the need for more software support and the need for use cases as well as the opportunity to discuss more meta-models: concrete UI, user model, modalities, etc.” Finally, he thanked ITEA for being “the best possible instrument for us to achieve our standardisation goals.”



**Smart Urban Spaces (SUS)** won the Excellence Award for ‘Exploitation’ and in his presentation of the project’s impact, Jean-Pierre Tual explained how design frameworks and urban standards will enable European

cities to introduce easily and seamlessly the most advanced mobile technologies in new interoperable e-services for their citizens that improve not only the day-to-day lives of European citizens but also the relationship between local administrations and their citizens and urban service providers. “ITEA has been the optimum framework for the Smart urban Spaces project,” Jean-Pierre remarked, “because it allows the kind of flexibility and experimentation that enables this kind of technology to be developed so close to the market. It is really the only place where you can develop this kind of

technology that is close to the market. It helps to create the high-level momentum for gaining and developing European leadership.”



**IMPONET**, the winner in the category ‘Seizing the High Ground’, investigated the business challenges and opportunities in the electrical distribution domain, identifying and describing the requirements

for advanced metering and power quality monitoring. This business-driven technology project has generated a huge number of deliverables and an impressive architecture to master a complex system. The market potential is significant as evidenced by the considerable interest in commercial development, from Serbia, Spain and Malaysia. Project leader, Eloy Gonzalez, was justifiably proud to receive the award, stating that “we are now in a position, as ITEA recognises, to seize the high ground. We have gained a position for European industry to show the world what we can do. This technology will give us the possibility to move forward, to push the limits. We are developing the technology that will make smart grids look like a thing of the past.”



**OPEES** warranted special attention and Gaël Blondelle took the deserved plaudits for leading this project to build a community to ensure the long-term availability of open source tools for critical industrial sectors

such as aerospace, transport and energy. The subsequent creation of Polarsys, implemented as an Industry Working Group within the Eclipse Foundation, allowed the emergence of a European service industry, a common vision and roadmap. The upshot is that the results of R&D collaborative projects can be extended and shared through an open technical repository of tools in the domain of embedded software

engineering, thereby reinforcing the European influence in the worldwide Eclipse community and positioning Europe at the centre of the Embedded and Industry community in Eclipse.

The Exhibition Award winner announced at the end of the Co-summit was voted for by exhibition participants and visitors: **AMALTHEA**. This project, led by Karlheinz Topp, was enthusiastically received for the clarity of its presentation and the enthusiasm of its standholders ensured that this very dynamic corner of the exhibition hall left a significant impression on all who visited it.

### All the fun at the fair

A ‘happy’ community enjoying the opportunity to network, share, learn and show was the order of the day in every nook, cranny and corner of the exhibition floor as people engaged in all kinds of activity, from listening intently to pitches and presentations, posing interesting questions to project leaders and chatting informally while enjoying a snack or a drink. The very open-plan nature of the booths, an archipelago of triangles, invited easy contact. The breadth and depth of innovation and achievement were impressive, and a visit to the exhibition by Daniel Johansson clearly had an impact as he cited the quality, range and impact of the projects on show before his opening keynote speech.

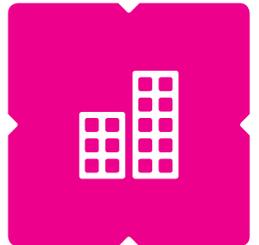


### Vision 2030

An important component on the first day of the Co-summit was the presentation of the **ITEA ARTEMIS-IA HIGH-LEVEL VISION 2030: OPPORTUNITIES FOR EUROPE, the impact of software innovation on revenue and jobs** that contains a very clear message about the impact of software innovation in facts and figures. Both the European Commission representative at the Co-summit, Werner Steinhögel, and Pedro de Sampaio Nunes, head of the EUREKA Secretariat, confirmed support for this joint Vision 2030 and lent weight to the notion shared by all the speakers at the Co-summit that investment – from public authorities, the European Commission, industry and research institutions – is vital to ensuring that Europe creates the conditions to enable innovation, and therefore industry, to flourish for the ultimate benefit of society.

**Environment of opportunity**

On the second day, the Co-summit’s panel session went on to explore the theme of *Software innovation: boosting high-tech employment and industry*. Joachim Karlsson, of VINNOVA, expressed his conviction that “ICT transforms industry and creates opportunity” while Tim Sinnaeve, Marketing Director for Digital Cinema at Barco, reminded the audience, in citing *Outliers* by Malcom Gladwell, that it is an environment of opportunity that enabled Bill Gates become the phenomenon he became. Carsten Rossbach, partner at Roland Berger Strategy Consultants, which provided the hard facts and figures for the ITEA ARTEMIS-IA High-level Vision 2030 positioning paper, underlined the need for Europe not to get left behind by North America and Asia while Max Lemke, of the European Commission’s directorate-general



CONNECT, pointed out the need for cooperation and collaboration. “We have to join together,” he said, “to use the funds efficiently.”

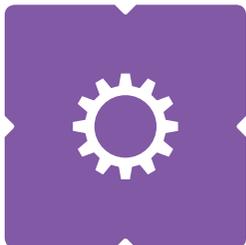
**Speakers Corners**

A unique feature of this Co-summit was the Speakers Corner concept. In the orange corner the presentations and debate centred on the fascinating area of the web of objects and the 2nd renaissance that focused on the software engineering challenges to be addressed from an automotive perspective. In the blue corner, man and machine was the focus of the presentations. Here speakers from the D3COS, ASTUTE, MEDUSA and Empathic projects covered human factors in man-machine design systems. Green was for open source, introduced by Gaël Blondelle whose work on OPEES and PolarSys was recognised at the Excellence Awards ceremony. Topics turned to sustainable open-source software systems and OpenETCS, and closed with an animated debate session. The pink corner looked at how emerging

technologies were meeting the grand challenges faced by production industries. These included a consideration of the ProcesIT.eu roadmap and managing the knowledge that is critical to support maintenance decision-making and real-time sensing.

**To boldly go ...**

As the Co-summit drew to its conclusion, both Heinrich Daembkes and Rudolf Hagenmüller reiterated the conviction to be bold and to seize the high ground. In summing up the two days, Rudolf again issued a call for action: “We have had a couple of exciting days. Let us be the world leaders in exploiting software innovation. We are very ambitious so let’s work hard and with happiness to achieve our goals.”



# ITEA happiness 'a two-sided meaning'

## ITEA community

Wilbert Schaap



**Wilbert Schaap, programme coordinator at the Netherlands Enterprise Agency for the ITEA and ARTEMIS programmes. The Netherlands Enterprise Agency (RVO.nl) encourages entrepreneurs in sustainable, agrarian, innovative and international business. It helps with grants, finding business partners, know-how**

**and compliance with laws and regulations. The Netherlands Enterprise Agency is part of the Ministry of Economic Affairs. The organisation has been in existence since 2014 and is the result of a merger between Agency NL and the Dienst Regelingen. Wilbert Schaap draws significant experience from his involvement through the Dutch Ministry of Economic Affairs in the several EUREKA initiatives and a major programme to promote the application of IT in Dutch SMEs. He looks back on his involvement in the ITEA story to date.**

*Can you say a little about your background and the highlights of your career to date?*

I have Masters in public administration and IT that prepared me well for the kind of work I do. As for the highlights of my career to date, I have done a lot of different jobs within the Ministry of Economic Affairs, starting with my involvement with the liberalisation of telecom 20 years ago in Brussels and the introduction of GSM to the Netherlands, working with the OECD in Paris and quite early in my career I became involved in EUREKA projects, such as HDTV and digital audio broadcasting in their really pioneering phases. I was also involved in the auctioning of UMTS and FM frequencies. There have been many highlights throughout my career at the Ministry since 1987 and one of the main reasons I'm still here is I am happy in the work I do.

*How did you become involved in ITEA?*

I used to be account manager for the relations with Philips. I became fascinated with the idea that Philips and other leading companies had at the time of setting up the ITEA programme for embedded systems and services. So I got involved from the public authorities' side. And I guess I am one of the few around who has been involved in ITEA since day one. Fopke Klok is

already the fourth office director that I have got to know. Although I must admit I had a five-year break when I was asked to work on service innovation but then a change in government policy meant that I became reintroduced to ITEA a couple of years ago.

*How has ITEA changed over the years?*

What I now see is an ITEA organisation that is a very well oiled machine. It has been a gradual process of getting there. What is also perceptible is the growing importance of the ITEA programme, in terms of the participants in the projects. I think one of the keys to the success has been the blend of industry and research, the way in which both larger and smaller enterprises work with academia and the public authorities to generate the breakthroughs and results that have an impact on our daily lives.

*How would you assess the role of ITEA in terms of Europe's ambitions?*

If you look at the VISION 2030, you see that Europe is doing very well in certain areas. But you can't rest on your laurels because if you do, you'll find yourself lagging behind. So I believe that 'seizing the high ground' is vital to Europe's ambition to stay number one. And EUREKA and ITEA have crucial roles to play in keeping Europe competitive. As for the role that ITEA will play in the coming decade, well you only have to take a look at all the projects on display in the Co-summit exhibition and you feel a real buzz. Everyone is talking so enthusiastically about their projects and is putting a real emphasis on the impact their projects have. Of course, that is something the Ministry of Economic Affairs is keen to hear. After all, you want to see your investments getting a return.

*How important is 'happiness'?*

Happiness? You can, of course, take this very literally. You're very happy when you see an ITEA project in healthcare benefiting so many people's lives. You're happy when the quality of your life improves. You can also see happiness in terms of your work. It's obvious from all the happy faces at the exhibition that enjoyment is something that runs through veins of the ITEA community. And that makes me very happy, too. It creates a virtuous circle.



Frank van der Linden

Frank van der Linden, of Philips Healthcare, has been involved in leading successful ITEA projects since 1999. With a broad knowledge of mathematics, software engineering, physics, chemistry and (human) biology along with a sprinkling of psychology and sociology, Frank is involved in software engineering in the broad sense. His aim is to enable people to make easy use of technology.

*Can you say a little about your background and the highlights of your career to date?*

After completing a PhD in Mathematics, in 1984 I joined Philips in the software engineering field: program semantics, parallelism, artificial intelligence. As the years went by, I became more involved in software architecture and in 1995 I became involved in a European project on product line engineering, and that is where I made my name. In 1999, I was leading one of the two first ITEA projects: ESAPS. Six years later we had 3 successful projects, accumulated a lot of knowledge and I co-authored two books out of these projects. A real highlight for me is that they are still selling very well today. After that I focused on collaborative development and open source. Then the public authorities switched their attention to application-gearred projects and so I became involved in medical imaging projects. Which is where I am today.

*How did you become involved in ITEA?*

When I heard that ITEA was being founded, I wanted to become involved so I defined a project outline and proposal in late 1998 for ITEA. Philips was, of course, one of the co-founders, so the groundwork had been laid and this allowed me to know how and where to pitch a relevant project. I then became involved in the second ITEA roadmap, which is something I enjoyed very much. I still contribute ideas to the roadmap today. My experience within the ITEA community also feeds back into Philips Healthcare where I can advise on what and what not to do in submitting project proposals.

*How has ITEA changed over the years?*

As I said, there has been a shift towards application innovation. I also see quite a change in the composition of the companies in ITEA projects. In the beginning the large companies dominated but now there are increasing numbers of SMEs bringing in their specific expertise and becoming a real part of the landscape. So the community is growing. In addition, what was a technology drive in 1999 has become much more focused on responding to the needs of society and the challenges that face us. And with this shift, the ITEA organisation has become more professional. The support is better now than it was ten years ago.

*How would you assess the role of ITEA in terms of Europe's ambitions?*

Being in the network cannot be understated. This is a vital role that ITEA fulfils in acquiring and disseminating knowledge and enabling innovation to really take place. It is a kind of catalyst that brings different elements together, from software developers to tool providers, and accelerates innovation. Of course, the funding helps to get projects off the ground but the environment allows the partners to move out of their own zones, to gain a broader perspective and to benefit from each other's knowledge and expertise. This motivates, accelerates innovation and generates results. An essential aspect, too, is the need for integration and interoperability. ITEA has played and must continue to play a central role in this because rising to the challenges will be key to Europe's ambitions to have a competitive edge in digital technology.

*How do you interpret two pillars of the VISION 2030, 'seizing the high ground' and 'happiness'?*

To me 'seizing the high ground' means 'harvesting the best ideas' and this is what we are doing, pushing the boundaries of what is possible. And that often creates the basis for taking it to the next level. From prototype to product, for example. My take on 'happiness' is that an idea actually grows into something that works. I am also happy when I see the people in my project produce common results and see that others are interested in their work. My mother is 88 and recently she bought an iPad. She can Skype, use Facebook, take photos and connect with her children and grandchildren, some living abroad – that's happiness.

---

**'My take on 'happiness' is that an idea actually grows into something that works.'**

---

# Better life of the end-user

ITEA projects are aimed at making people's lives happier. Whether it's medical imaging for the early detection and thus preventive treatment of tumours, critical automotive safety systems that make our lives safer and more comfortable, smartphone applications that enable tourists to get the most out of a weekend in a foreign city or smart energy distribution systems that help us save consumption and cost. These are just a few of the examples of how the exploitation of ITEA project results can boost the quality of people's lives and make for happier communities and society.

## Digital Cinema



## JEDI



## PARMA



---

# Exploitation of ITEA project results boosting the quality of people's lives

---

## EPAS



## MEDIATE



## NEMO&CODED, IMPONET



## SUS



## MODELISAR



ITEA Success story: EAST-EEA

# A revolution in automotive software development

For about fifteen years ITEA projects have created a ‘string of pearls’, successes that have laid the foundations for ITEA to be just as, if not more, successful in the future in a number of key domains. These are projects that have ‘seized the high ground’ and pushed the domain into the next phase of its development. One such domain is automotive and one such story of success is EAST-EEA, a project that began in 2001 and ended in 2004. Ended? No, because this project has generated a constant flow of results for projects and ‘pearls’ of success that have continued to this day and will continue on into the future.

---

## A constant flow of results for projects and ‘pearls’ of success

---

### The first ‘pearl’

To set the scene: the challenge posed at the beginning of the new millennium in the evolution of cars was the implementation of integral electronic control of in-vehicle and extra-vehicle functions in order to achieve active and predictive safety functions, enhanced comfort, improvements to the vehicle’s ability to make progress on existing roadways and protection of the environment. Twenty-three partners from across the European car industry joined forces in the EAST-EEA ITEA project in order to create the standard middleware, to define a high-level language to make it accessible and to develop specialist tools including test tools and demonstrators to tackle this challenge.

EAST-EEA provided an open and layered middleware architecture with interfaces and services that support the high-quality portability of embedded software modules. The middleware, as well as the communication layer concepts, were implemented and validated in demonstrators in the different automotive areas of body electronics, powertrain, chassis, telematics and human-machine interfaces. The software development model created by EAST-EEA consisted of successive development and validation processes that acted as a foundation into which all development phases and support software requirements could be incorporated for traceability. The techniques and tools developed in the project ensured conformity between requirements, design process and the

resulting products. The work also resulted in a publicly available dedicated ADL, Architecture Description Language. In addition to the technical work, EAST-EEA provided a widely accepted technical glossary and elaborated a general framework for a future reference architecture.

### Towards integration

The new software architecture allowed the easier integration of new electronics in cars through plug-and-play technology, dramatically reducing development time and costs to market. Not only that but new systems, such as new electronic steering systems, would be quicker to design and to market. Furthermore, the project also guaranteed a level of quality that

---

## With the involvement of the complete automotive supply chain, the impact of the SAFE project will be felt on several levels

---

is essential to the competitiveness of European cars. Immediate beneficiaries included the EU Framework 6 project EASIS and the car industry's AUTOSAR (AUTomotive Open System ARchitecture) initiative, the latter taking the Architecture Description Language (ADL) initially defined in the ITEA EAST-EEA project and subsequently refining to describe automotive electronic systems through an information model that captures engineering information in a standardised form.

Thanks to the EAST-EEA approach, vehicle manufacturers acquired an integrated framework for software and communication interfaces, tool environments and rules while suppliers benefited from standard solutions and re-use became possible, with new vehicle models able to be developed faster and product quality improved. However, with the advent of multi-core, a further leap was required in automotive

software development and here, too, an ITEA project took over the baton.

### AMALTHEA

While AUTOSAR defined a methodology for component-based development of automotive software and a standardised software architecture for automotive electronic control units, only limited support was offered for detailed behaviour descriptions that are indispensable for developing much more complex multi-core systems of sufficiently high quality. This requires an increased exchange between tools, especially in the case of multi-core optimisation that is based on additional information like the detailed timing behaviour. With its motto 'Tune up your software development', the ITEA 2 AMALTHEA project, which began in 2011, set about adapting existing development methods and tools and creating an open-source development platform with common data models and well-defined interfaces to achieve a remarkable increase in the efficiency of software development.

Dr. Christoph Kornmesser of VW has commented that "in order to reduce the effort for exchanging data, a platform with a common data model is a key. AMALTHEA and its data model provide the ideal platform for exchanging data with our suppliers in the production process." Several companies are already using the platform to create and exchange data models of their control units while others are investigating the benefits of this option compared to other solutions. A special focus in developing the platform is open interfaces to enable the integration of a variety of tools, whether open source, commercial or corporate-owned, using Eclipse as the basis for the development environment, which provides a plug-in mechanism and thus an easy integration with other tools. As an open source tool chain platform, AMALTHEA allows efficient data exchange not only between different cooperating companies but also between different tools used by a single organisation. Equally, each user can build a customised tool chain by choosing appropriate tools that work on the common AMALTHEA data model. In this context, the multi-core capability of the common AMALTHEA data model has already been proven to be appropriate for tools simulating multi-core systems.

### A SAFE market boost

With the state-of-the-art a dynamic moving target, the ITEA 2 SAFE project brings the results of EAST-EEA and successive projects up to date, especially in respect of the latest ISO 26262 standard for functional safety in automotive electrical and electronic systems published in November 2011. This project focuses on accelerating the efficient development of safety features in cars by extending the AUTOSAR architectural model now widely used in production vehicles and throughout the automotive supply chain.

As many of today's innovations focus on active or passive safety, the tough demands on systems reliability and functionality put pressure on development processes. SAFE addresses the demands of these new standards, reducing software development efforts while ensuring a technological advantage for Europe through the fast realisation of innovative and high-quality yet affordable products. The extension of the AUTOSAR architecture model will enable the effective integration of artefacts associated with the application of ISO 26262 and be implemented in a technology reference platform that will itself be extended with a set of appropriate plug-ins to allow evaluation of the methods within significant industrial case studies, with the involvement of the complete automotive supply chain. By including carmakers, their tier-one suppliers, chipmakers and tool suppliers as well as research organisations, the impact of the SAFE project will be felt on several levels.

### Benefits throughout the chain

Car manufacturers will acquire methods and tools that provide the flexibility to develop new architectures with a Safety-In-the-Loop approach while first tier suppliers will be able to demonstrate safety conformity and optimise development costs. In their turn, semiconductor manufacturers can develop new architectures for safe hardware components and tool vendors gain an opportunity to provide an integrated tool-chain including design and safety analysis. Finally, research organisations benefit from the possibility to subject their conceptual work to methods of analysis. Certification bodies can gain accreditation for automotive certification of functional safety assessment.

Another ‘grandchild’ of EAST-EEA is the ITEA 2 TIMMO-2-USE project that enables an advanced timing framework to complement and extend AUTOSAR. It significantly improves automation for more predictable development cycles, thereby cutting development risks and time to market. The result is much increased reliability, safety, robustness and fault tolerance with better early quality control.

#### Significant automation advance

A first step in the efficient exchange of timing information between OEM and Tier-1 suppliers, for instance, was the development of the Timing Augmented Description Language (TADL) and the description of timing information on higher abstraction levels by referencing discrete events, or event chains. To increase reliability, safety, robustness, fault tolerance through a much higher degree of design automation, TIMMO-2-USE took in hand the specification, transition and exchange of relevant timing information throughout different steps of the AUTOSAR-based development process and tool chain.

The participation of leading automotive organisations in TIMMO-2-USE not only guaranteed a high level of automotive engineering expertise but also excellent exploitation of the project’s results. Given that the vast majority of TIMMO-2-USE partners are AUTOSAR members, the project results will be deployed in the respective AUTOSAR working groups and has given TIMMO-2-USE an excellent internationally competitive position. The impact that such results have generated include shortened, predictable development cycles, reduced time-to-market through massive reuse, more efficient communication and collaboration between different parties involved in development, and less development risk with improved quality.

#### Pearls of success rooted in two decades

The successes of AMALTHEA, SAFE and TIMMO-2-USE, in terms of revolutionising software development in the automotive industry and the impact they have had and will have on subsequent related projects, can be traced back over the past two decades to EAST-EEA. They are projects that have added something new, something extra in response to the state of the industry and market demands. As Stefan Voget,



project leader for the SAFE project, suggests, “the results of the EAST-EEA project, although it finished a decade ago, acts like a reference platform for further development in new projects. Today there is more formalisation in the exchange of communication through models rather than through language. New, model-based technologies are penetrating the market to make things more standardised, clear and less complex. Which reduces not only the costs of development but also the complexity and organisation throughout the chain. It is making life easier for both OEMs and suppliers.”

EAST-EEA provided the fertile foundation for the successful ITEA projects to grow into the string of pearls it has become and make the automotive industry and the users of its products happier – in the knowledge that they will continue to benefit from the ongoing innovation of future ITEA-based projects that ‘seize the high ground’.

#### More information:

[www.amalthea-project.org](http://www.amalthea-project.org)  
[www.safe-project.eu](http://www.safe-project.eu)  
[www.timmo-2-use.org](http://www.timmo-2-use.org)

The EAST-EEA project acts like a reference platform for further development in new projects

# NEWS

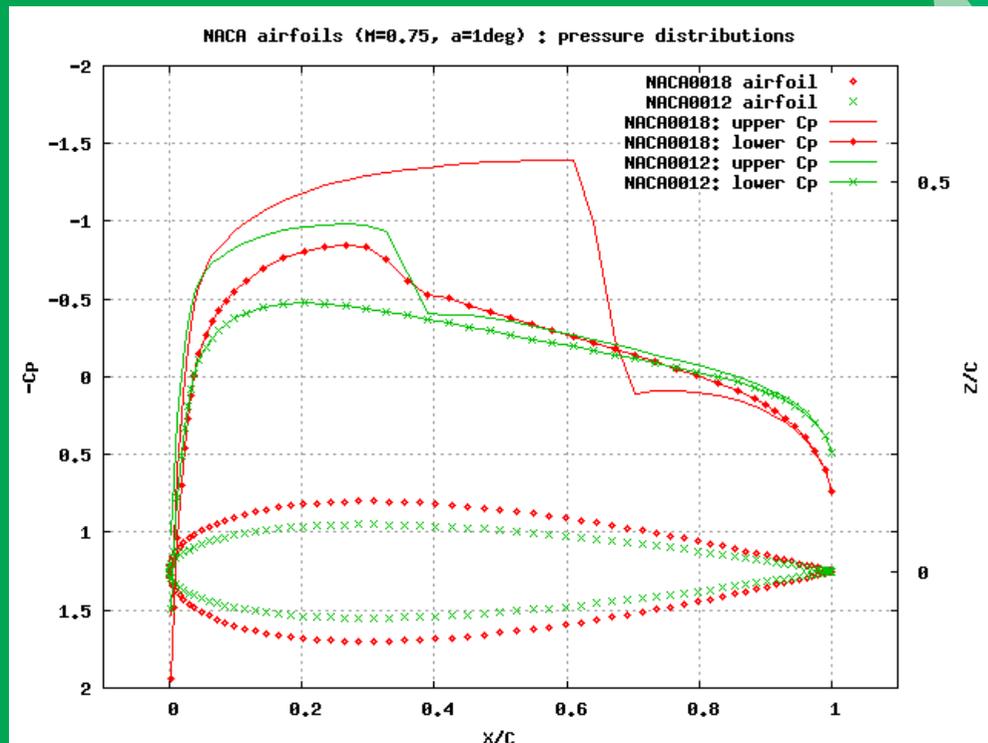
## H4H project pushes HPC in Scilab software

Scilab is the free Open Source software for numerical computation, developed and published by Scilab Enterprises Company. Scilab Enterprises was partner in the H4H project and two major improvements in the use of High Performance Computing with Scilab have been developed and released.

Scilab now has a new module for using the GPU (Graphics Processor Unit) of the computer. It is called **sciGPGPU** and can be automatically installed in Scilab as an ATOMS module (<http://atoms.scilab.org/toolboxes/sciGPGPU>). The module manages OpenCL and CUDA kernels, provides a number of GPU based Scilab functions and maps many CUBLAS and CUFFT functions. It is interesting to use **sciGPGPU** when managing large datasets.

**Scilab/MPI** implements the MPI (Message Passing Interface) API for parallel computation. It manages most Scilab types and is included in new Scilab 5.5.0 (beta version released on October 1st 2013). It is interesting to use **Scilab/MPI** in most of general cases.

**sciGPGPU** and **Scilab/MPI** made from H4H are available in Scilab for the community: Education, Research and Industry. During the H4H project Scilab Enterprises has worked closely with industrial partners to share expertise in the use of their products, to provide updates or new implementation for functions required by domain-specific applications, resulting in improvements for industry:



- Dassault Aviation speeds up its computations for aircraft design by a factor of 6 with **sciGPGPU** on a heterogeneous (CPU+GPU) node and by a factor of 10 with **Scilab/MPI** using 10 MPI processes spread over several CPU nodes.
- Repsol managed to reduce by half some simulation time in seismic inversion and reservoir simulation domains.

H4H

scilab enterprises



DASSAULT AVIATION

# CALENDAR

20-22 January  
**EUROPEAN 3D TSV SUMMIT 2014**

Grenoble, France  
[www.semi.org/eu/node/8566](http://www.semi.org/eu/node/8566)

5-6 February  
**ARTEMIS BROKERAGE EVENT FOR CALL 2014**

Brussels, Belgium  
[www.artemis-ia.eu](http://www.artemis-ia.eu)

5-6 February  
**AENEAS & CATRENE COMMON BROKERAGE EVENT 2014**

Brussels, Belgium  
[www.catrene.org](http://www.catrene.org)

5-7 February  
**ERTS<sup>2</sup> 2014 CONGRESS ON EMBEDDED REAL TIME SYSTEMS AND SOFTWARE**

Toulouse, France  
[www.erts2014.org](http://www.erts2014.org)

26 February  
**ITEA 3 LAUNCH EVENT GERMANY 2014**

Nuremberg, Germany  
[www.itea3.org/launcheventgermany](http://www.itea3.org/launcheventgermany)

This event will be part of EMBEDDED WORLD  
(25-27 February)



10-14 March  
**CEBIT 2014**

Hannover, Germany  
[www.cebit.de](http://www.cebit.de)

27-28 March  
**METROMEET**  
(sent in by ITEA 2 project CAP)

Bilbao, Spain  
[www.metromeet.org/en](http://www.metromeet.org/en)



METROMEET is an event and conference in the industrial dimensional metrology sector, providing information about the latest technology and progress made in the sector. It constitutes a forum for debate on metrology and its development within a fast changing industry. In the METROMEET conferences, international leaders from the Industrial Dimensional Metrology sector including companies and organisms like NIST, Volvo, PTB, NPL, Volkswagen and many others will show you how to improve the quality of your product and the efficiency of its production.

7-11 April  
**HANNOVER MESSE 2014**

Hannover, Germany  
[www.hannovermesse.de](http://www.hannovermesse.de)

23-24 April  
**CELTIC-PLUS EVENT 2014**

Monaco  
[www.celtic-initiative.org](http://www.celtic-initiative.org)

23-24 September  
**ITEA 3 PO PREPARATION DAYS 2014**

**Join us at the event that will give you the excellent opportunity to launch your PO preparation!**

**More detailed information will follow soon.**

[www.itea3.org](http://www.itea3.org)

The EUREKA network



# Europe and beyond

In this special feature on EUREKA, Pedro de Sampaio Nunes, head of the EUREKA Secretariat, looks at the role and impact of the EUREKA countries and networks in achieving the goals set out in 1985 and still relevant today.

In 1985 an initiative was created to 'raise through closer cooperation among enterprises and research in advanced technologies, the *productivity and competitiveness* of Europe's industries and national economies in the world market and hence strengthen the basis for lasting prosperity and employment.' The objectives cited by EUREKA in 1985 are now, some 28 years on, just as relevant as they were then.

Over the past three decades, EUREKA has shown great dynamism and ability to react to changes and the changing needs of European industry, economy and infrastructure. Not only does EUREKA shepherd a list of projects but also provides a forum where European technological development is being fashioned. The *success of our bottom-up approach* where industry can decide which project to start and when is very important and vital in the functioning and continuation of the initiative.

#### **One united voice**

While the member countries of EUREKA play a significant role in establishing important contacts between the stakeholders, a need still

exists to exploit this potential to the full and move towards greater integration and more intra-European cooperation ventures. As natural partner to EU and national R&D&I policies, EUREKA's objectives are also convergent towards the same goals:



the creation of an *Integrated European Research Area*. EUREKA's approach can be a stimulus for governments to pursue more the objectives of European integration in research. And this can only be achieved with the full support and commitment of the whole member countries. We need to have one united voice.

Clusters of public, private and research institutes, as is the case of the EUREKA Clusters, are an important instrument to contribute to *sustainable development for both business and society*.

EUREKA Clusters are the perfect blend of international R&D cooperation with a competitive spirit. They continue to show how public private partnerships can produce breakthroughs in high-tech sectors of significant economic and social importance to Europe. Indeed, EUREKA Clusters are now emphasising cross-sector industrial collaboration as a key instrument to trigger partnerships and perform common research activities. We need to keep in mind one of EUREKA's founding principles, the priority for initiatives from industry and try to further facilitate the renewal and emergence of new strategic industry initiatives.

#### Clusters in the vanguard

It should not be forgotten that EUREKA Clusters represent 70% of the budget of the EUREKA portfolio and have leveraged more than €14.9 billion since EUREKA's creation. It is the flexibility and fast reaction by EUREKA Clusters to new opportunities and constantly changing business landscapes that enable and support EUREKA to be an integral part of the European Research Area and stay in the forefront of industrial innovation. In this respect, ITEA has and will continue to have a major role to play in mastering all societal and economic challenges. Through its support to innovative and pre-competitive R&D projects, it contributes to research excellence in Europe's highly competitive software-intensive systems and services sector. ITEA and all EUREKA Clusters are in the *vanguard of anticipating technological trends and addressing societal challenges*.

Being part of these industry strategic initiatives is a crucial factor in *sharing investment between*

*the private sector and national governments*. This joint funding for industrial research projects is a key element for success. On the one hand, it allows industry to decide on the strategic research priorities and the main objectives to be pursued in each sector and, on the other hand, the public authorities and innovation agencies can check that the return on investment will be in line with their own priorities at national and European level, especially in terms of employment and competitiveness. EUREKA provides a flexible platform for R&D actors to share R&D costs and results, to access other technologies and partners and accelerate the introduction of their results to the market. It is a win-win cooperation.

#### Spotlight on SMEs - Eurostars

Engaging SMEs, alongside industry, in increasing their R&D&I cooperation with partners all around Europe and beyond, has now become a European priority. Cooperation with SMEs in EUREKA is crucial for finding research partners that will help them develop their future products. The high participation of SMEs in EUREKA, and especially the dedicated programme (Eurostars), is a great development and a positive sign that reflects *the vitality of our SMEs and the substantial contribution they are making* towards the development of projects, thereby enhancing European technology. The bottom-up approach in EUREKA has been carefully developed to answer to the specific needs of these SMEs, and it targets the development of new products and services, giving easier access to international markets thanks to the transnational nature of each project consortium.

#### New opportunities and markets

EUREKA's present magnitude and its continuing growth make it an increasingly natural pole of attraction to other areas of the world which aspire to share the spin-offs of technological research, both as active participants in research ventures and as users. South Korea and Canada are two examples of countries that have recently become EUREKA 'affiliates', and South Africa is expected to follow soon. With the initiative becoming greater, so will the interest shown by third countries. Thanks to promoting new forms of cooperation at EU and national level, technological relationships will also be easier,

thus paving the way to *create new partnerships and exploit new opportunities and markets*. We can say that EUREKA is a technological system with a lot of economic and political potential. It will be the responsibility of national governments to ensure that this potential is further developed and promoted.

Of the top 20 global innovators (source: Global Innovation Index 2013), 15 are EUREKA members. Throughout its existence, EUREKA has played a vital innovation role as a driver of economic growth and prosperity and is a key player of the ERA and a natural partner in a number of EU research policies. With more than €30 billion of public-private investment having been mobilised to support 4,452 EUREKA projects in a whole range of technological areas, the success stories that have been generated by these projects have contributed to improving the lives of millions of people. EUREKA has opened itself to a bigger market, a challenge which will continue in the next decade. We are living in an increasingly interdependent world and international cooperation to support European competitiveness through strategic partnerships, access to new markets for European companies and addressing societal challenges will be EUREKA's main objectives for the years to come.

#### Industry and public authorities: meeting the challenges together

One of the major challenges is time to market: being innovative is important but bringing a new product to the market at the right time makes a big difference, especially if we take into consideration today's innovation race. It is essential for there to be *synchronisation among public authorities and industry*, especially when an agreement from authorities from both sides is needed on a common project. But the good news and hope for the future is that industry is and will remain a key player in driving innovation forward with important achievements being in technological developments leading to new standards. This does, of course, depend on the main industrial actors being involved in international cooperation. In the present economic times, it is very important that industry and public authorities invest together in industrial R&D&I to secure a sustainable future for all.

# EUREKA at the Co-summit 2013



Stockholm, 4-5 December



ITEA welcomed Pedro de Sampaio Nunes, Head of the EUREKA Secretariat at the 2013 Co-summit in Stockholm. During the first day, he took part in the presentation of the ITEA ARTEMIS-IA HIGH LEVEL VISION 2030: OPPORTUNITIES FOR EUROPE. Together with Werner Steinhögel of the European Commission, he commended the efforts of ITEA and ARTEMIS in stating the impact on business and society in such clear terms and in creating real opportunities for the future.



*"We are trying to build the European research area and I think that this, the Joint 2030 Vision, is the best example we can present. It's up to you to lead the way and also to mobilise society if you want to keep or expand the nine million jobs in ICT."  
Pedro de Sampaio Nunes, EUREKA.*

ITEA was honoured that on day 2, Mr Nunes addressed the ITEA community in the ITEA Family session and awarded the ITEA Awards of Excellence to the winning projects together with ITEA Vice-chairman Philippe Letellier. As previous years, ITEA and the EUREKA Network joined forces in a combined ITEA-EUREKA stand at the well-visited project exhibition.

# Colophon

---



---

An online version is available at [www.itea3.org](http://www.itea3.org)

**Publisher:**

ITEA Office - High Tech Campus 69-3 - 5656 AG Eindhoven, The Netherlands

**Editorial contributions and copywriting:**

CPLS text & copy - Goirle, The Netherlands

**Design and creative lay-out:**

Studio Kraft - Veldhoven, The Netherlands

**Printing:**

Drukkerij Snep - Eindhoven, The Netherlands

With thanks to the interviewees, project participants, ITEA Office, ITEA Presidium and other ITEA-involved persons for any assistance and material provided in the production of this issue of the ITEA Magazine.

**Submissions:**

The ITEA Office is interested in receiving news or events linked to the ITEA programme, its projects or in general: R&D in the Software-intensive Systems and Services field. Please submit your information to [communications@itea3.org](mailto:communications@itea3.org).

**Subscription enquiries:**

[communications@itea3.org](mailto:communications@itea3.org)

©2014 ITEA Office

Permission to reproduce individual articles from ITEA Magazine for non-commercial purposes is granted, provided that ITEA Magazine is credited as the source.

Opinions expressed in the ITEA Magazine do not necessarily reflect those of the organisation.

---

