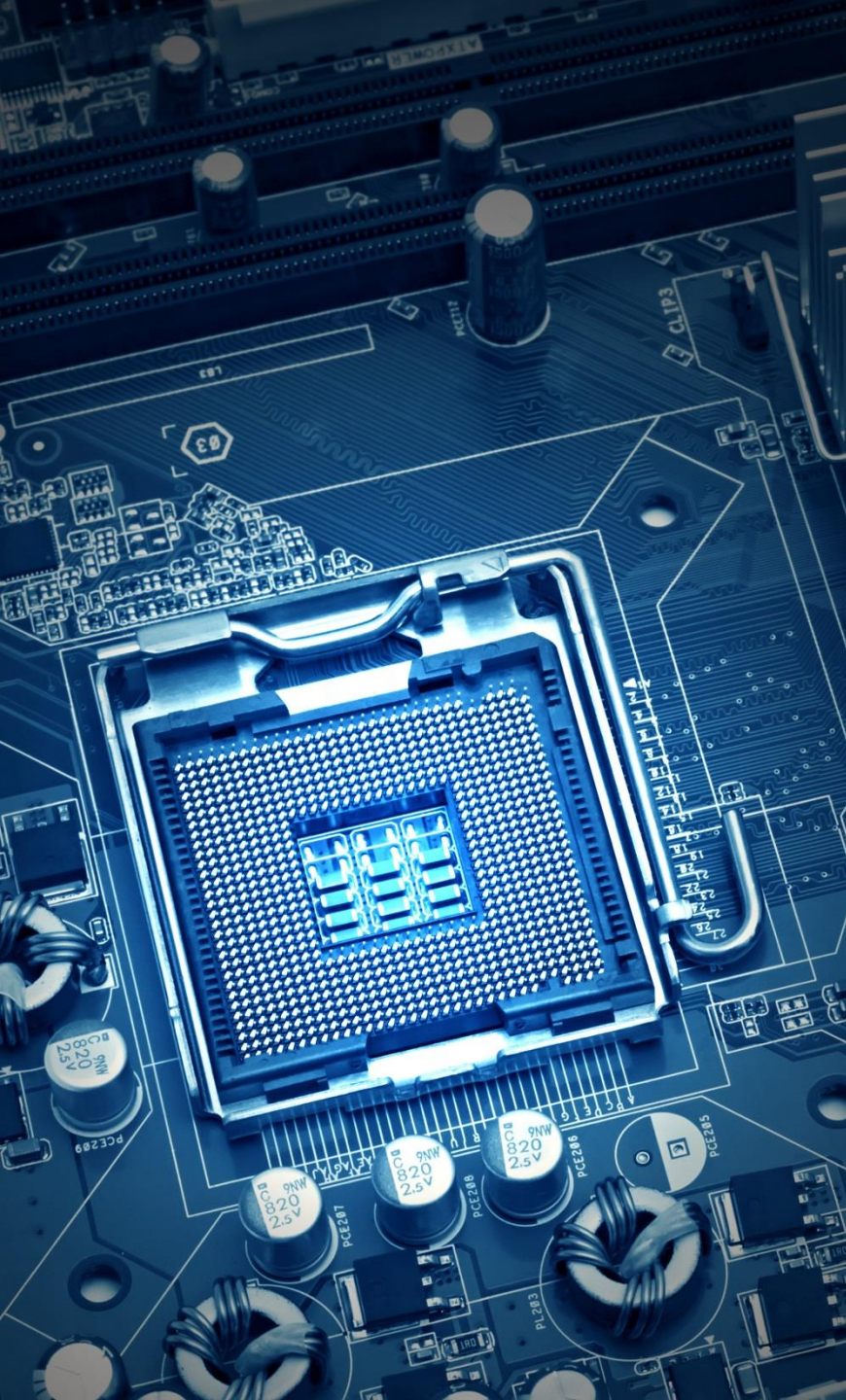


ECSEL – JU

Bert De Colvenaer
Executive Director





What is ECSEL?
Electronic Components and
Systems for European
Leadership

ECSEL

Joint Undertaking

a Public-Private Partnership
Keeping Europe at the Forefront
of Technology Development

Established by the Council Regulation (EU)
No 561/2014

What is ECSEL? - Principles

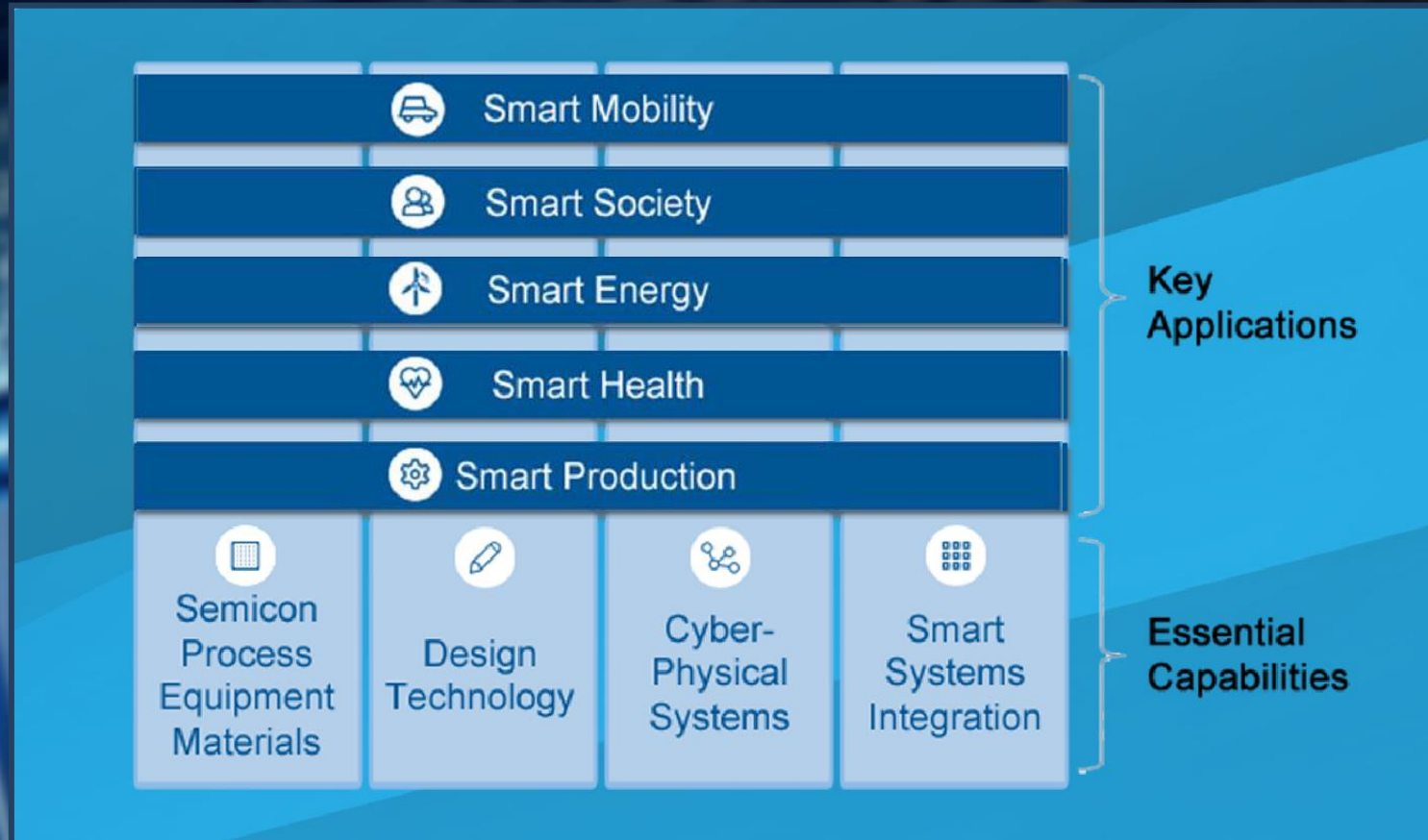
Implement Horizon 2020:

- Develop favourable conditions for investing in knowledge and innovation
- Achieve smart, sustainable and inclusive growth

PPP-model with 3-way funding:

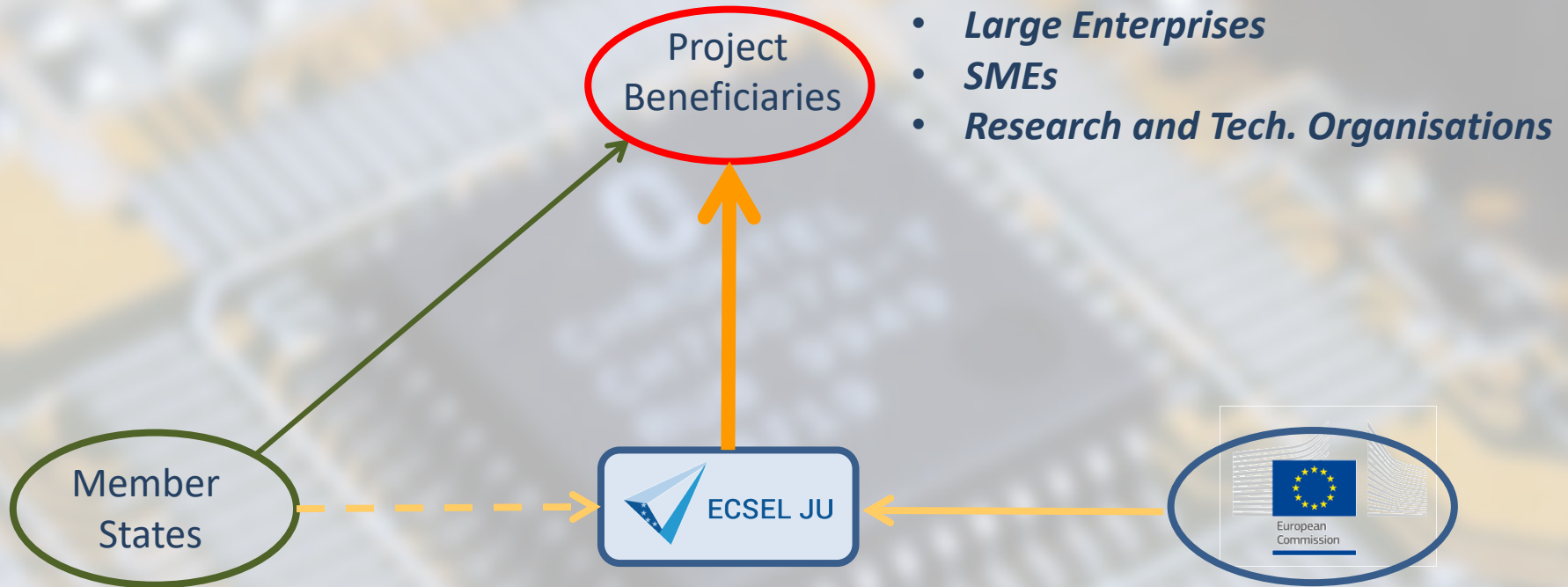
- The European Union (1.17B€, via EC/H2020)
- The ECSEL Participating States (>1.17B€)
- The Private Members (~ 5B€ minus grants)
- Build upon ARTEMIS/ENIAC JU experience and achievements

Why ECSEL ?

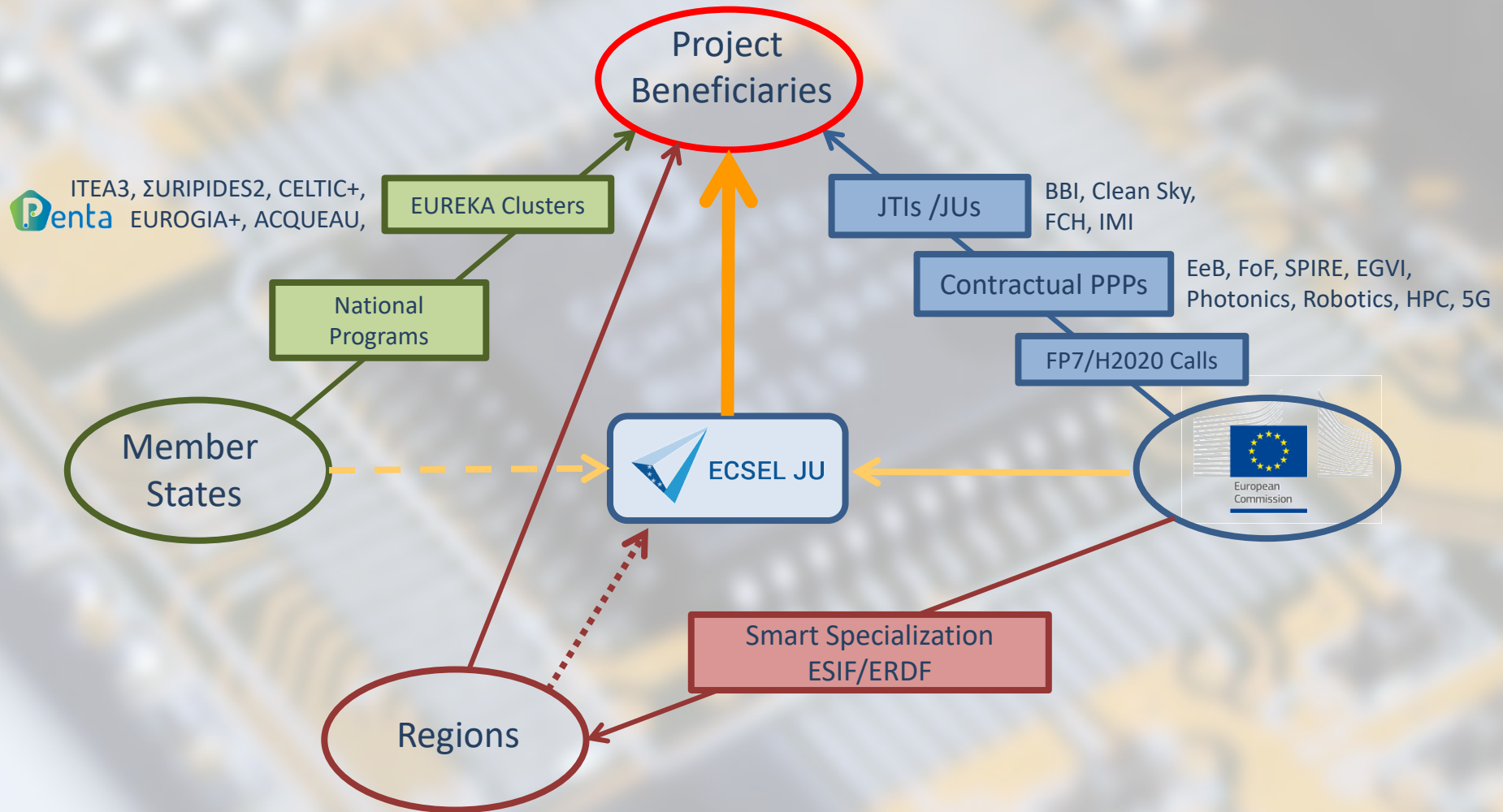


The ECSEL strategy

ECSEL JU funding: EU and National funding together



ECSEL JU funding: complementing other instruments





ECSEL

Calls in 2016



ECSEL JU “Lighthouse Initiatives”

- Build on well identified market-pull related to societal needs, with a strong pan-European dimension
- Create ecosystems along the relevant value and supply chains, where appropriate:
 - Working towards clustering of projects
 - Having a strategic IP management policy
 - Establishing a standardization strategy
 - Addressing the relevant non-technical aspects (legislative, regulatory, social, ...)



Overview ECSEL JU Calls 2016

	Project proposals	Total cost M€	EU Funding requested M€	National Funding requested M€
RIA 2016	28	605	177	176
IA 2016	13	1232	281	270
Total 2016	41	1837	457	446

	RIA	IA
EU/ECSEL	65 M€	85 M€
All MS	About 160 M€	



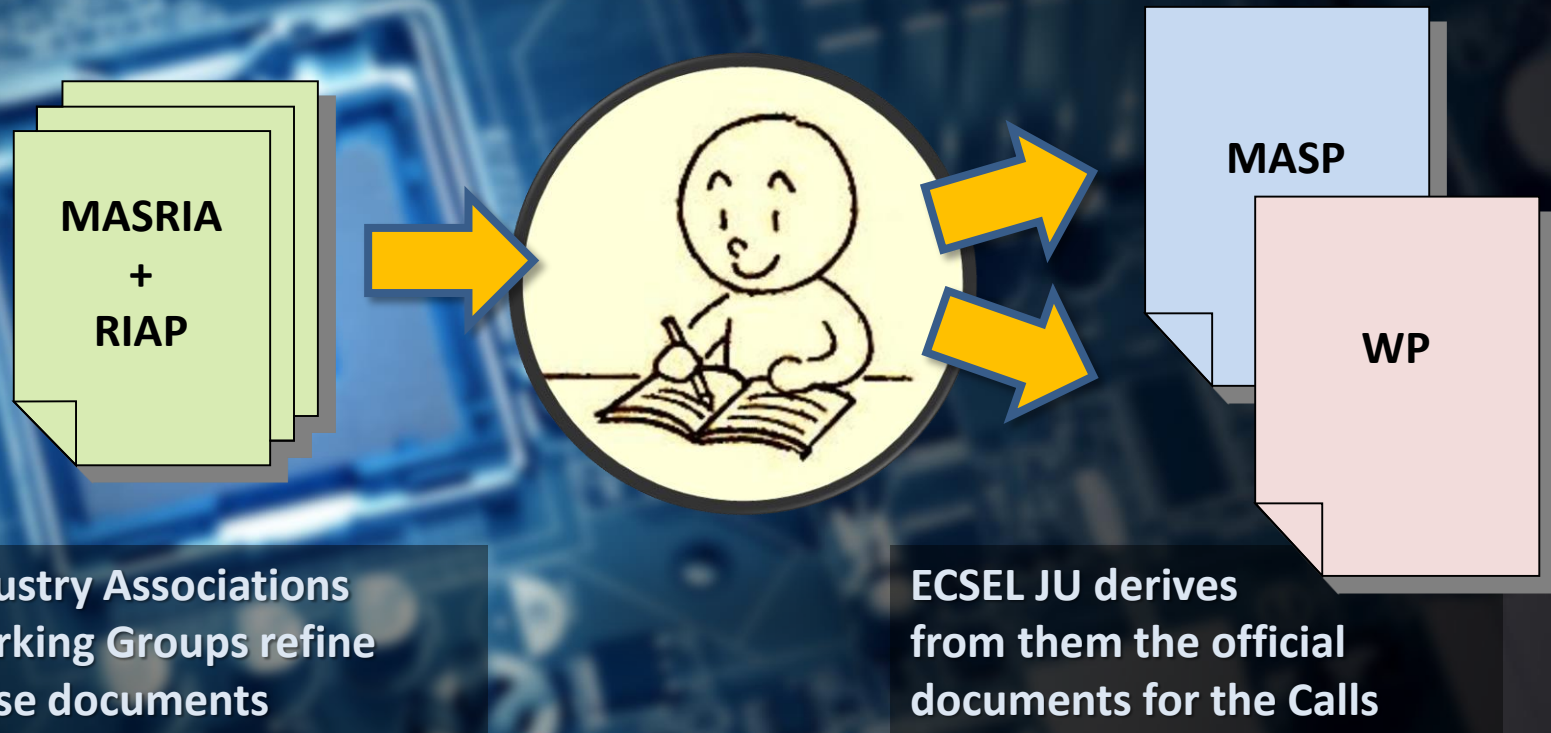
ECSEL

Calls in 2017



Preparing the ECSEL JU 2017 Calls

- Multi Annual Strategic Plan and Work Plan 2017
 - MASP 2017 to be adopted in December 2016
 - Work Plan 2017 to be adopted December 2016



ECSEL JU 2017 calls - provisional -

- MASP & WP: December '16
- Calls launch: begin of March '17
- *EU funding budget \approx 160M€, Total National budgets \sim the same*
- Phase 1: Project outline: end of May '17
- Phase 2: Full Project Proposal: end of September
- Funding Decision: end November '17



Regional cooperation with JU's 11/10, Brussels

14:30 - 17:00

INV11A37 - Enhance Regional Innovation and Growth: possibilities for integrated funding through regional cooperation with Joint Undertakings (JUs)

Workshops - Tuesday 11 October 2016



Organisers: EU-Representation Office of Carinthia
Venue: Committee of the Regions, Van Maerlant, Room 1

Speakers and chair(s): Mr. Biebuyck Bart , Mr. Corvo Paolo , Mr. Kaiser Peter , Mr. Mastantuono Bruno , Mrs. Mol-Arts Mirjam

Enhance Regional Innovation and Growth: possibilities for integrated funding through regional cooperation with Joint Undertakings (JUs)

To boost innovation and growth in the regions, synergies between different funding mechanisms such as the European Structural and Investment Funds (ESIF) and the Horizon 2020 programme are crucial. Five public-private partnerships (BBI, Clean Sky, ECSEL, FCH, IMI) and their regional and industrial partners (Andalucia, Carinthia, Clariant GmbH, Noord-Brabant, Scotland, Valcea) come together to exchange best practices on enhancing regional innovation by combining public and private funding and explore new forms of cooperation. Speakers represent regions, JUs, industry and research project partners in the field of electronic components and systems, health, fuel cells and hydrogen, aeronautics and bio-based industries.


This workshop will be followed by a networking session.

Target audience

- ☑ EU, national, regional and local policy/decision makers
- ☑ Other stakeholders: private companies, financial institutions, European and national associations

ECSEL JU Stakeholder Forum 2016

[HOME](#) [ABOUT ECSEL JU](#) [CALLS FOR PROPOSALS](#) [PROJECTS & PARTNERS](#) [DOCUMENTS](#) [PUBLICATIONS](#) [EVENTS](#) [CONTACT](#)


SEARCH 

EVENTS

- > 2016 Events
 - > **ECSEL Stakeholder Forum 2016**
 - > Programme
 - > Registration
 - > Location
 - > ECSEL Call Forum 2016
 - > Brokerage 2016
- > 2016 past Events
- > 2015 Events
- > 2014 Events

ECSEL STAKEHOLDER FORUM 2016

Brussels, Belgium



Wednesday October 19th (evening) and Thursday October 20th 2016

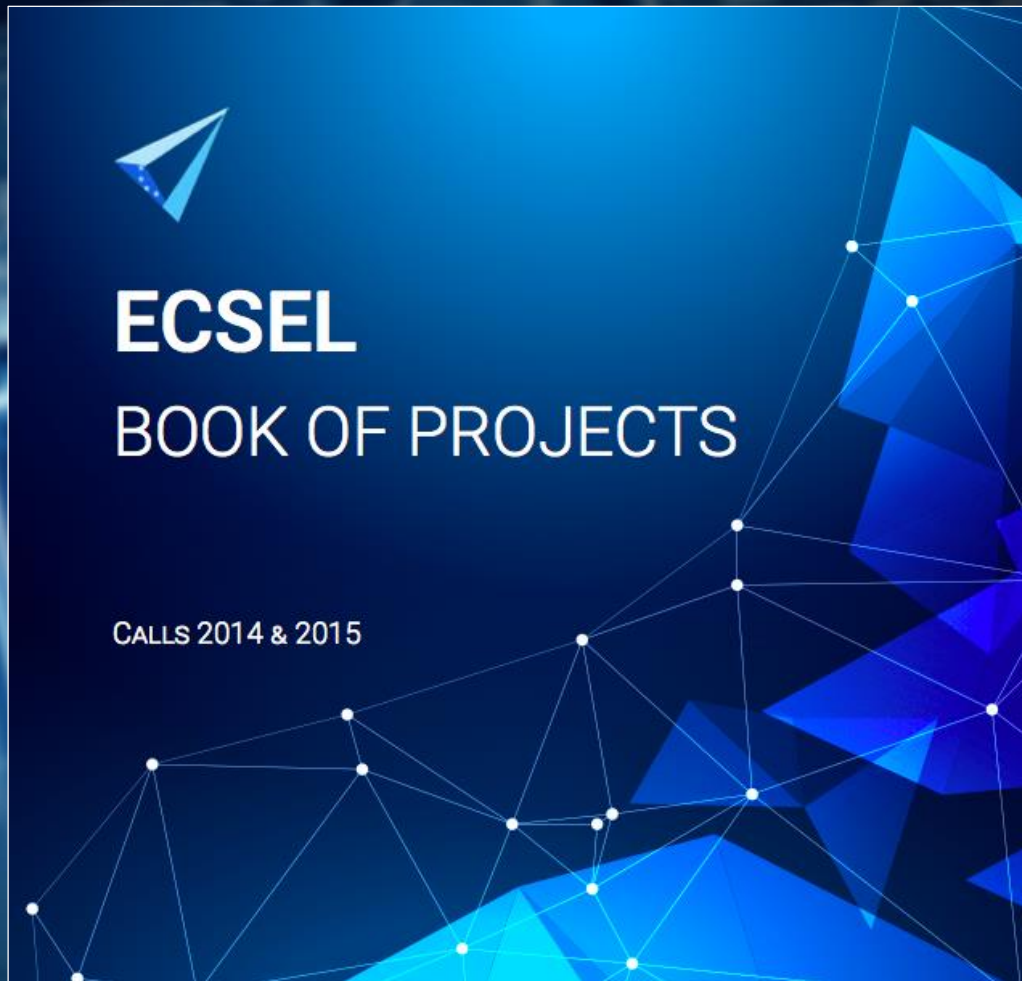
The ECSEL Private Members Board will organise the "**ECSEL Stakeholders' Forum**" in Brussels, Belgium. The event will take place at the [Sheraton Brussels Hotel](#), in the city centre. [Details can be found here.](#)

Strategic guidelines for the ECSEL programme will be outlined and discussed, and time is available in parallel Working Groups to discuss and develop the various chapters of the Multi-Annual Strategic Research and Innovation Agenda (MASRIA).

Participation is free of charge but registration is mandatory. As available capacity is fixed, we recommend that you [register early](#).

PROGRAMME: The event on October 19th will start at 18:00. The programme on October 20th starts at 9:00 and finishes at 16:00. [See details here.](#)

ECSEL JU Book of Projects



ECSEL JU Book of Projects



SafeCOP



Start date	1 April 2016
Duration	36 months
Total investment	€3.8M
Number of participants	28

Next generation Cyber-Physical Systems (CPS) are interconnected through wireless communication. They provide businesses and individuals with a wide range of highly innovative applications and services in everyday life. Because of the complex nature of these systems, it is necessary to make sure they comply with essential requirements of safety and security.

SafeCOP is an ECSEL project targeting cyber-physical systems whose safe cooperation relies on wireless communication. The Cooperative Open Cyber-Physical System (CO-CPS) is a "system-of-systems", which is characterised by multiple stakeholders, dynamic system definitions, and unpredictable operating environments. In this scenario, no single party holds the overall responsibility over the system, which means the safety-relevant functions are performed jointly while relying on the wireless communication. This means that safety and security could easily be compromised.

Such CO-CPS can successfully address several societal challenges, and can lead to new applications and new markets. For instance, cooperative vehicles, or "V2V", have been shown to reduce fuel consumption, decrease the number of traffic accidents, and result in efficiency gains and congestion savings. CO-CPS can also be successfully applied in

healthcare, a domain which is characterized by dramatically increasing costs. For example, cooperative robots could be used to reduce the amount of physical labour in hospitals.

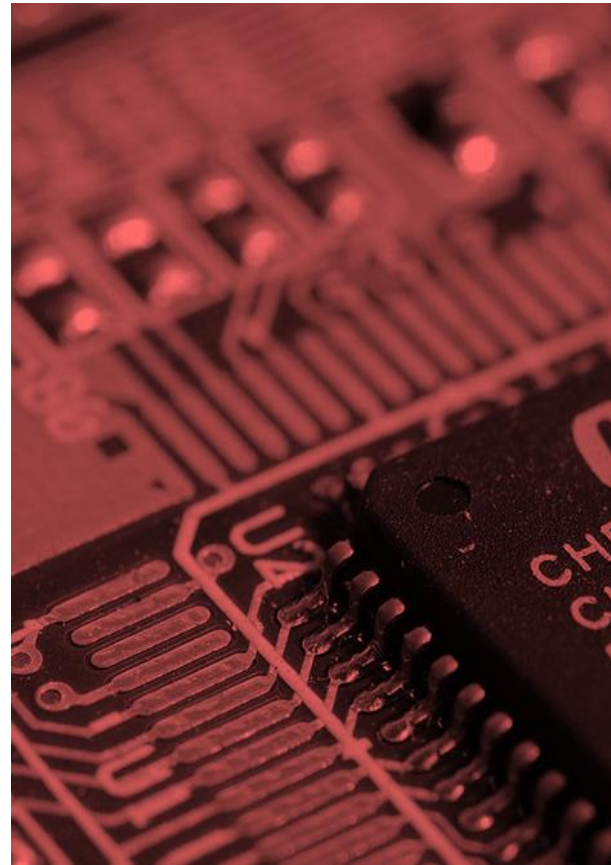
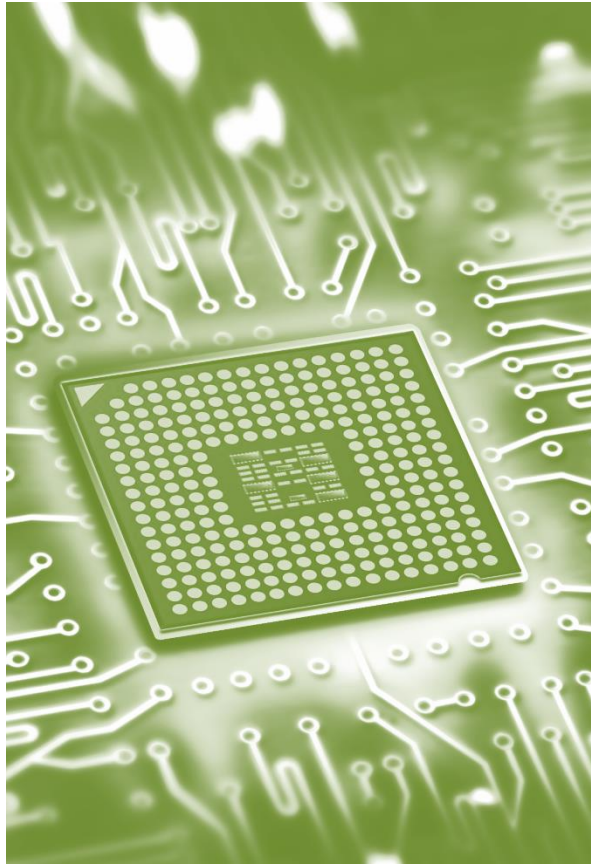
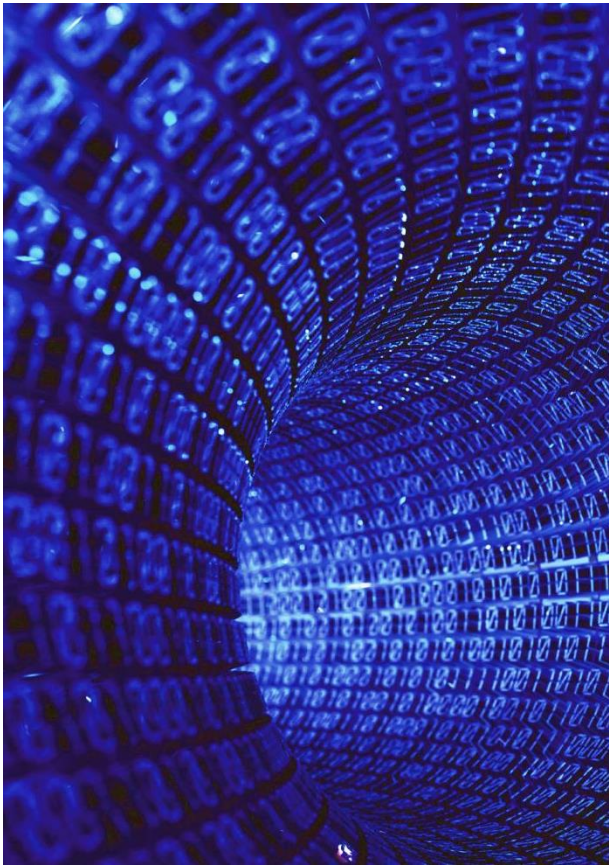
Development of CO-CPS, however, poses challenges that are not adequately addressed by existing practices. These challenges typically require design decisions to be made that trade-off safety concerns, functionality, cost, and other considerations. SafeCOP will develop a safety-assurance framework for such systems, which will facilitate their certification and market release. The project will also define a reference "Runtime Manager" architecture that detects abnormal behaviour, and triggers a safety degraded mode in case of emergency. SafeCOP will also contribute to developing new standards and regulations by providing certification authorities with scientifically legitimate solutions. The project will also equip current wireless technologies with a safety protocol to ensure secure cooperation of already existing systems.

SafeCOP brings clear benefits in implementation and certification practice of cooperating systems in four areas: healthcare, maritime, vehicle-to-vehicle and vehicle-to-infrastructure. The project will lower certification costs, increase trustworthiness of wireless communication, ensure better management of increasing complexity, reduce effort for verification and validation, lower total system costs, and shorten time to market leading to increased market share. These results will be demonstrated in five use-cases: cooperative moving of empty hospital beds, cooperative bathymetry with boat platoons, vehicle control loss warning, vehicle and roadside units' interaction and vehicle-to-infrastructure cooperation for traffic management.

Summary:

- Joint
- Customer
- Communication





Thank you

