



EUREKA CLUSTERS

EUREKA ICT Clusters
and
INNOGLOBAL 2018

Zeynep Sarilar

InterCluster spokesperson

European innovation landscape

EUREKA Σ !
innovation across borders



EUROPEAN

Innovation
Programmes
following
**European
Strategy**



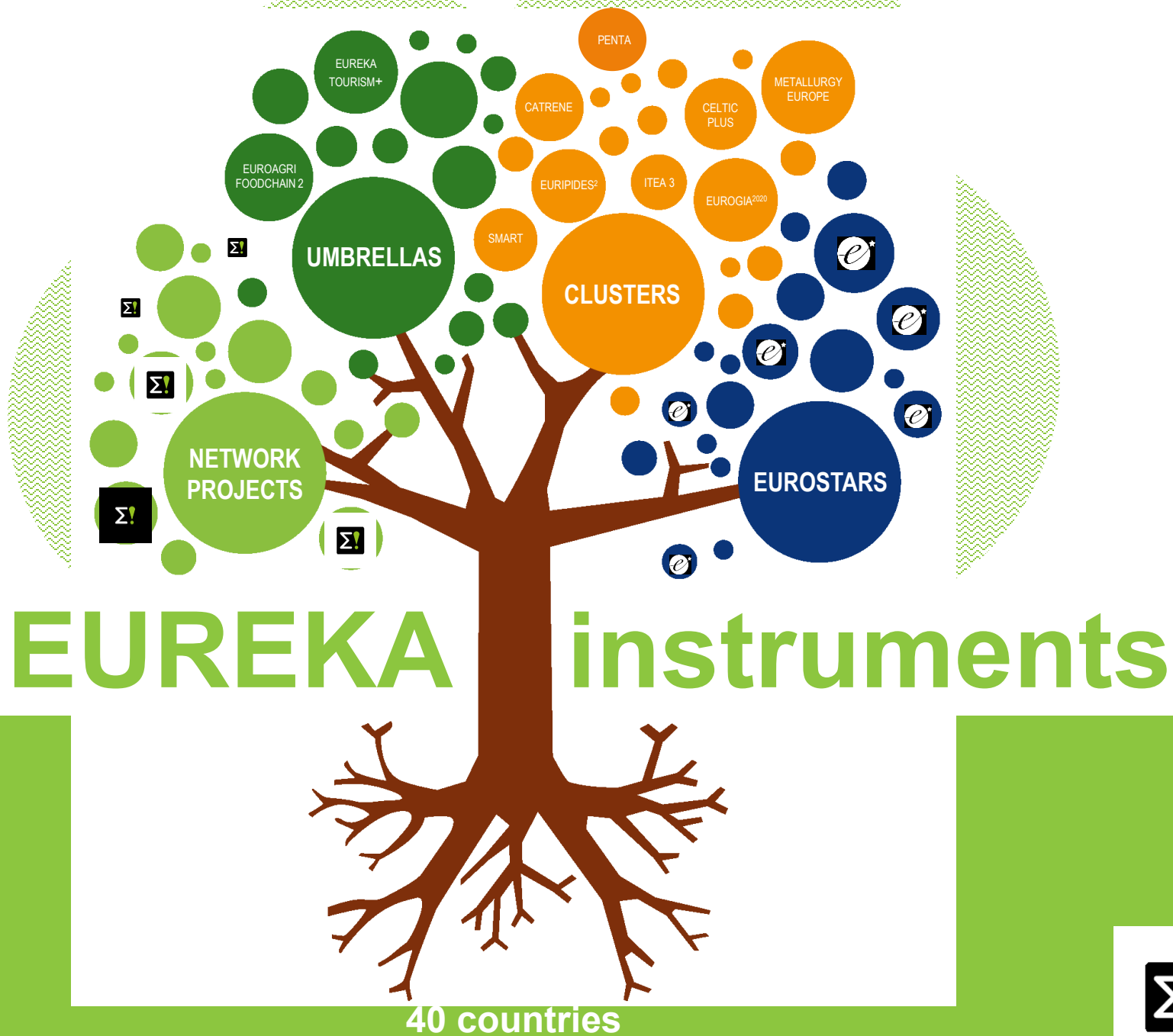
NATIONAL

Develop &
Maintain
**Critical Mass &
Differentiation**



EUREKA

Trans-National
Programmes
following
National Priorities





Micro and nano electronics

(Last Call in 2015 but projects will continue until 2018)



ICT and telecommunications



Smart electronic systems



Low carbon energy technologies



Software intensive systems and services



Advanced materials and manufacturing



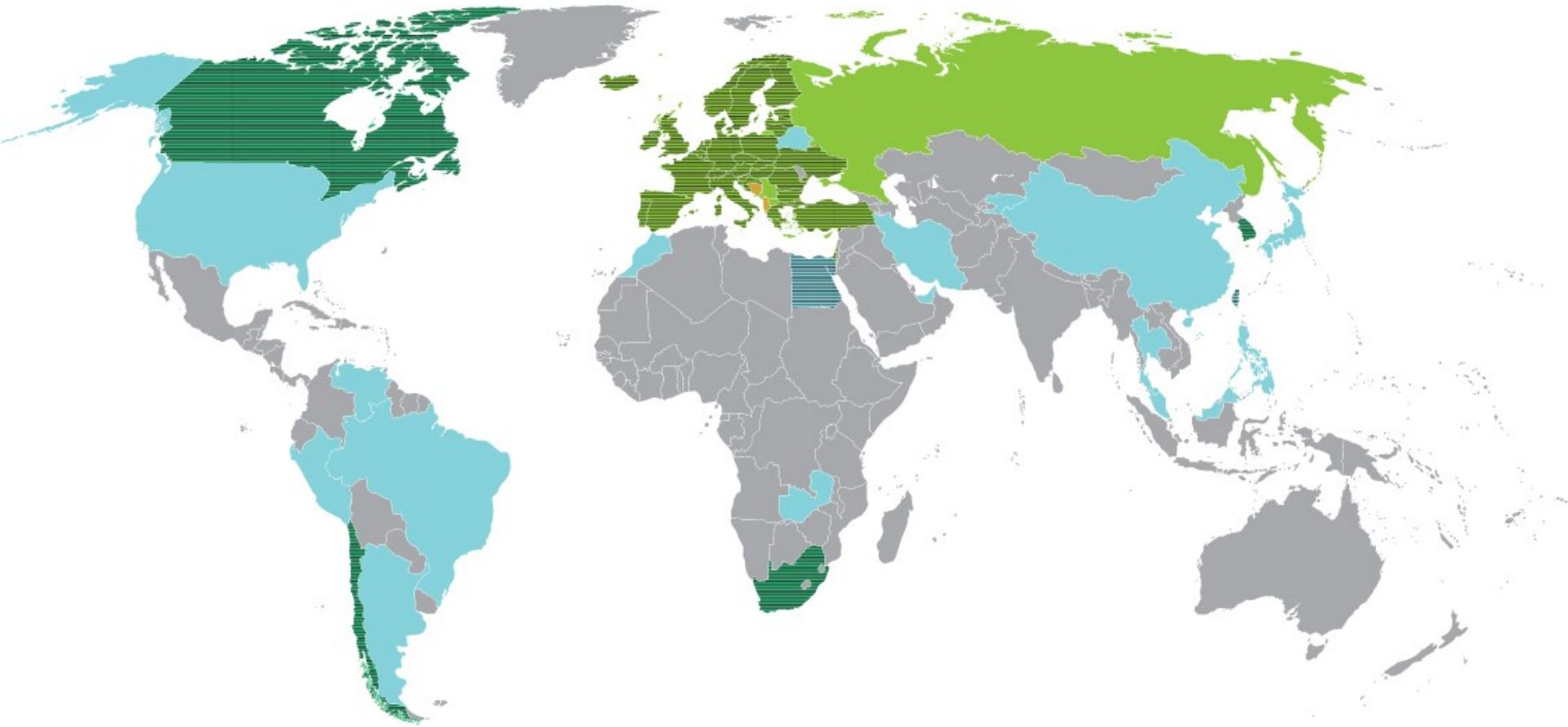
Micro & nanoelectronics enabled systems and applications



Advanced manufacturing

Cluster activity

 Countries with Cluster activity



EUREKA Clusters are active in 38 countries

Spanish Cluster board members

EUREKA Σ !
innovation across borders

AIRBUS



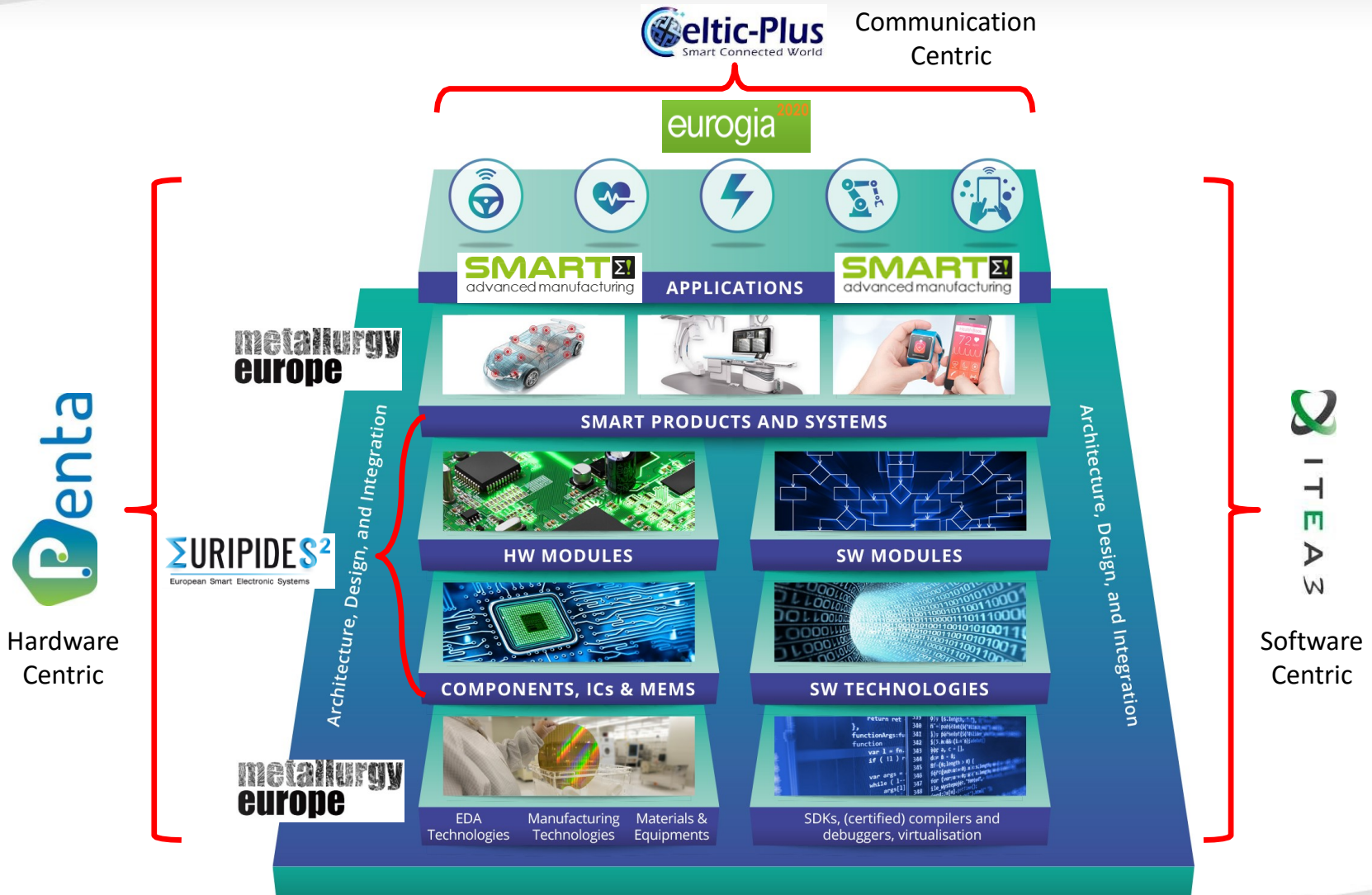
Atos



Royo

Telefonica

Cluster complementarity



What is a EUREKA Cluster project?



An Industry-led Initiative

- Focus on strategically significant areas
- International ecosystem of R,D & I participants
- Executed through public-private partnerships



Flexible number of participants

- With partners all along the value chain
- From major European industries, SMEs and Academia
- With large SME participation (30–50% of partners)



Fostering European competitiveness

- By developing new technologies & applications
- That address economic and societal challenges
- And help form new relationships along the value chain
- Supporting the development of business relationships not only in the EU, but worldwide

- The opportunity for funding **trans-national** R&D consortia in a **fast and efficient** way within a global network
- Agile and flexible support to projects **initiated by industry and in alignment with national priorities**
- A **community** focused on a specific subject to build a consortium covering the **whole value chain** for an innovative research project
- The opportunity to bring together the **best companies and knowledge institutes** that aim at economic impact via research and innovation
- Options to integrate along the **whole value chain**, from technology to applications, involving **end-users, labs, startups, SMEs and large companies**
- **Experts with an industrial viewpoint** support during the elaboration, submission and monitoring phases of projects to ensure **relevance and quality**

- **Societal impact** through employment, education and addressing societal challenges
- **Economic impact** through creating new products, new processes, new materials and new services in Global markets
- **Innovation impact** through new IP, standards and pushing the State-of-the-Art
- **Ecosystem impact** through the development of new partnerships, supply chains and opportunities for growth
- **Increase speed** and **decrease risk** on innovation and new products



Clusters' Basic Info



Focus Area

Telecommunication, ICT and its applications (especially the 5G technology), for individuals, communities and businesses. Celtic-Plus focuses on an end-to-end system approach in the development of future communications-related solutions. It continues its bottom-up, industry-driven approach; includes flagship projects with significant impacts; and intensifies the promotion of activities for the new societal challenges

Scope and Research Areas

Purpose

Strengthen the competitiveness of the European industry and the well-being of the society by stimulating and facilitating innovative, industry-driven, pre-competitive R&D projects in the area of telecommunications, new media, future Internet, and related flexible applications and services

Mission and Vision





Examples of Cluster Projects

- SIGMONA: First SDN (Software Defined Network) solutions for 4 and 5G mobile networks
- SASER: Secure Communications for Europe
- CoMoSeF: Co-operative Mobility Services of the Future
- 4GBB-Gold-G.fast: by the end of 2020, 10 million premises will be connected

Board Members

ATOS Research, British Telecom, Deutsche Telekom, Ericsson, Eurescom, Orange-Labs, Gemalto, INDRA, imec, Italtel, NETAS, Nokia, RAD Data Communications, Siemens Convergence Creators, Telefónica I+D, Telenor, Thales, Turkcell, Türk Telekom

Project Call Process

- [Call information](#)
- [Call calendar](#)



Focus Area

Smart electronic systems and smart systems integration; industrialization and manufacturability of systems in application areas like vehicle of the future, transport & mobility; health & well-being; manufacturing; smart interconnection system; energy; aerospace; IoT; integration of hardware and software; safety & security

Purpose

Improve technological expertise and European sovereignty in electronics components and systems for the implementation of Industry 4.0, the industrial Internet of Things and Mobility of the future in the new Smart World



Example of Cluster Projects

- ADORAS: Advanced Onboard Data Recording and Analysis System
- ADVANTEX: ADVANced functional blocks and technologies for smart TEXTile products
- EDDEMA: Embedded Die Design Environment & Methodology for Automotive Applications
- SAM3: Smart Analysis Methods for 3D Integration in Advanced Microsystems and Corresponding Materials (Colabel CATRENE-EURIPIDES²)

Board Members

ACAMP, RISE-ACREO, AIRBUS Defense and Space, AT&S, BIC Ostrava, C2MI, CEALLETI, CSEM, EOLANE, EPoSS, ETRI, Fraunhofer IZM, IMEC, INFINEON, KENTKART, MURATA Oy, NOVAPACK, RADIAL, SAFRAN Electrical & Power, SAVRONIK, SOMFY, STMicroelectronics, THALES Airborne Systems, VERMON, VOLVO AB, VTT

Project Call Process

- Detailed information on [EURIPIDES² Project Calls](#)
- [Call calendar](#)

Focus Area

EUROGIA2020 is the EUREKA Cluster for low carbon energy technologies. It supports and promotes innovative energy technology projects with the aim of mitigating climate change

Purpose

Reduce the carbon footprint of energy production and use. Develop new technologies for energy such as solar, wind, biomass, geothermal, energy efficiency, etc.

Examples of Cluster Projects

- Windfarm vessels: Offshore installation of wind turbines with attractive costs
- RENERSTA: Electricity at isolated places
- CO2FieldLab: Increasing carbon capture and storage safety
- ILIS: Innovative energy storage and management system
- HYWINDESS: Incorporation of energy storage systems for wind farms

Board Members

Acciona Energy, Air Liquide, Bureau Veritas, Cardtek (2017-2018 Chair), DCNS, ENGIE, ENERJISA, GE Oil and Gas, Green Power Labs, Leading Enterprise, MERIC, SAFT

Project Call Process

- 4 project cut off dates per year
 - [Next cut off dates](#)
 - [Online project submission tool](#)
- Templates are provided for project applicants via EUROGIA2020 website
 - [Project Outline Template](#)
 - [Full Project Proposal Template](#)
 - [Project Cooperation Agreement](#)
- EUREKA NFBs have access to projects generated from their countries through the [EUROGIA2020 Project extranet](#)






Focus Area

- Software-intensive Systems and Services
- Digital transformation

Purpose

ITEA stimulates trans-national and industry-driven RD&I in the domain of software innovation. ITEA enables an international and knowledgeable community to collaborate in funded projects turning innovative ideas into new businesses, jobs, economic growth and benefits for society

Examples of Cluster Projects

- SEAS: Smart Energy Aware Systems 
- AVANTI: Test methodology for virtual commissioning of production systems 
- ADAX: Cyber Attack Detection And Countermeasures Simulation
- SORTS: Productivity and effectiveness in cancer treatment 



Board Members

Airbus, ATOS/Bull, Barco, Bosch, Ericsson, Indra, KocSistem, Nokia, Philips, Siemens, Technicolor, Telefonica, Thales, Turkcell

Project Call Process

- Annual two-stage Call with PO and FPP
 - [Call process](#)
 - [Call documents](#)
 - [Getting started](#)
 - [Living Roadmap challenges](#)
- [Call calendar](#)

Focus Area

New innovative applications with an industrial focus in the area of Advanced Materials and Manufacturing

Purpose

Design, develop and deploy the next set of revolutionary alloys and composites for key industrial applications





Examples of Cluster Projects

17 project proposals in Call 1 worth ca. 200 Mio. Euro in October 2015. Currently two projects:

- Andromeda: Additive manufacturing of very large AM metallic structures (1-5 m range)
- Phoenix: Multi-component alloys - Focus on metallic high entropy alloys (MHEA) for extreme industrial applications to generate knowledge on manufacturing, microstructure and properties
- (Orion: Search for funding in Germany)

Board Members

ArcelorMittal, COMTES FHT, Coşkunöz Holding, Culham Centre for Fusion Energy, ESI Group, European Powder Metallurgy Association, Tata Steel

Project Call Process

- [Two-stage Call process](#)
- [Call calendar](#)

Focus Area

Micro and nanoelectronic enabled systems and applications along the Electronic Components & Systems (ECS) value chain



Purpose

PENTA is designed to encourage, enable and support collaborative RD&I in micro and nanoelectronics enabled systems and applications. In many, but not all, cases projects are integrated along the whole value chain, from core technology to applications

Board Members (AENEAS Supervisory Board)

ASML, Airbus, AlphaSiP, Audi, Bosch, CEA-LETI, Fraunhofer Institute, Gemalto, IBS, IMEC, Infineon, IU.NET, NXP, Philips, RECIF, Soitec, STMicroelectronics, LPE, Thales, Zeiss



Example of Cluster Projects

- CosmoDU: Compact, highly smart, modular drive control unit directly integrated in the electrical motors ●●
- DISPERSE: Electronics for spatially distributed sensors and transducer arrays ●
- HADES: Hierarchy-Aware embedded test infrastructure for Dependability & performance Enhancement of Systems ●
- Hyb-Man: Hybrid 3D Manufacturing of Smart Systems ●
- MIRS: Midget IR based Sensing Systems ●
- SERENE_IoT: Secured & EneRgy Efficient health-carE solutions for IoT market ●●
- SENSATION: Next generations of CMOS image sensors, video processing and transmission ●

Project Call Process

- [Annual Call information](#)
- Detailed information: [PENTA Project Zone](#)






Focus Area

SMART is focused on 6 Research and Innovation Domains:
Advanced manufacturing processes, Intelligent and adaptive manufacturing systems, Digital, virtual and efficient industries, Person-machine collaboration, Sustainable manufacturing and Customer based production (value chain)

Purpose

Boost the leadership and growth of European discrete manufacturing industries through the development and implementation of Advanced Manufacturing Technologies

Examples of Cluster Projects

- CONSTRUMATIC4.0: Flexible Robotic Systems for the Construction Industry 
- WorthTruck: Improved heavy truck components through process simulation 
- CPSCBM: Cyber Physical Systems for Conditioned Based Maintenance 
- TOOLS: Manufacturing optimized and more intelligent tools 
- HS-LBL: High Speed Laser Blanking Line 

Board Members

Airbus Operations, GKN Aerospace, Grupo Antolín, IK4 Research Alliance, Irish Manufacturing Research (IMR), MONDRAGON Corporation, S.V.U.M, Royo Group, SWEREA, TOFAS

Project Call Process

- Annual two-stage Call with Project Outline (PO) and Full Project Proposal (FPP)
 - [Call process](#)
 - [Call documents](#)
 - [Call calendar](#)



Thank you