

ECS SRIA 2026 and 2027

Azzoni Paolo – INSIDE Industry Association
2026, February 23 @ Info Day
Chips Mirror Group Italy



*Strategic Research and
Innovation Agenda*



ECS-SRIA 2026



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Aeneas



What is the Electronic Components and Systems SRIA



Members: Industry and Researchers

- Bottom-up compilation from Industry and Research View
- Current and future R&D&I trends
- Covering the whole ECS value chain
- Time horizon: around 15 years
- Support tool for political discussions

71 „Major Challenges“



Translation into five Objectives in the SRIA

Mapped to Objectives (See Appendix)



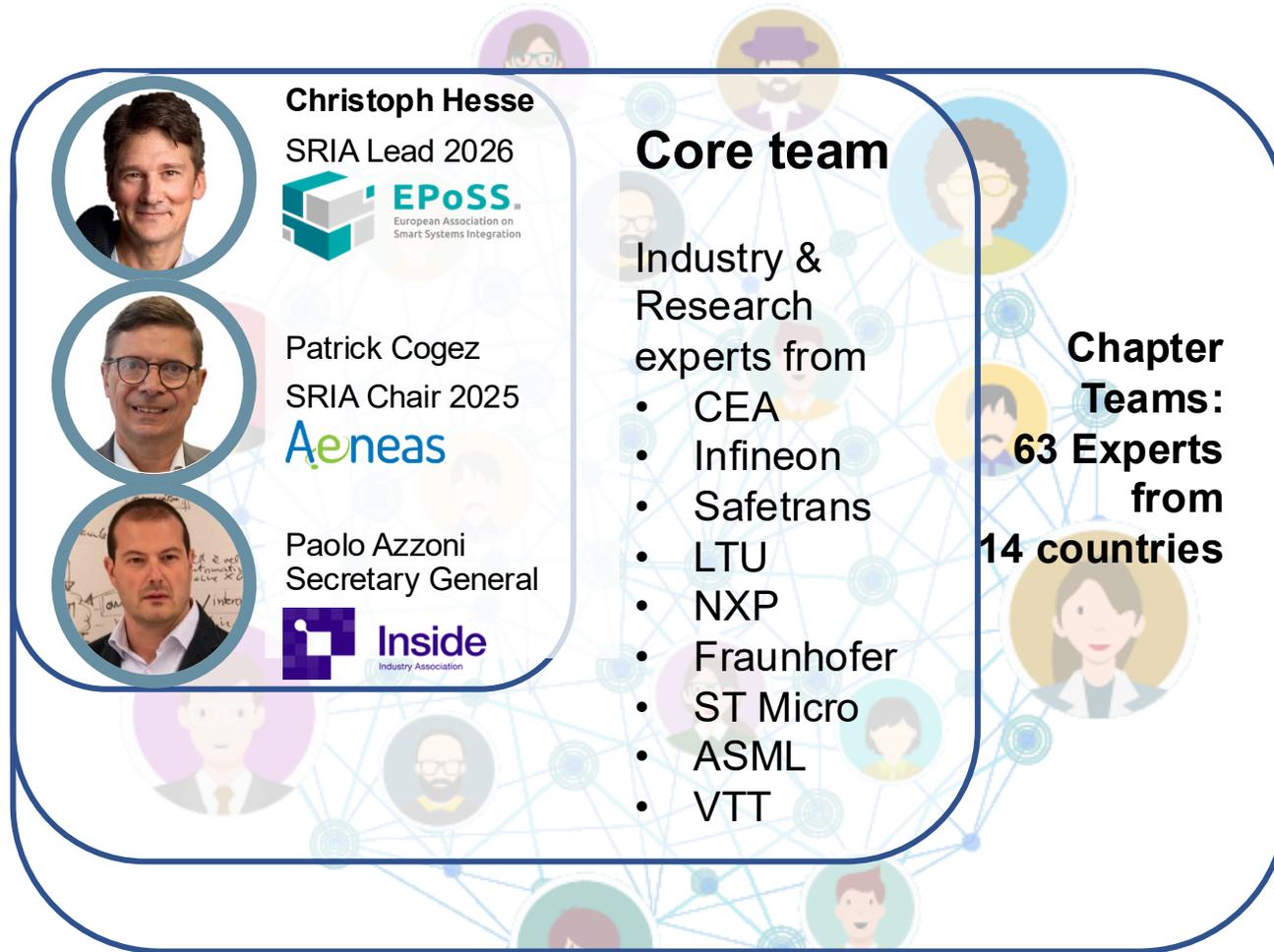
Participating States, EC, Eureka Network

EU-Wide Strategies & Targets

1. Competitiveness
 2. Secure, safe & reliable ECS
 3. Sustainable and resilient value chains
 4. Intelligent and autonomous systems
 5. ECS Engineering Ecosystem
- Political & funding decisions

Definition of Funding Areas

Preparation and publishing



Christoph Hesse
SRIA Lead 2026
 EPoSS
European Association on Smart Systems Integration

Patrick Cogez
SRIA Chair 2025
 Aeneas

Paolo Azzoni
Secretary General
 Inside
Industry Association

Core team

Industry & Research experts from

- CEA
- Infineon
- Safetrans
- LTU
- NXP
- Fraunhofer
- ST Micro
- ASML
- VTT

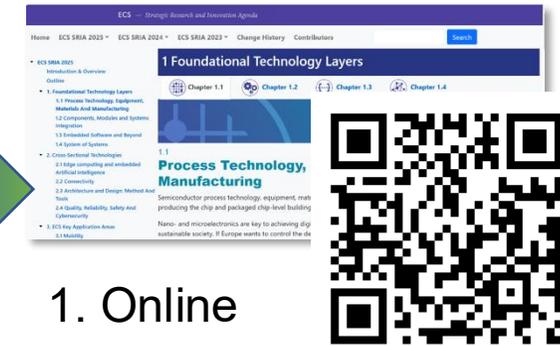
Chapter Teams:
63 Experts
from 14 countries

More than 200 Outside Contributions via public consultation and community outreach

Review
by the
three

Industry
associa-
tions

Publication at EF ECS, be-
fore WP 2026 Publication:
<https://ecssria.eu/2026>



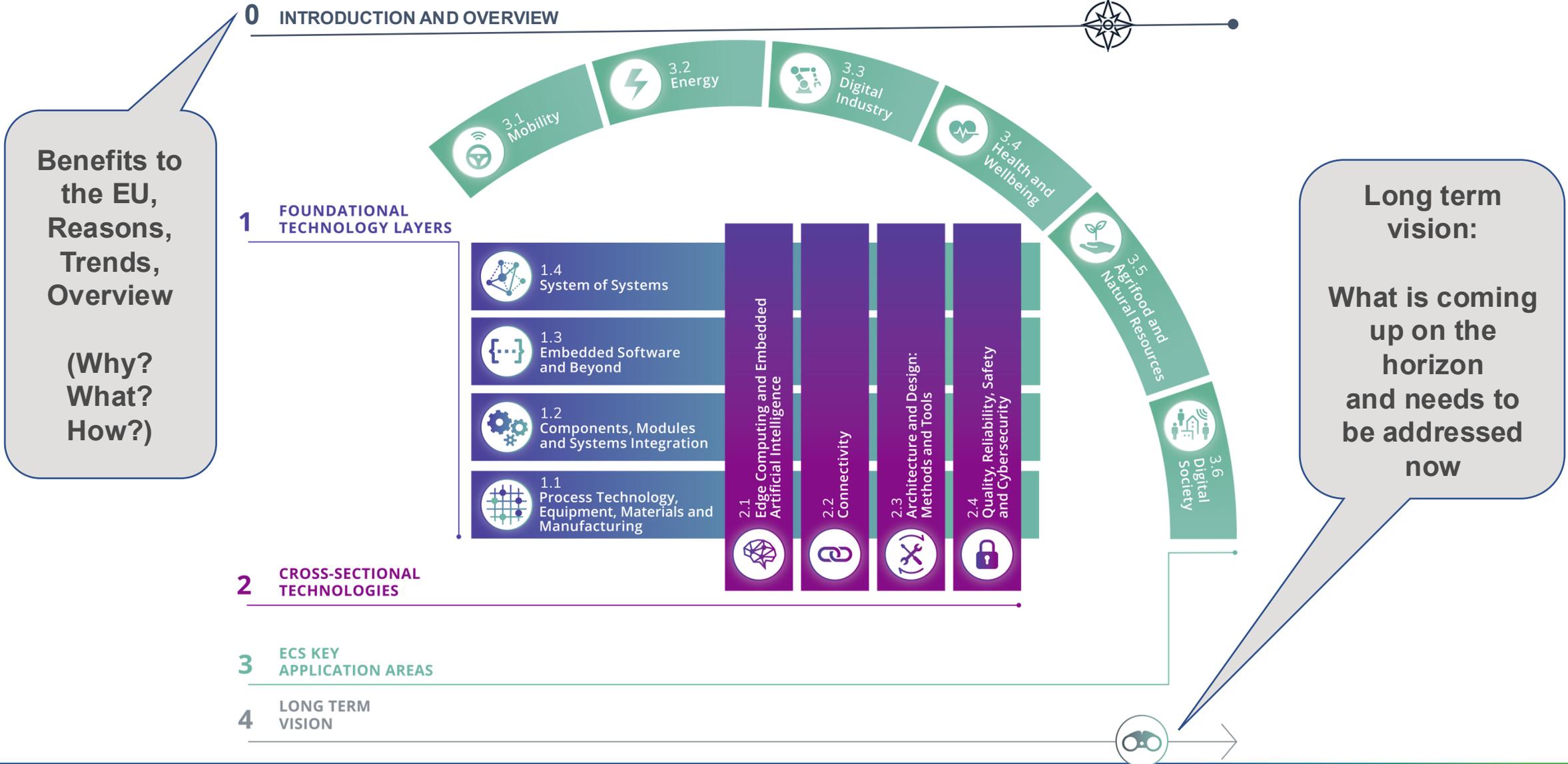
1. Online



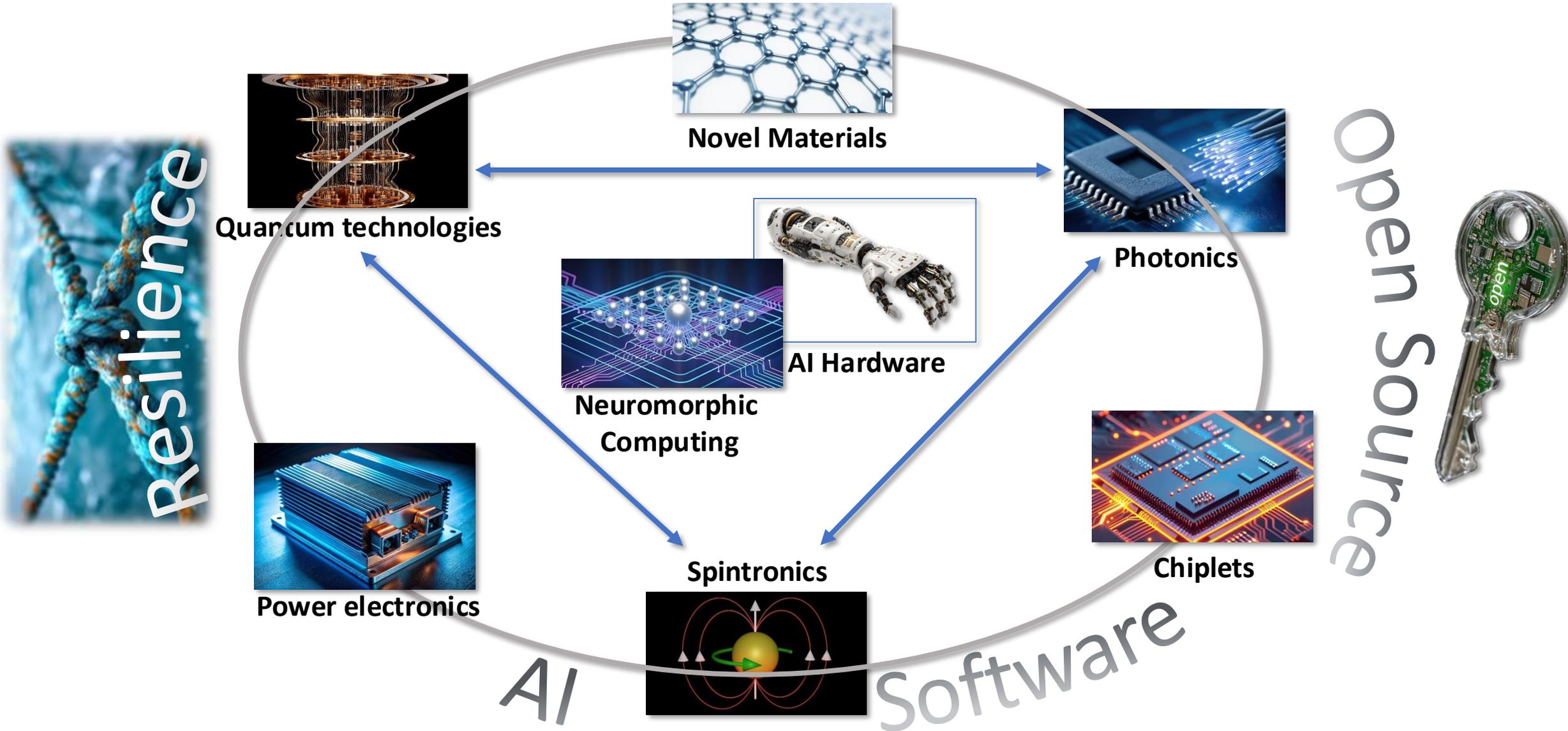
2. PDF

ECS-SRIA is the work of many contributors - **Thank you!**

The ECS-SRIA's Structure



Overarching and disruptive trends (Introductory Chapter)



1 Current trends - Foundational

1.1 Process & Manufacturing: AI Power consumption, Defense & Space section, Critical raw materials and recycling, novel devices - advanced power electronics to quantum sensing, 300mm wafers, CFET Architecture, novel materials and metrology

1.2 Components & Integration: Spintronics and TMR-based sensors, Silicon-based THz systems, Component supply chain resilience and circular economy of SoS, Quantum integration, advanced (3D) packaging

1.3 Embedded Software: GenAI in the Software development life cycle, Edge AI, AI in embedded systems runtime, AI results verification

1.4 Systems of Systems: Edge to Cloud Compute Continuum & Orchestration, Chiplet systems, autonomous self-engineering & validation



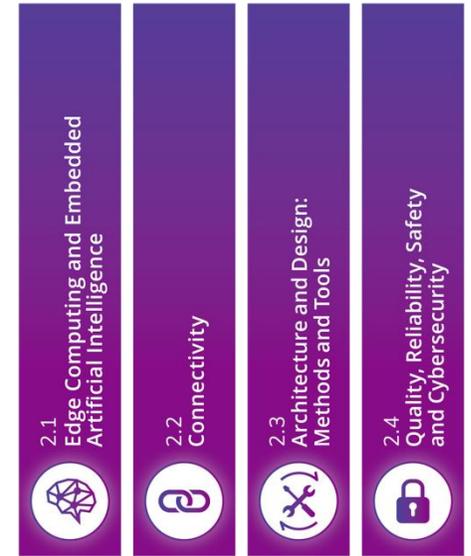
2 Current Trends – Cross-Sectional

2.1 Edge AI: Mobility, Agriculture, all application areas, sensor data, small models, beyond CMOS, interacting edge AIs in systems

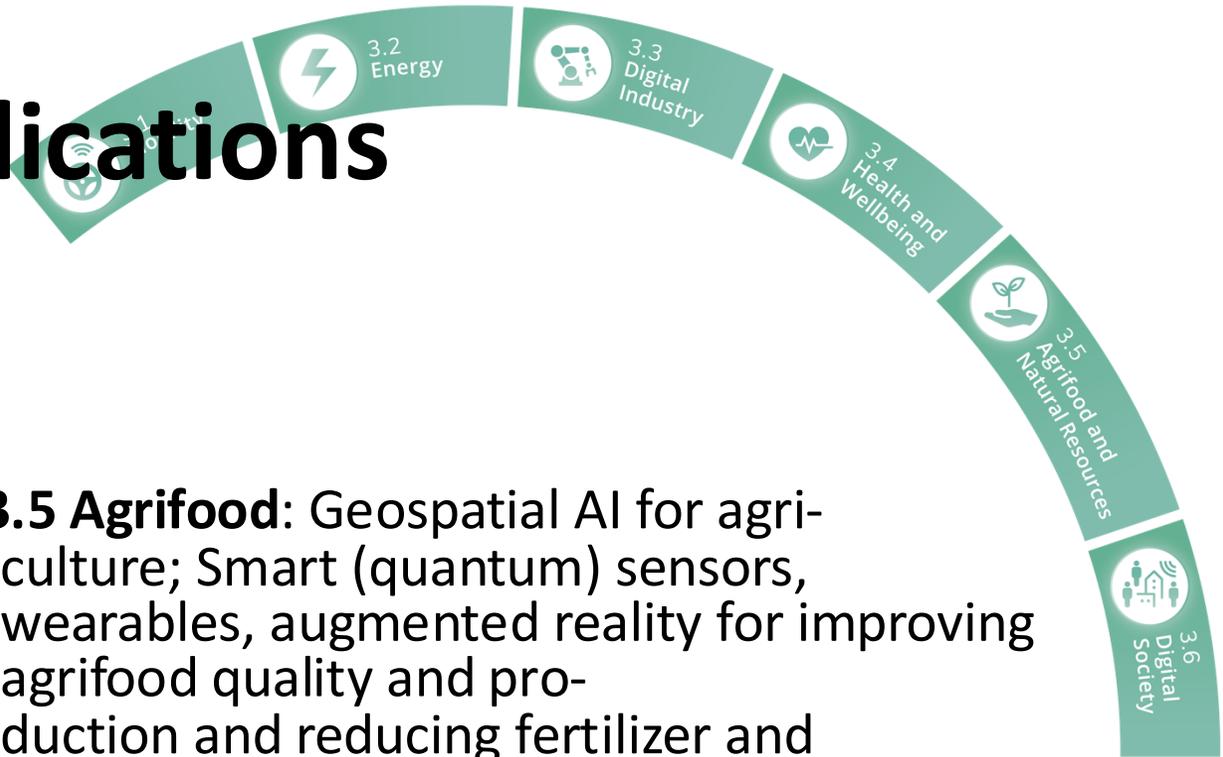
2.2 Connectivity: Chiplets, Cloud to edge continuum, Polymer materials

2.3 Architecture & Design Methods: AI role in design, system engineering. IC design democratization, open source EDA flows, advanced digital twins, methods & architectures for Software-defined vehicles

2.4 Quality, Reliability, Safety: New process quality assessment technologies, advanced data security devices, AI Act secure virtualization and more



3 Current Trends - Applications



3.1 Mobility: Zonal Architectures, AI-supported Software-Defined Vehicle stack

3.2 Energy: For Datacenter and Edge AI Consumption, Mobility and Storage, Increased Renewable Energies

3.3 Digital Industry: GenAI and Robotics for manufacturing and automation

3.4 Health: minimally invasive procedures, research solutions, image-based & P4 treatment, AI and technology for clinical workflows and Compensation of staffing shortages

3.5 Agrifood: Geospatial AI for agriculture; Smart (quantum) sensors, wearables, augmented reality for improving agrifood quality and production and reducing fertilizer and pollutants

3.6 Digital Society: Extended reality technology and applications, miniaturization including using photonics ICs, affordable solutions through ECS, welfare and political context

ECS-SRIA 2027



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EPoSS
European Association on
Smart Systems Integration

Inside
Industry Association

ECS-SRIA Evolution

- ECS-SRIA has an important role for our community, and the preparation of Chips JU and Xecs work programmes
- Its role is acknowledged by 3IA members, EC and PAB
- High visibility and reputation demonstrated by the web site analytics

It is important to consolidate and strengthen the role of the ECS-SRIA in the new Chips Act 2.0

ECS-SRIA – Executive summary

Dedicated working group

2027 – Executive summary (EPOSS)

- Provide a short non-technical summary of the ECS-SRIA
- Redefinition of the main objectives
- Chapters summary evidencing synergies
- Summary of the major challenges
- Short-, medium- and long-term timelines

2028 – Executive summary and programmatic document (INSIDE)

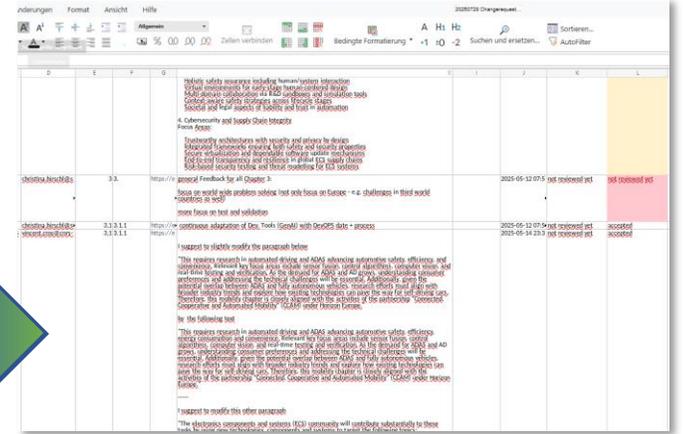
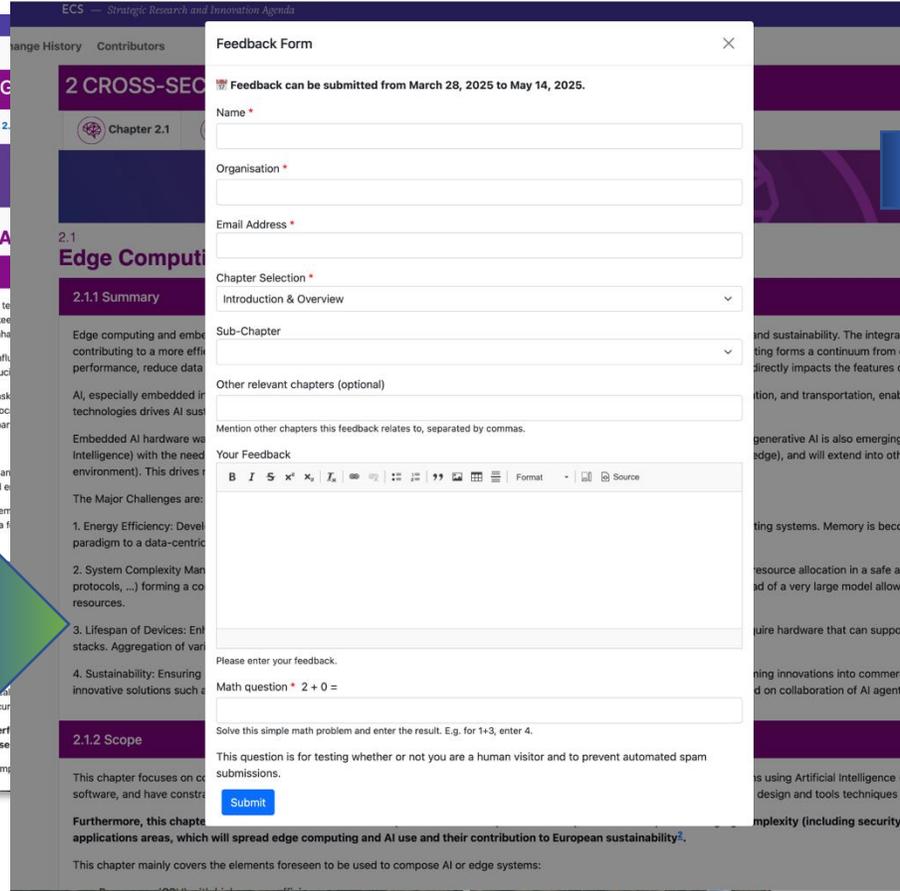
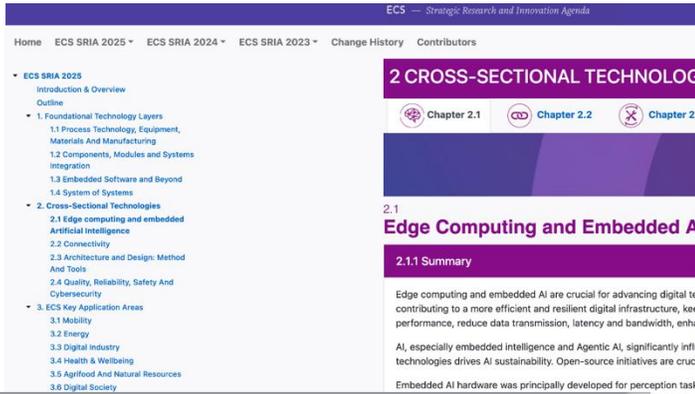
- Align/harmonise the ECS-SRIA with ECF/FP10
 - New priorities and the need to form cluster / interconnections / roadmaps combining several research areas and their market introduction
- Review the entire structure
- What are Europe's strategic objectives for the ECS sector?
- How does the SRIA help reaching the EU goals?
- What disruptive trends can we identify?
- Introduce new applications (Defence? Aerospace?)
- Introduce new techs

ECS-SRIA 2027

- General clean-up
 - Identify outdated parts and remove them
- Chapters update
 - Overall chapters update
 - Limited structural update (e.g. 2.1 and 2.4)
 - Chapter full review (e.g. 3.6)
- Improved online search
- Start brainstorming on thematic clusters for 2028
- Online public consultation

Online public consultation

Open consultation from April to May 2026 (Dates TBC)



Submit Your Feedback

Feedback submission opens on April 1, 2026

We appreciate your feedback. Click the button below to open the form.

Open Feedback Form

- Collect inputs online plus direct input by community
- Automatic collection in online database with images, formatting
- Chapter and core team reviews
- Chapter amendments
- Final chapter reviews

Thank you!

Please explore the 2026 SRIA here:
<https://ecssria.eu/2026>



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