

DISCUSSION ITEMS AND SUMMARY ON PRIORITIES

- Foundational & cross-technology priorities
 - Embedded intelligence & advanced control : 5 priorities
 - Edge computing : 6 priorities (2 overlap with SW)
 - System of Systems, Internet of Things : 8 priorities (5 overlap with SW)
 - Engineering & lifecycle support : 7 priorities (5 overlap with SW)
- Application-specific priorities (3 to 5 priorities per application domain)
 - Mobility, Energy, Digital Industry, Health & Wellbeing, Agrifood & Natural Resources, Digital Society
- Public Authorities
 - **Trusted HW for AI**, trusted chip design, self-sufficient electronic systems, edge computing HW tailored to application
- Industry (Bosch, Kalray, Infineon)
 - IoT : Device connectivity, SW updates, device management, data-driven continuous improvement in the AIoT Cycle
 - **Open (IoT) Platforms** with OSS, **Open HW/SW Ecosystems**, **Interoperability** between edge layers, open layers from cloud to edge
 - Heterogeneous real-time processing with many-core processors incl. smart data-fabrics and high-speed i/f's
 - Accelerated fusion of embedded SW&HW, meta-learning & hybrid modelling, blockchain & AI, new AI processing elements / memories
 - **Trust and explainability**, **Safe AI**, learning and re-learning at the edge, functional safety, security & adversarial attacks
 - Tools and libraries
- Research (IMEC)
 - Seamless AI, AI acceleration, specialized compute units, flexible integration, increased power-efficiency, cross-disciplinary integration
- Discussion
 - Add "Point-of-Care" systems with AI and advanced / cell-based therapies with future use of AI in "Health"
 - Broaden "safety" to include "resilience & cybersecurity" in "Mobility"
 - Trustworthy AI, Safe AI, Explainable AI are considered important by many participants
 - How to include legacy IP ? AI as part of a wider system – seamless integration of AI, standardized API's
 - Importance to add SME's and Start-ups are involved in the eco-system, need to increase industrial competitiveness in Europe
 - Photonics & edge computing (see also workshop on 20 May)