

PROPOSALS FOR PRIORITY



Horizontal Priorities

- Embedded Intelligence – IoT & intelligent edge, HW/SW co-design for reconfigurable IoT, system-of-systems approach
- Integration & Orchestration platforms for systems-of-systems
- Dependability, Interoperability, Virtualization, Scalability, Standardisation & Certification (more a generic characteristic)
- Open-source Software (more a generic characteristic)
- End-to-end Trustworthiness (supported by engineering tools incl. frameworks, methods and tools for analysing, testing and V&V for ECS, especially for those ECS that (a) have high level of automation - up to autonomy, (b) are supposed to network resp. cooperate with humans and/or other ECS within a network/cloud/..., and (c) those ECS that employ Artificial Intelligence) – incl. automation and low code / no code, non-functional properties
- Engineering & lifecycle support – SW/HW hybrid modelling
- Managing complexity, dynamics & uncertainty of KDT applications & systems-of-systems
- SW upgrades (over-the-air)
- Swarm computing & neuromorphic solutions
- Autonomous SW for verification, validation & testing for IoT and edge computing
- How to cope with legacy software ?

Vertical Priorities

- Application-specific priorities (mobility, health, industry, energy, agrifood, society), including application-specific engineering tools, environmental aspects, energy efficiency, etc.

Synergistic program across domains – European ecosystem & infrastructure

- Integrating a large number of elements above
- From “Cognitive CPS” to “Orchestrated, distributed & embedded intelligence”