THIS IS SPARTA

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European scientists hold pioneering positions in cybersecurity research fields such as cryptography [5, 4], formal methods [2], or secure hardware components [6]. Yet this excellence on focused domains does not translate into larger-scale, system-level solutions and services: too often, small scattered teams fall short of critical mass capacities, despite demonstrating world-class talent and results. In a competitive international environment, and with cyberspace becoming a geopolitical asset [1], such a limited capacity-building can constitute a weakness of Europe's strategic autonomy [3].

In response, the SPARTA pilot project proposes to establish a *network of competence centers*, with a governance aiming to encourage collaborations between research teams, across geographies, disciplines, and organizations – spanning through academic, industrial, institutional, and grassroots cybersecurity. Two major artifacts will serve as pivotal elements for this governance: an ambitious and continuously-evolving *research and innovation roadmap*, and a set of *joint platforms and infrastructure*.

The SPARTA network will demonstrate its operation over the course of four *Programs* focused on strategic challenges for digital societies:

- **T-SHARK** will explore innovative work in full-spectrum situational awareness, with the goal of enabling the supervision of complex systems over heterogeneous time scales;
- CAPE will investigate new avenues for continuous assessment in polymorphous environments, creating new evaluation tools and techniques for handling tomorrow's dynamic and elastic digital systems;
- **HAII-T** will aim to create a toolkit for high-assurance intelligent infrastructure, incorporating pivotal components for secure and resilient intelligent infrastructures;
- **SAFAIR** will devise secure and fair AI systems for citizen, delving into innovative approaches to make systems using AI more reliable and resilient.

These Programs are supported, in turn, by activities on ethical, legal, and social aspects of research with a particular attention to privacy and data protection; on exploitation and intellectual property rights; and on potential interactions with existing and new certification practices.

Project	SPARTA
	CEA / 44 partners / 50+ associates
Dead / Lart.	ATE DE CZ DE DE DI DC DD
Topology	AT, BE, CZ, DE, EE, EL, ES, FR,
	IT, LT, LU, LV, PL, PT
Instrument	H2020-SU-ICT-03-2018
Timeline	T_0 : 01/02/2019, 36 months
TRL	3-6

To ensure the proper dissemination of SPARTA results with all relevant stakeholders, all partners will engage with their respective communities. SPARTA results will also be shared with SPARTA Associates and the general public through bi-annual days and monthly workshops throughout the network.

Through innovative governance, ambitious demonstration cases, and active community

engagement, SPARTA aims at re-thinking the way cybersecurity research is performed in Europe across domains and expertise, from foundations to applications, contributing *inter alia* to achieve the objective of European strategic autonomy.

References

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