SPARTA

SRI ROADMAP FOR CYBERSECURITY

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1 – INTRODUCTION
THE SPARTA ROADMAP

Mission-oriented:

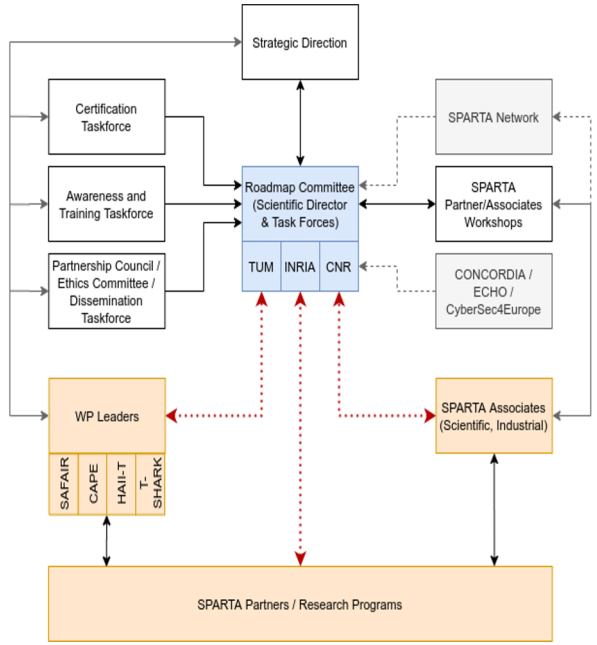
- Shape the cybersecurity technologies required to establish and maintain a European Strategic Digital Autonomy
- Design process: agile and open

Expected outcome:

- Roadmap provides a mid- to long-term vision on cybersecurity challenges
- Roadmap provides guidelines for decision makers to develop strategies
  - to strengthen the EU's cybersecurity capacity,
  - to close cyber skill gaps and,
  - to address emerging challenges appropriately

Cross-Pilots:

- Harmonize the different roadmapping approaches of the 4 pilots



ROADMAP PROCESS

Initial Roadmap Design

- Defined with input from SPARTA's partners:
  - Collected 60 "seed challenges" to establish **European Strategic Autonomy**

- Roadmap foundations:
  - Analysis of strategic research Agendas (national, EU) and Alignment to JRC Taxonomy.

Research Domains

	Spain Ind.	Austria	Czech	Germany	Spain	Poland	Italy	Lithuania	Luxemburg	Greece	France INRIA	France	Total
	2013	2013	2015	2015	2016	2017	2018	2018	2018	2019	2019	2019	
Assurance, Audit, and Certification	■			■	■	■	■			■		■	7
Cryptology				■	■		■				■		4
Data Security and Privacy		■		■	■		■		■		■		6
Education and Training	■	■	■		■	■	■	■	■	■	■		10
Operational Incident Handling and Digital Forensics	■		■			■	■	■	■	■	■	■	9
Human Aspects				■	■						■		3
Identity and Access Management											■		1
Security Management and Governance	■	■	■		■	■	■	■	■	■	■	■	11
Network and distributed Systems				■	■	■							3
Software and Hardware Security engineering	■	■				■	■		■				5
Security Measurements	■								■	■			3
Legal Aspects		■	■					■		■	■		5
Theoretical Foundations													0
Trust Management, Assurance, and Accountability				■							■		2

Technologies

	Spain Ind.	Austria	Czech	Germany	Spain	Poland	Italy	Lithuania	Luxemburg	Greece	France INRIA	France	Total
	2013	2013	2015	2015	2016	2017	2018	2018	2018	2019	2019	2019	
Artificial intelligence;							■			■	■	■	4
Big Data;				■	■	■				■			4
Blockchain and Distributed Ledger Technology (DLT);							■				■		2
Cloud and Virtualisation;					■		■		■		■		4
Embedded Systems;					■				■			■	3
Hardware technology (RFID, chips, sensors, routers, etc.)													0
Industrial Control Systems (e.g. SCADA);				■	■	■	■		■		■		6
Information Systems;											■		1
Internet of Things;				■		■	■				■		4
Mobile Devices;						■							1
Operating Systems													0
Pervasive systems													0
Quantum Technologies;				■			■						2
Robotics;							■				■		2
Satellite systems and applications;					■								1
Supply Chain;						■					■		2
Vehicular systems													0

Sectors

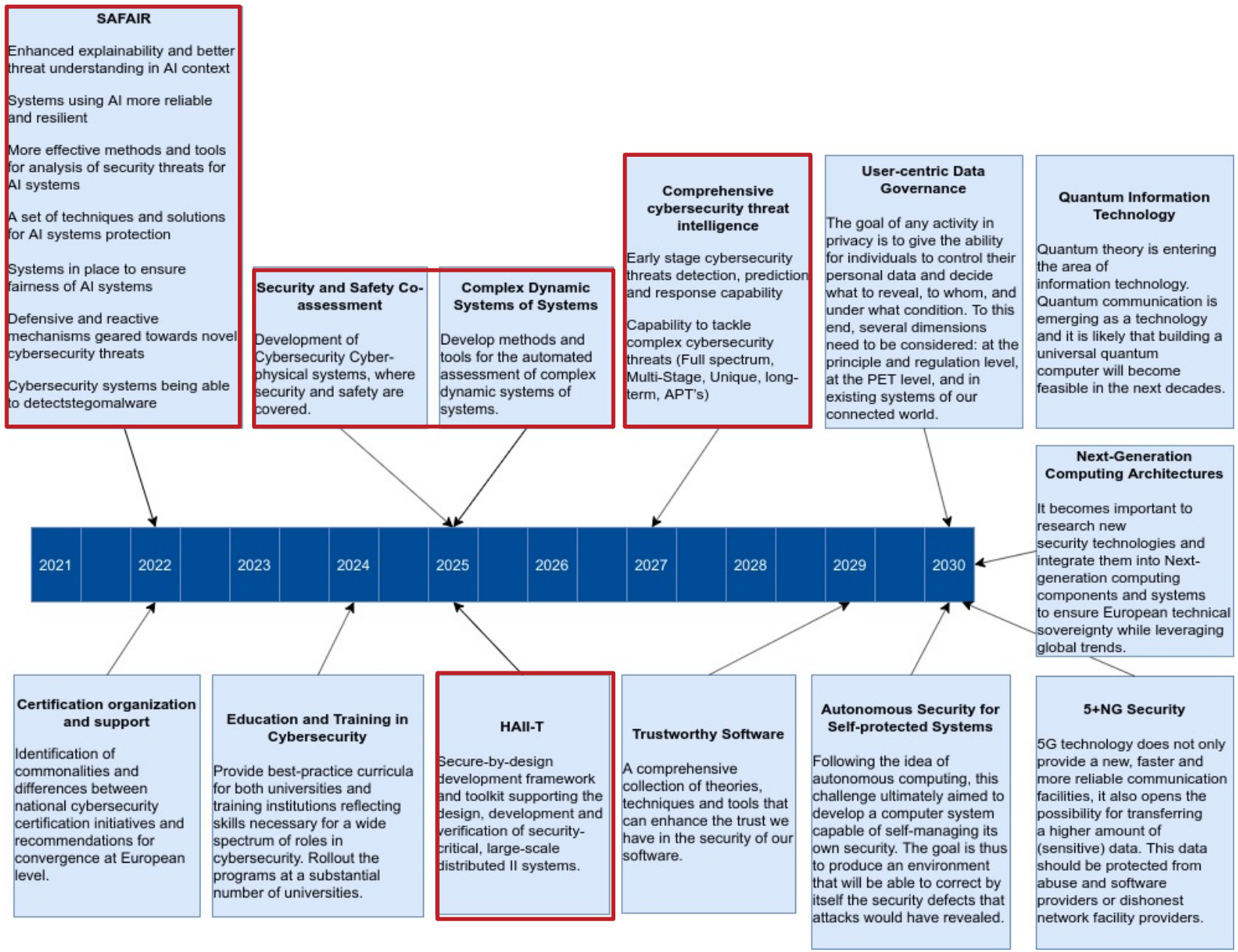
	Spain Ind.	Austria	Czech	Germany	Spain	Poland	Italy	Lithuania	Luxemburg	Greece	France INRIA	France	Total
	2013	2013	2015	2015	2016	2017	2018	2018	2018	2019	2019	2019	
Audiovisual and media													0
Defence									■				1
Digital Infrastructure													0
Energy					■		■		■	■			4
Financial					■		■		■				3
Government and public authorities							■						1
Health				■	■				■	■	■		5
Maritime													0
Nuclear													0
Public safety													0
Tourism							■						1
Transportation				■	■		■		■				4
Smart ecosystems					■								1
Space									■				1
Supply Chain													0

ROADMAP V1

13 MPs defined

- Goal
- Timeline
- Contributions

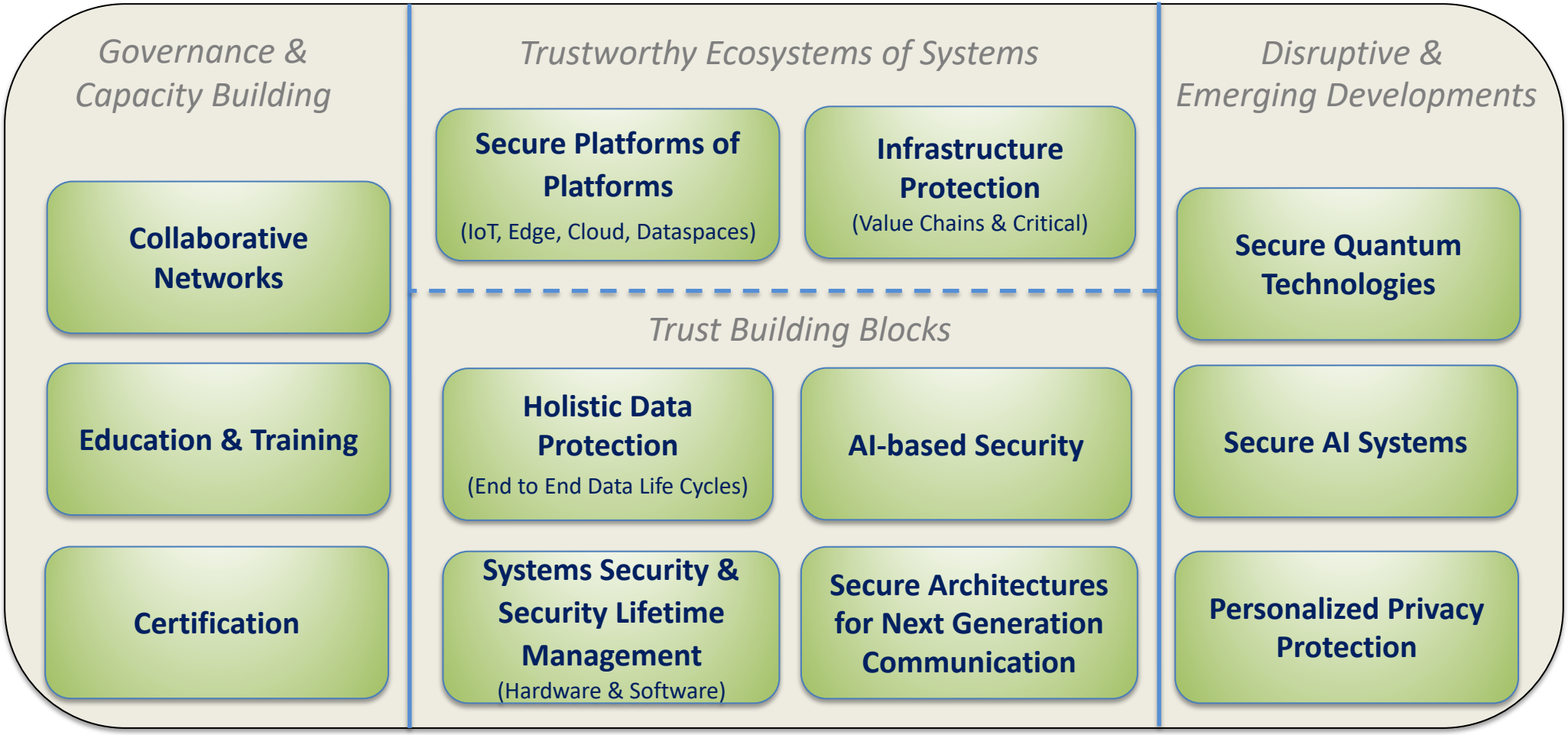
Original SPARTA research programs marked in red squares



Cybersecurity Research Focus Areas Priorities

The 4 Pilots & ECSO Perspective

As per May 2021



Each of these Cybersecurity Research Focus Areas Priorities are generally intertwined with each other.

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THANK YOU!

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