Project Overview

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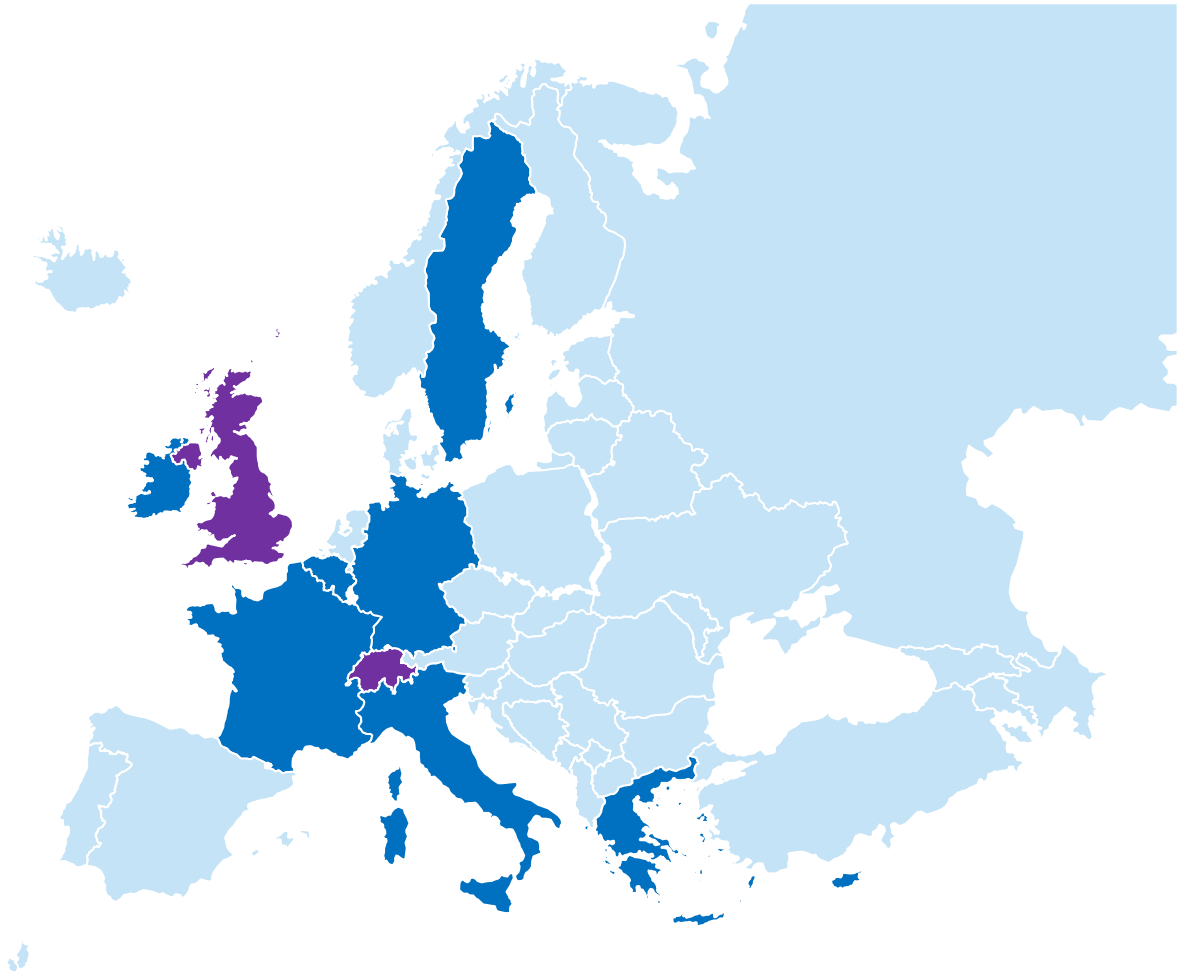
This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101120779

Project Full Title

An innovative VR-based intrusion detection, incident investigation and response approach for enhancing the resilience, security, privacy and accountability of complex and heterogeneous digital systems and infrastructures

Project ID

Call: HORIZON-CL3-2022-CS-01
Reference No: 101120779
Type of Action: Innovation Action (IA)
Total budget: 6,992,875.00 €
EU funding: 5,749,637.50 €



Consortium

CyberSecDome

Industry

University

SMEs

Association

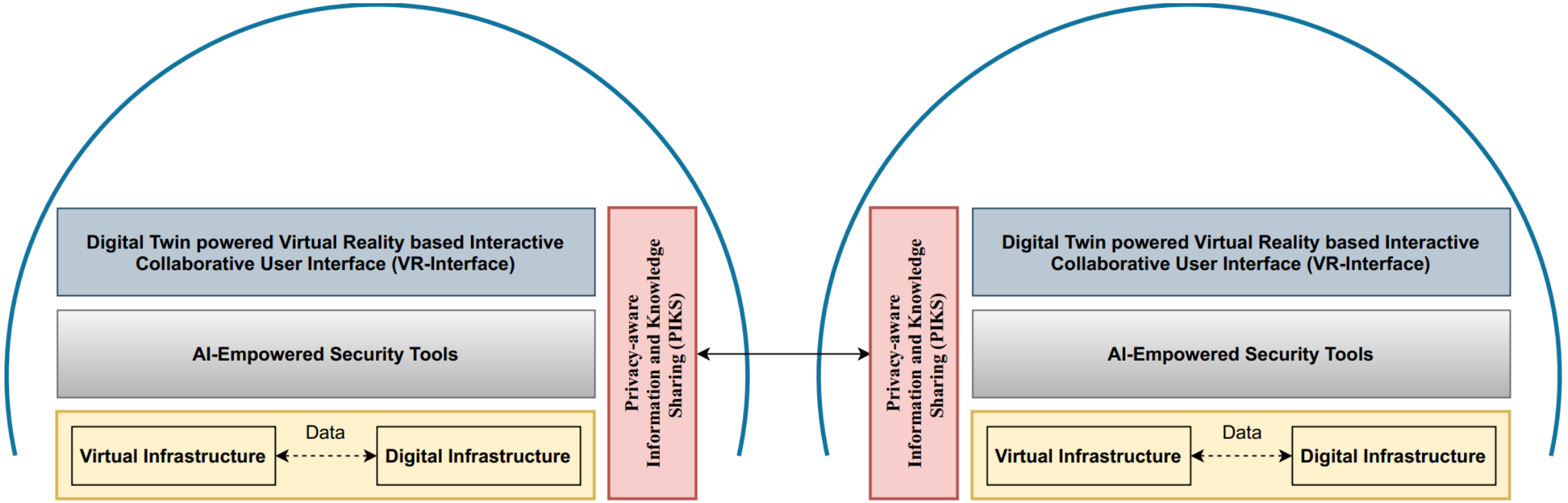
The Vision

- To democratize and combine Artificial Intelligence-enabled tools to provide a better prediction of cybersecurity threats and related risks and an efficient and dynamic selection of incident response against cybersecurity attacks that may target the digital infrastructure.
- To professionally integrate Virtual Reality (VR) to provide situational awareness for the detected incidents, risks, and responses in real-time.
- To optimise the collaborative response among the stakeholders within the Digital Infrastructure ecosystem by developing privacy-aware information and knowledge-sharing mechanisms

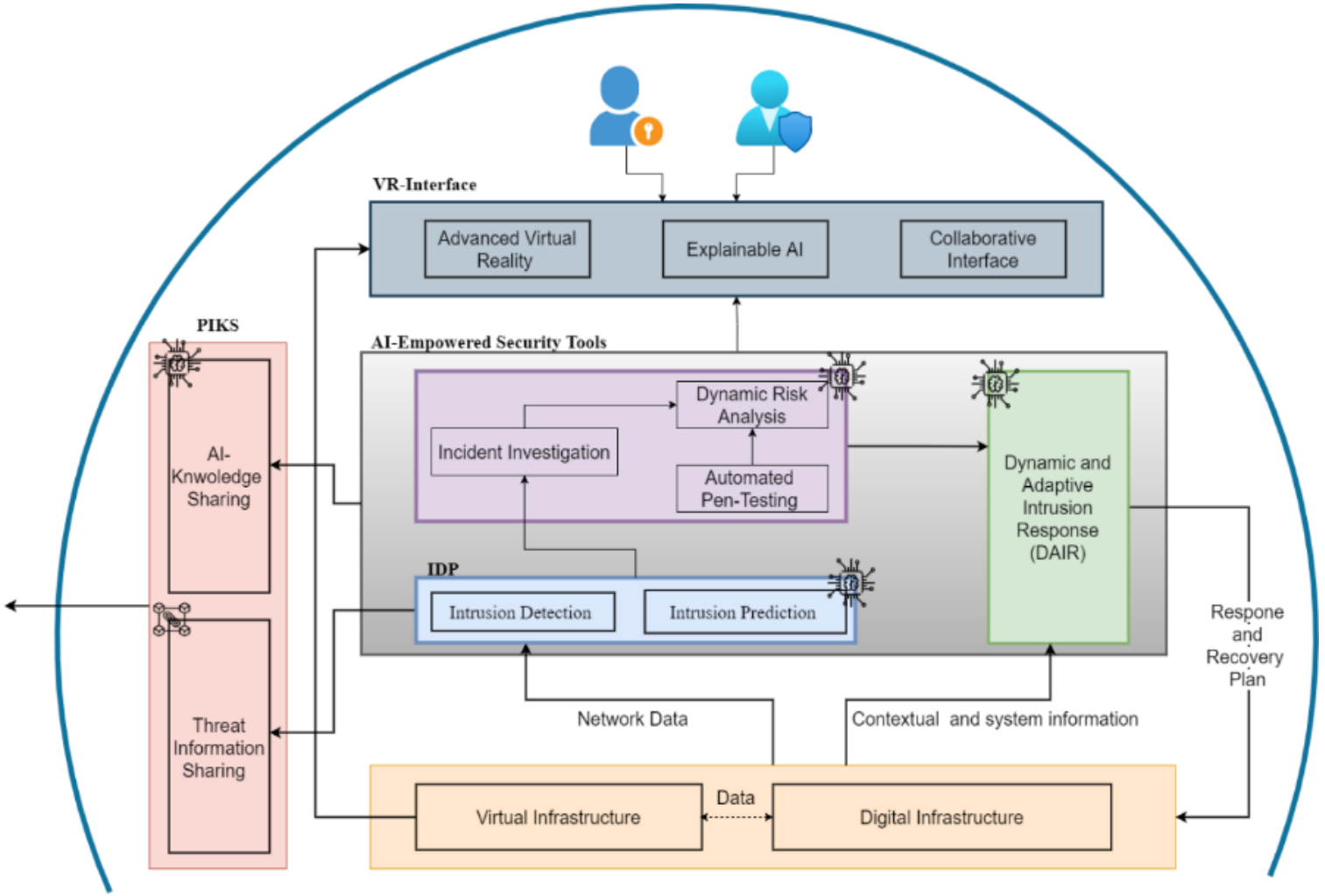
Objectives

- **Obj. 1**: Increase the disruption preparedness and resilience of digital infrastructure
- **Obj. 2**: Provide dynamic cyber-incident response capability for digital systems and infrastructures
- **Obj. 3**: Enhance coordinated cyber-incident response among different digital infrastructures and systems at the national and European levels
- **Obj. 4**: Provide high cybersecurity levels via a set of policies and AI-based methods for effective and real-time management in a proactive way of all the security issues.
- **Obj. 5**: Provide better interfaces between humans and cybersecurity algorithms
- **Obj. 6**: Develop solutions to automate penetration testing for proactive security using data-driven AI
- **Obj. 7**: Achieve pilot-driven prototypes of CyberSecDome security services ready for internal and external (Open Call) deployment and validation

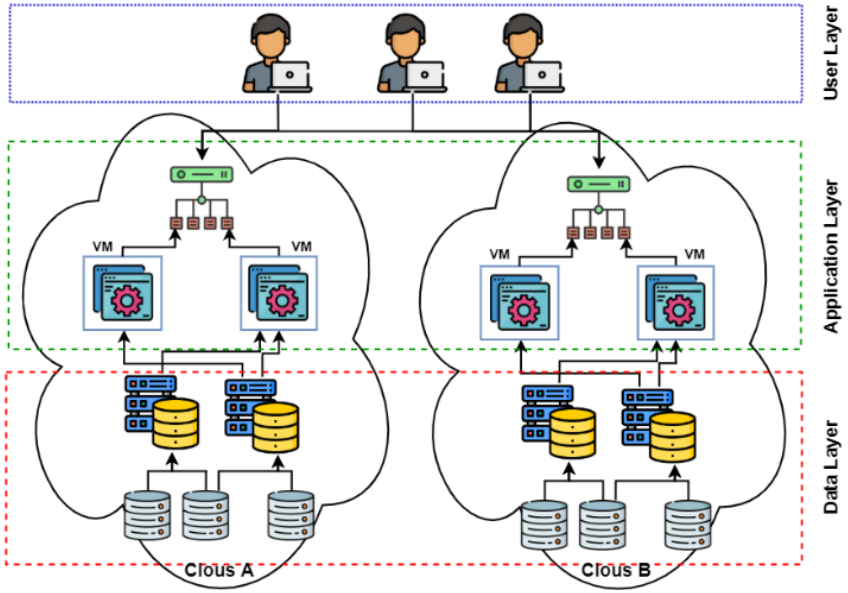
CyberSecDome – The Big Picture



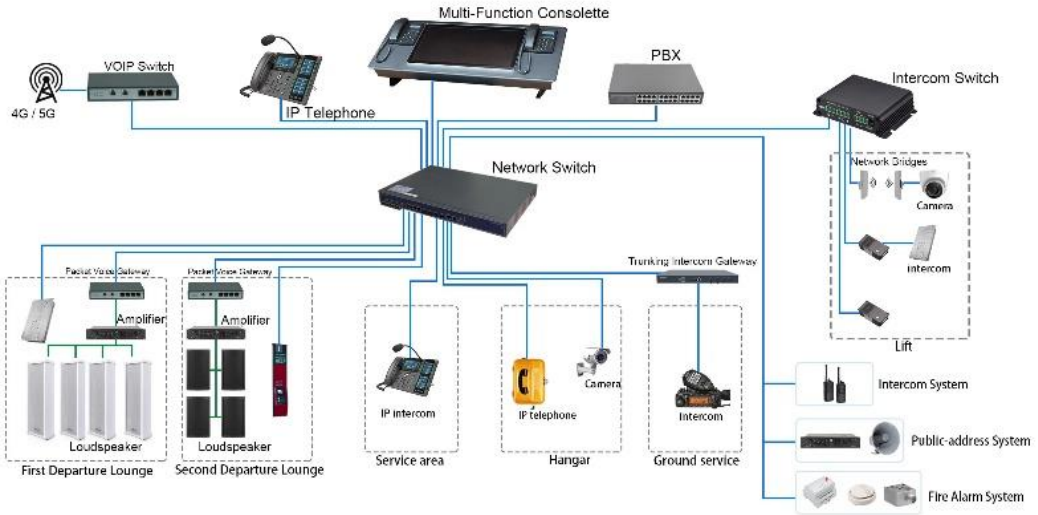
CyberSecDome – The Detailed Picture



Pilots



Telecommunication

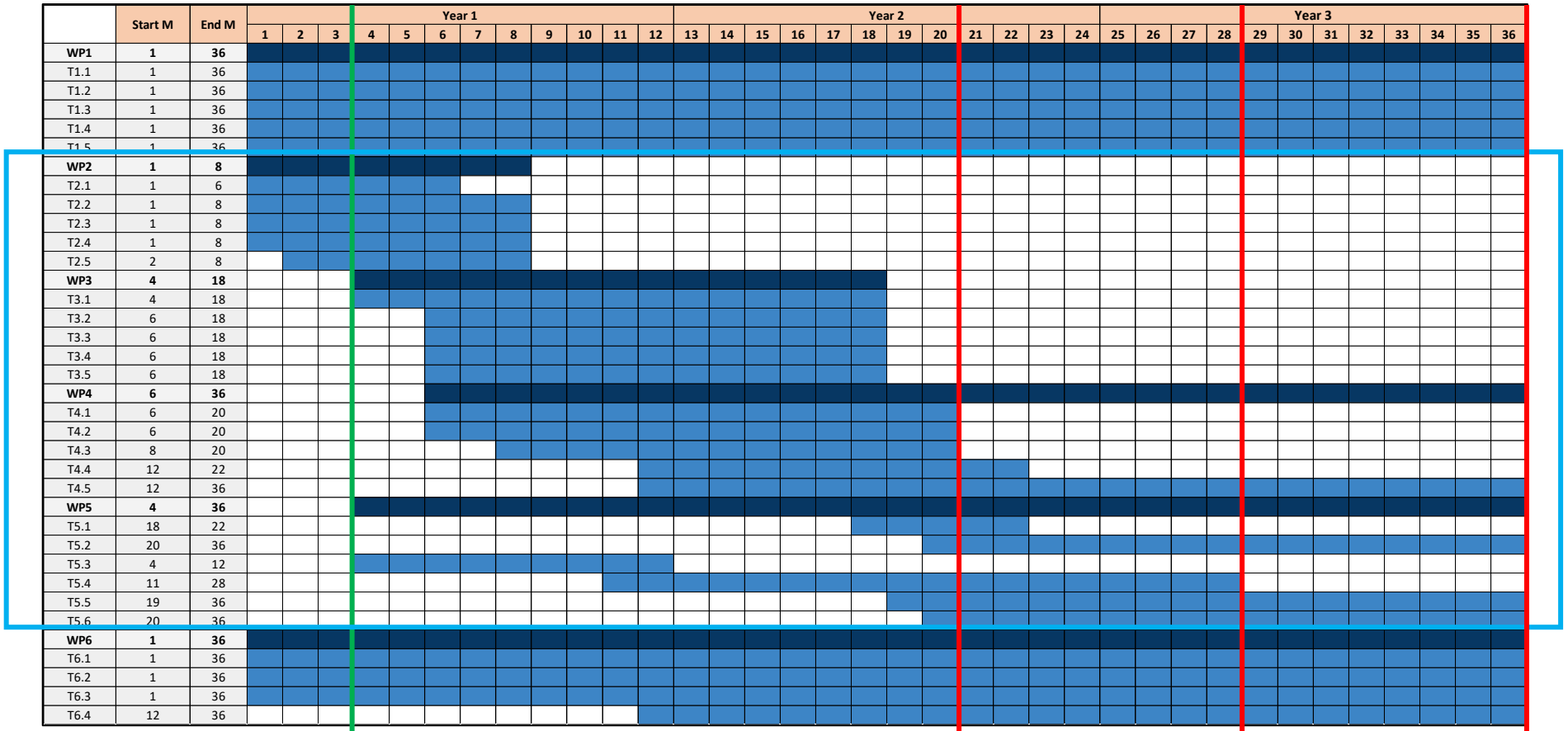


Airport

Innovation and Key Results

- **KER 1**: Dynamic and Adaptive Incident Response (DAIR)
- **KER 2**: Privacy-aware Information and Knowledge Sharing (PIKS)
  - *Module 1*: Cyber Threat Intelligence
  - *Module 2*: AI Knowledge
- **KER 3**: Intrusion Detection and Prediction (IDP)
- **KER 4**: Incident Investigation (II)
- **KER 5**: Dynamic Risk Assessment (DRA)
- **KER 6**: Automatic Pen-Testing (APT)
- **KER 7**: VR-based Collaborative Interface (VR Interface)
- **KER 8**: CyberSecDome Integrated Platform

Work plan



	Start M	End M	Year 1												Year 2												Year 3											
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
WP1	**1**	**36**																																				
T1.1	1	36																																				
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T1.4	1	36																																				
T1.5	1	36																																				
WP2	**1**	**8**																																				
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T2.4	1	8																																				
T2.5	2	8																																				
WP3	**4**	**18**																																				
T3.1	4	18																																				
T3.2	6	18																																				
T3.3	6	18																																				
T3.4	6	18																																				
T3.5	6	18																																				
WP4	**6**	**36**																																				
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T6.1	1	36																																				
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T6.3	1	36																																				
T6.4	12	36																																				

Design and development

The **first** integrated version of CyberSecDome

The **second** integrated version of CyberSecDome

The **final** integrated version of CyberSecDome

Contact

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