



TRUSTEE

www.horizon-trustee.eu

Welcome to the TRUSTEE Newsletter #3

We are pleased to announce the publication of the third issue of the TRUSTEE Newsletter!

This newsletter will be published twice a year bringing the latest news and advances of the TRUSTEE project!

First and foremost...

TRUSTEE is a 42-month Research and Innovation Horizon Europe project, that will last until 2025.

It kicked off in July 2022 and it gathers a consortium of 21 partners.

Utilizing Self-Sovereign technologies and with State-of-the-Art homomorphic encryption, TRUSTEE offers a socially and environmentally-aware framework for cross discipline federation of Data.



TRUSTEE



TrusteeHorizon



Horizon-Trustee

zenodo

communities
/trusteeproject



3rd Plenary Meeting



The TRUSTEE consortium during the 3rd Plenary Meeting

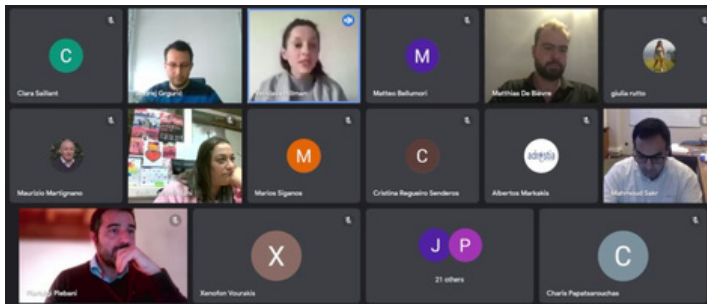


TRUSTEE's Third Plenary Meeting took place on August 30th and 31st, in Frankfurt. Germany.

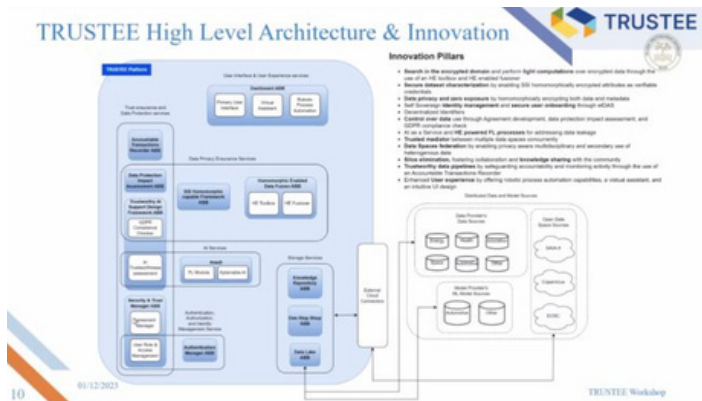




2nd Workshop



The second Workshop of TRUSTEE was organized by EPL with the help of Adrestia and was presented by Velislava Tchakarova-Hillman, with us were the TEADAL project, Prometheus-X, TANGO Project, OASEES, and MobiSpaces.



Use case of Drone Inspection using Edge/Swarm Intelligence

HORIZON-CL4-2022-DATA-01-03 Programming tools for decentralized intelligence and swarms (RIA): Project: OASEES 101092702; Period: 01-01-2023 to 31-12-2025; EC contribution 7.9 mil. EUR.

Concept:

Autonomous drone inspections can provide multiple stakeholders with the data and insights they need to expand their infrastructure. OASEES aims to operate a drone swarm in a self-organized manner based on Decentralized Autonomous Organizations (DAOs).

Showcase converged connectivity for 5G Drone communication

Dynamic Governance for Drone operations over distributed ledgers

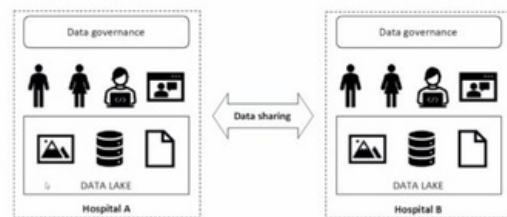
Combine different acceleration technologies to solve different challenges in Drone operation scenarios

Benefits:

Extend and leverage novel edge acceleration technologies, i.e., Quantum Computing and Spiking Neural Networks (SNN)

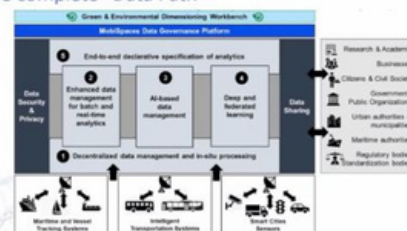
Demonstrate energy consumption reduction from the usage of SNN for object detection mechanisms deployed at the drone

Deploy optimized route missions for Drone Swarms



Project-in-a-sentence

MobiSpaces delivers an end-to-end mobility-aware and mobility-optimized data governance platform that will utilize the outcomes of AI-based mobility analytics to optimize the complete "Data Path"



TANGO technologies

Blockchain-based data storage and sharing (WP3)

Trustworthy data sharing (WP3)

Confidentiality and privacy by design (WP3)

Self-encryption and decryption techniques with multi-factor information recovery mechanisms (WP3)

Self-sovereign identity management (WP4)

Seamless onboarding for users and devices (WP4)

User continuous behavioural authentication (WP4)

Device continuous behavioural authentication (WP4)

Hardening against side-channel attacks (WP4)

Exploratory data analysis engine (WP5)

Energy efficient AI model training (WP5)

Dynamic intelligent AI execution on heterogeneous systems (WP5)

Privacy threat modelling and identification for trustworthy AI (WP5)

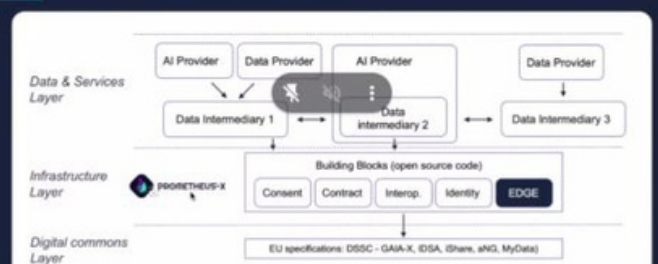
X-AI for privacy and trust enhancement (WP5)

Infrastructure management based on AI (WP5)



Prometheus-X

General Architecture





3rd Workshop



First Workshop of the Space Use-Case

The first workshop of the space use-case of the TRUSTEE project, and the third in total, aims at introducing the community of potential users of the system to the first proof-of-concept demonstrator of the project which showcases the automatic query of an encrypted database and the processing of a small volume of encrypted data. The workshop is mainly focused on the research groups within the Institute of Space Science working on large space missions, space applications for human health and safety, space weather, etc., and interested collaborators from other research institutions.





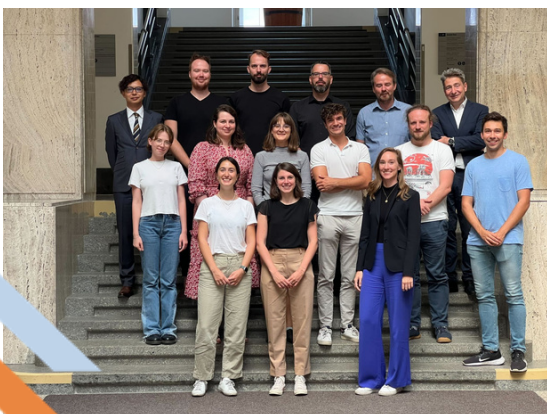
IEEE EMBC 2023

TRUSTEE went intercontinental to Australia to be presented to the IEEE Engineering in Medicine and Biology Society by Emmanouil Spanakis and Vangelis Sakkalis who are the Project Coordinators, ICS-FORTH on the 24th of July.

ENT Summer Camp 2023



ENT Summer Camp 2023 was held at locations in Zagreb, Split, and Osijek, and students were allowed to discover new values through the collection, analysis, and modeling of data, which are enabled by quality analytics and data management in the development of digital solutions. Ericsson had an event on September 8th with students and internal employees where among other things TRUSTEE was also disseminated.



Masaryk University Brno, Faculty of Social Studies

TRUSTEE was presented during an academic visit from the Department of Innovation and Digitalisation in Law (University of Vienna) at Masaryk University Brno, Faculty of Social Studies, on September 11th - 12th. During that visit, Hande Ozkayagan and Clara Saillant discussed the legal challenges for data spaces and data-sharing facilitators.



Events

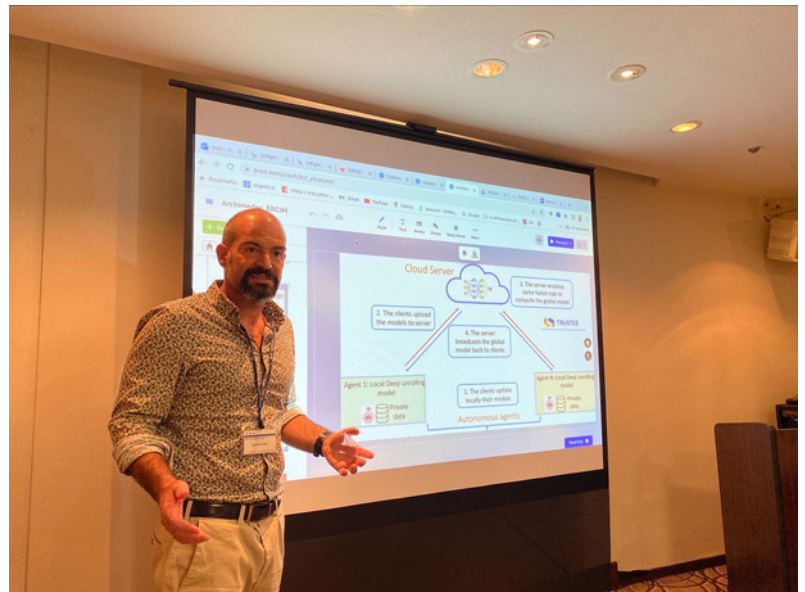


#EBDVF23

TRUSTEE was presented together with the TEADAL project, about "Creating trustworthy European dataspace federations - challenges and lessons learned from TEADAL and TRUSTEE".

Our colleague Alberto Berreteaga Barbero, from TECNALIA Research & Innovation, represented the TRUSTEE project and presented the architecture of their platform and the linkages with the Gaia-X Association for Data and Cloud (AISBL). And Dr. Sebastian Werner, Technische Universität Berlin represented the TEADAL project and presented the architecture and advancements in the TEADAL platform.

Exploring new research challenges and collaborations in AI, BD, HCI, and IoT technologies



Dr. Aris Lalos, Research Director at Industrial Systems Institute, ATHENA R.C., participated in the joint conference held by the Japan Science and Technology Agency (JST) and the European Research Consortium ERCIM - European Research Consortium for Informatics and Mathematics, in Kyoto, Japan. The joint meeting began with presentations on the theme "Infrastructure and Resilience of Services for the Smart Society". In this session, Aris Lalos shared personal experiences in applying federated learning research to improving situational awareness in the TRUSTEE automotive pilot studies.



Events

Advisory Board Meeting

Table of contents

- TRUSTEE Technical Management Team
- TRUSTEE Technical Overview
- TRUSTEE Roadmap towards Implementation
- TRUSTEE Personas & end-user Goals
- TRUSTEE High Level Architecture & Innovation

The screenshot also shows a grid of participants in a video conference, including Dr. Evangelos Markakis and Dr. Emmanouil Spanakis.

The first Advisory Board Meeting for TRUSTEE was held. Our Technical Manager Dr. Evangelos Markakis and our Coordinator Dr. Emmanouil Spanakis shared the project's goals, receiving good advice from top experts in the field.

TRUSTEE Use Cases - Pilots

The slide displays a map of Europe with various use cases and pilots highlighted, including:

- CheckWatt
- Panasonic Automotive
- Industrial
- Energy
- ISS
- etiole
- Education
- Health
- VTT
- ZORTENET

TRUSTEE's fully encrypted solution will be validated through six different use cases supporting GAIA-X, ECSC, EGI, etc. demonstrating a multi-disciplinary, Pan-European federated FAIR and private data ecosystem.

The screenshot also shows a grid of participants in a video conference, including Dr. Evangelos Markakis and Dr. Emmanouil Spanakis.



Next Steps



4th Plenary Meeting



Athens, Greece

20-21 December 2023



TRUSTEE's 4th Plenary Meeting will take place in Athens, Greece at Stavros Niarchos Foundation on the 20th and 21st of December

TRUSTEE is going to start a series of interviews with the pilot leaders of the project, which will be posted on TRUSTEE's Youtube page!

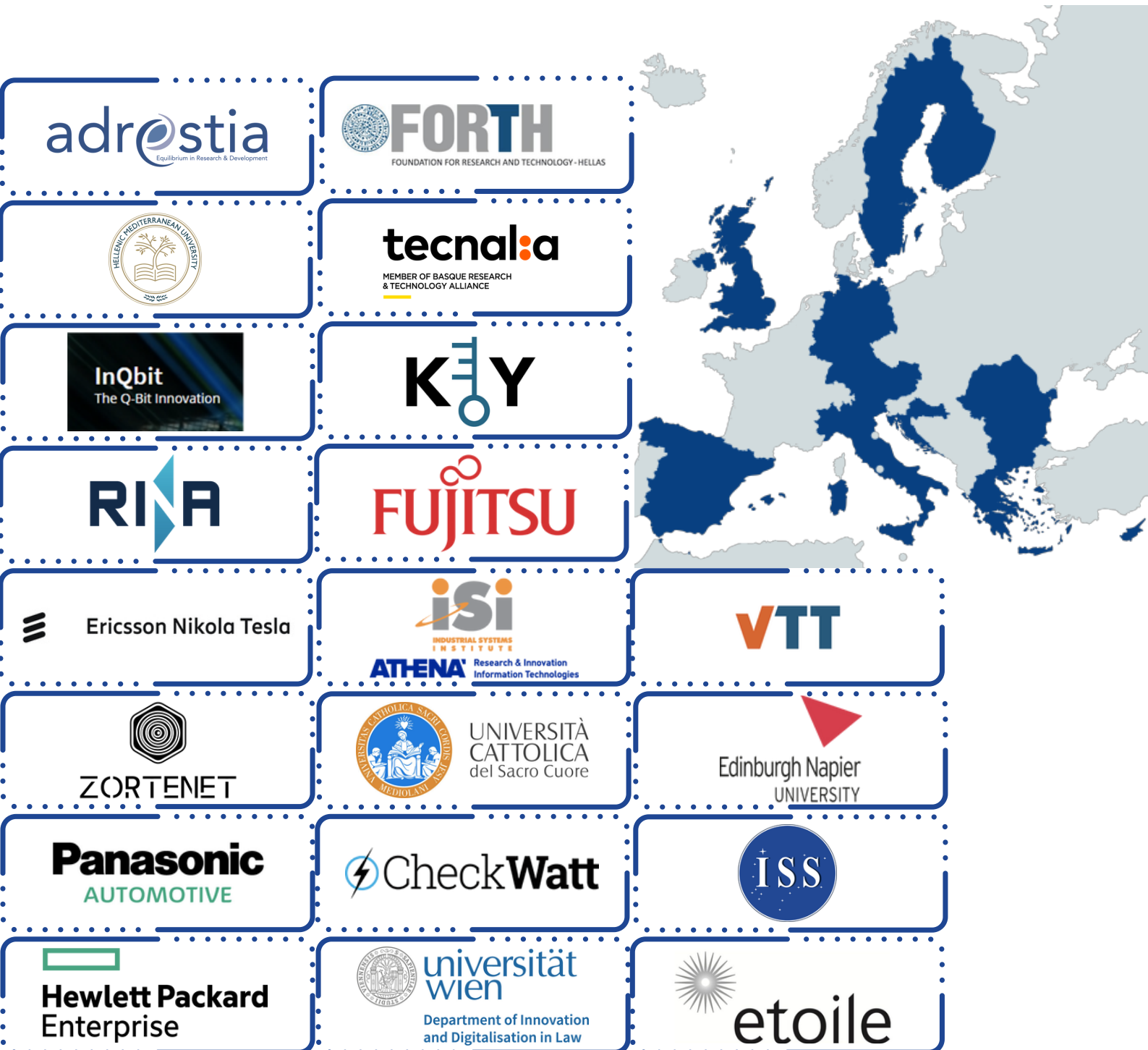


Interview Series

On our social media pages, you will find the latest updates on the project!



Get to know the TRUSTEE Consortium!



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