

Open Source Community Day

23 - 24 September

ECLIPSE[®]
FOUNDATION

CEI-Sphere
part of EU CloudEdgeIoT.eu

Co-located with

CONNECT

CCAM TRUST & RESILIENCE

AIOTI Days 2025

CONNECT Project

Focus: Integrate Trustworthiness in security & safety
CCAM

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SURREY

STELLANTIS



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(Dialog)



Continuous and Efficient Cooperative Trust Management for Resilient CCAM

Call/Topic

HORIZON-CL5-2021-D6-01-04 Safe, Resilient Transport and Smart Mobility services for passengers and goods

Project Grant Agreement: No. 101069688

Project Coordinator: Technikon

Budget: 21.9 M Euro

Grant: 17.9 M Euro

Duration: 36 months

Start Date: 1st September 2022

Number of Use Cases: 3

CCAM

AI Trustworthiness

Vehicle 2X

DOMAIN

Ethics Trust

Computing

In-vehicle services

Vision

Unlock the use of V2X messages for day2+ applications by enabling vehicles to quantify the trustworthiness of the exchanged data.



- <https://vimeo.com/showcase/connect-video-showcase?share=copy>

Project objectives (Moving towards Zero Trust for CCAM)

- Creation of mechanisms **for assessing dynamic trust relationships and defining a trust model and trust reasoning framework** based on which involved entities can establish **trust for cooperatively executing safety-critical functions**. (Quantify Trust by reasoning under uncertainty).
- Defines and leverages **attestation mechanisms** to enable the establishment **of trust relationships and trust calculations in next generation CCAM**. This includes the **integration of TEE technologies**, which can offer guarantees and assurances for the establishment of trust through the required proofs/claims.
- Allow a vehicle **to outsource calculations to the backend (MEC or cloud)**. To this end, we will **design and implement a decision-making mechanism** to determine which calculations need to remain on the vehicle and which can be offloaded on the infrastructure. Involves two parameter: a) the operational calculation and b) the trust calculations.
- **Ethical dimension of Trust Management**
- **Simulation, Validation & Evaluation of CONNECT Framework**

- **Open Source Development Plan:**

- 5 Artifacts as open source
- Validation of KERs through 3 Demos
- Assessment ISO/IEC 25010:2011 Product Quality Model.
- Validation in 2 iterations



<https://linktr.ee/horizonconnect>

Open source repositories:

- TAF
- TEE Libraries
- Runtime TRACER
- Foreseen collaboration with SDV Eclipse Working group (Eclipse Software Defined Vehicle)

TRUST COMPUTING GROUP 204

5GAA Trust4Auto Working Item

- White paper participation
- CONNECT contributions

ETSI Security Week Presentation of CONNECT work

Contribution to ISO TC22/SC32/WG11 Road Vehicles

Contribution to ISO/IEC JTC1/WG13 Trustworthiness

More than 21 Scientific papers in conferences

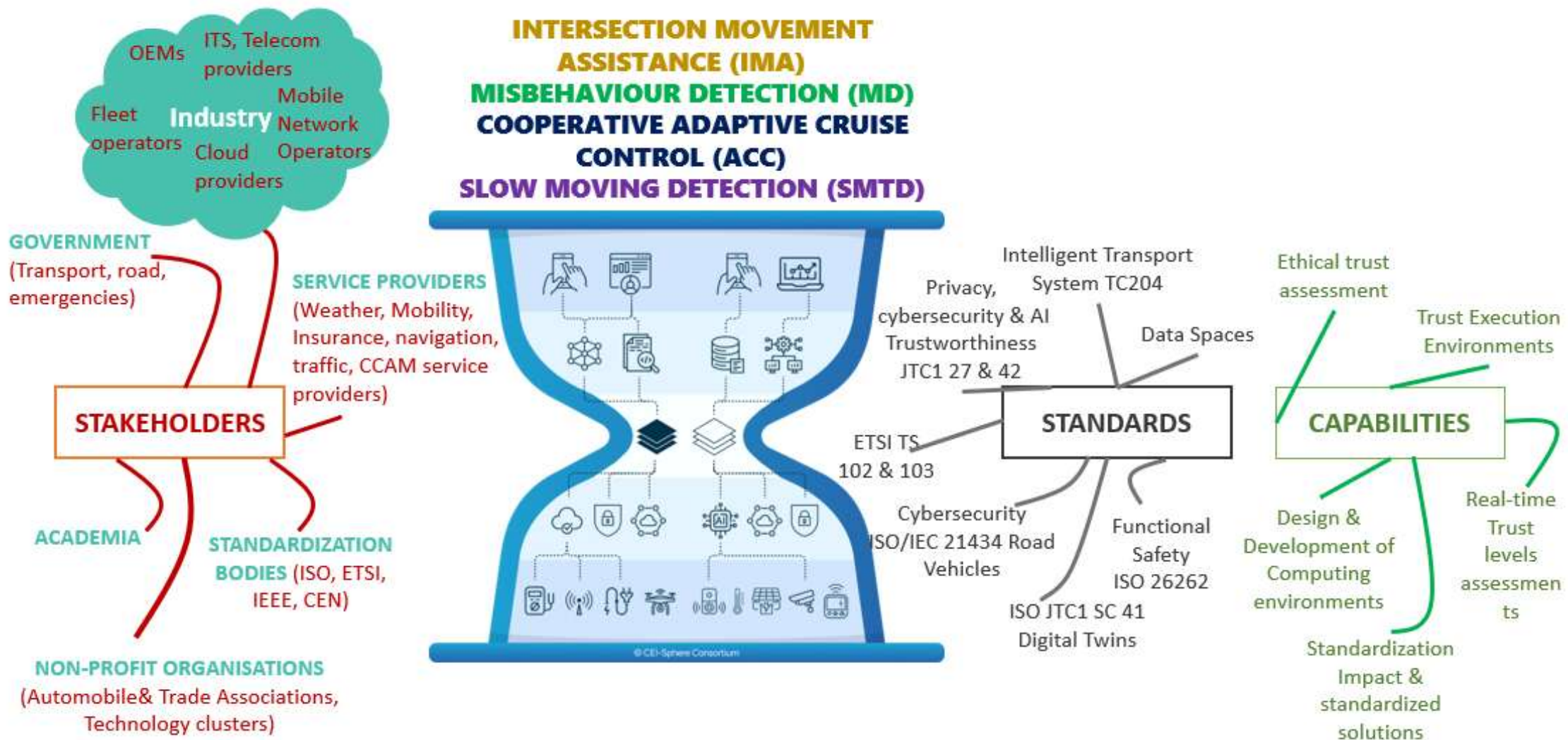
8 Journal high level publications

Workshop on Trustworthy AI

8 Journal high level publications

Liaison-Clustering:

- CCAM Association
- Car2Car
- CEPS WG on Post-Quantum Crypto



Thank you

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