



AUGMENTED CCAM

ACCAM - First Newsletter

Newsletter N°1 - January 2024

Editorial

AUGMENTED CCAM is happy to share with you its first Annual Newsletter!

AUGMENTED CCAM (Augmenting and Evaluating the Physical and Digital Infrastructure for CCAM deployment) is a European funded Innovation Action that started on the 1st of September 2022 and is expected to last 40 months. It is a Partnership consisting of 27 beneficiaries from 13 European countries, coordinated by FEHRL (Forum of European National Highway Research Laboratories) and technically managed by the Hellenic Institute of Transport (HIT) of Centre for Research and Technology Hellas (CERTH).

AUGMENTED CCAM (ACCAM) aims to understand, harmonise and evaluate in an augmented manner, adapted and novel support concepts of Physical, Digital and Communication (PDI) infrastructure to advance the infrastructure readiness for large-scale deployment of CCAM solutions for all. During its first year of life, it reached a series of Milestones!

Harmonised prioritised PDI support classification schema for CCAM

ACCAM has released its **Harmonized prioritised PDI support classification schema for CCAM**, addressing the needs of road infrastructure operators, decision makers, also any type of road user. Starting from a revision of the PDI that matters for CCAM operations being also valuable to some extent to other road users (non-connected; non-automated), it has come up with an enriched **PDI registry** that encompasses all physical, digital and communication elements.

In turn, having reviewed more than 70 references, including past initiatives having dealt with similar objectives (i.e. ISAD classification from INFRAMIX project, Smart Roads Classification (SRC) of PIARC, Connected Road Classification System (CRCS), CCAM Partnership PDI schema, SHOW, SLAIN and MANTRA projects relevant documentation, and many other) it came up with the ACCAM classification schema that consists of **5 escalating layers of PDI readiness for CCAM**, to be aligning with existing schemas but conceptually reflecting the CCAM "Sense – Plan - Act". Those are namely: **Layer E**: Conventional sensing and planning infrastructure - **Layer D**: Anticipated sensing infrastructure - **Layer C**: Enhanced sensing and primary planning support infrastructure - **Layer B**: Enhanced Planning and Actuation support infrastructure - **Layer A**: Augmented/ orchestrated acting infrastructure for mixed fleets operation. Across the layers, the schema elaborates on all relevant Physical Infrastructure (PI) and Digital and Communication Infrastructure (DCI) elements, how they impact different **vehicle cohorts** [Conventional (L0); Connected & Cooperative; L1-L3 automated; L4-L5 automated] and, for AVs in specific, how they impact their ODD, which are the requirements from vehicles' side to assume the infrastructure support and, finally, which are the priority investments on them upon a list of criteria: mixed traffic, enabling AD, enhancing traffic safety and efficiency, financial investment range, mitigation of unexpected MRMs, key application context (highway/ urban/ rural/ specific areas (e.g. occurrence of traffic lights, road works, restricted areas, low GNSS signal)/ special infrastructures).

All ACCAM-targeted PDI-enabled services are correspondingly positioned in the Schema layers.

Expected support of PDI schema elements

Layer	PDI support element	Infra-structure type	Expected support
E	Lane width [Road infrastructure]	Physical infrastructure	<i>Lane width is crucial for safe driving in mixed traffic conditions as it supports lane keeping systems. Change on lane width could pose safety-related challenges even in conventional traffic [Ref: INFRAMIX]. Automated vehicles with better lane keeping may allow for smaller tolerances for vehicle behavior. If narrower lanes are feasible, they hold the possibility to fitting an additional lane in the carriageway [EU EIP, 2020] or making space for inside shoulders [AUTOMOTO, 2021].</i>
E	Static traffic signs incl. tunnel control signs [Traffic Control - Vertical Traffic Signs]	Physical infrastructure	<p><i>Supporting conventional vehicles' driving and enhancing perception (and in turn planning) for vehicles with Traffic Sign Recognition (TSR) systems. The specific context of the traffic sign needs to be interpretable by TSR systems. Bad condition, lack of their visibility, misplacement, misinterpretation of traffic signs by vehicles' systems can lead to incidents.</i></p> <p><i>In human-driven vehicles with automated functions assuming traffic signs recognition, disagreements may emerge between drivers and vehicles systems perception, or in first place, disengagements of automated functions being fed. Recognition by vehicles TSR systems does not by default inferring automated action, which assumes the related s/w functionalities on vehicle side that will use the information for vehicle actuation strategies, i.e. ISA [Ref. ACCAM, INFRAMIX]</i></p>
E	Temporary signs [Traffic Control - Vertical Traffic Signs]	Physical infrastructure	<i>Similar to static traffic signs, temporary signs support drivers' and vehicles' situational awareness and are beneficial for automated functions/vehicles, when detected and interpreted effectively by TSR systems. The interpreted signs can support planning and actuation (if they are feeding relevant assistance functions). With these signs, temporary traffic conditions are communicated.</i>
E	Dynamic signs (including Variable Message Signs) [Traffic Control - Vertical Traffic Signs]	Digital and communications infrastructure	<p><i>Similar to static traffic signs, dynamic signs also enhance situational awareness and planning of drivers and vehicles (if the latter can read, interpret and use them for assistance/automated functions, such as lane and platooning guidance, ISA, etc.). Dynamic signs can be programmed with a wide range of messages which may be instructions, advice, or simply useful information depending on circumstances. (Ref: ITF, 2023). Road safety and traffic efficiency can be improved, especially for road sections with frequently varying environmental and traffic conditions or historical traffic flow problems [Ref: PIARC, 2021].</i></p> <p><i>'VMS content can be alternatively provided through C-ITS services and/or HD maps.</i></p>

Addressed vehicle cohorts

Layer	PDI support element	Infra-structure type	Addressed vehicle cohort
E	Lane width [Road infrastructure]	Physical infrastructure	<input checked="" type="checkbox"/> Conventional: Sufficient and standards-abiding lane width is a crucial factor for traffic safety. <input checked="" type="checkbox"/> Connected & Cooperative: As above. <input checked="" type="checkbox"/> L1-L3 automated: As above. In addition, specifically for AVs, inappropriate lane width can lead to disengagements. <input checked="" type="checkbox"/> L4-L5 automated: As above.
E	Static traffic signs incl. tunnel control signs [Traffic Control - Vertical Traffic Signs]	Physical infrastructure	<input checked="" type="checkbox"/> Conventional: Default/mandatory support for driving in transport network – no extra requirement on behalf of the driver (given their full vision capability; assisted or not) – they aim to provide information, as appropriate, at a glance. <input checked="" type="checkbox"/> Connected & Cooperative <input checked="" type="checkbox"/> L1-L3 automated: Conditional support, if the traffic signs can be recognized by the vehicles' on-board equipment feeding in-turn available automated functions (i.e. ISA function). <input checked="" type="checkbox"/> L4-L5 automated: Conditional perception support, if the traffic signs can be recognized by the vehicles' on-board equipment.
E	Temporary signs [Traffic Control - Vertical Traffic Signs]	Physical infrastructure	<input checked="" type="checkbox"/> Conventional <input checked="" type="checkbox"/> Connected & Cooperative: Supports situational awareness about temporary traffic conditions, given availability of on-board Traffic Sign Recognition Systems that can read them (see also other requirements). <input checked="" type="checkbox"/> L1-L3 automated: As above – supports planning & actuation if automated functions are being fed. <input checked="" type="checkbox"/> L4-L5 automated: As above.
E	Dynamic signs (including Variable Message Signs) [Traffic Control - Vertical Traffic Signs]	Digital and communications infrastructure	<input checked="" type="checkbox"/> Conventional: supporting navigation & planning <input checked="" type="checkbox"/> Connected & Cooperative – enhances situational awareness and planning of assistance functions if available and given they can be read by TSR systems. <input checked="" type="checkbox"/> L1-L3 automated: Enhances situational awareness and planning, given they can be read by TSR systems <input checked="" type="checkbox"/> L4-L5 automated: As above

Enablers, requirements and key restrictions

Layer	PDI support	Requirements and recommendations (in addition to digital and communication enablers)	Additional Requirements in case of special infrastructure/ event (bridges, tunnels, road works)	Key restrictions
E	Lane width [Road infrastructure]	<ul style="list-style-type: none"> - Recommended lane width 2.8-4.2m (based on SLAIN, 2021: 2,72m critical lane width; PIARC, 2021: 2.6-4.2m; AUSTROADS, 2020: min. 2,8m, SHOW: <2,5m disabling lane support systems, UN-Regulation Nr. 130: min. 3.5m width between lane markings for testing) - Without segregated cycle traffic, lane widths between 3.0 and 3.5m should be avoided (in favor of cyclists as they could lead to critical overtaking maneuvers [Austrian RVS 03.02.13]). - Wider lanes allow distribution of vehicles within the lane (which should ideally be pursued by automated vehicles), therefore affecting road maintenance, narrower lane widths could lead to space for another lane/shoulder, etc. - Changes in lane width should be avoided (Change on lane width could pose safety-related challenges even in conventional traffic [Ref: INFRAMIX]) 	<p>Road works: Safe and appropriate navigation plans - no widths <2.5m, otherwise alert/communication needed</p> <p>Representation of stationary road works in HD map and C-ITS / legacy systems (DAB broadcast, TPEG, FM broadcast, VMS) and mobile road works in C-ITS / legacy systems.</p>	<p>The minimum width for LDW/LKA systems varies between manufacturers. On-road and off-road evaluations also provided some support that too-narrow lanes (<2.8 m) are challenging for the machine vision systems of most vehicles tested, particularly if the narrow lane has no edge lines. Some vehicles may have reduced pavement marking detection at lane widths less than 3.0 m. Bigger lane widths may cause issues for some vehicles' detectability, i.e. vehicles can unexpectedly lose lane keep functions. In contrast, narrow lane widths (smaller than 2.5m) are often used to disable lane support systems in order to prevent AV to "bounce" of lane boundaries and creating customer dissatisfaction. (Ref. SHOW D8.1, 2021). Change on lane width could pose safety related challenges even in conventional traffic. (Ref: INFRAMIX). A lane width of 2.72m was found to be the "critical" lane width for safe operation. (Ref: SLAIN, 2021, PIARC, 2021). Narrow lane sections should be generally avoided, as they would impede the vehicle's operation. Narrow two-way roads or lane widths of 3-3.5 meters or under are not considered suitable, especially in combination with side parking. Wider lanes allow for optimum vehicle operation. (Ref: SHOW D8.1, 2021): Lane widths that are too wide or too narrow make the task of detecting longitudinal pavement markings more difficult. It is suggested to use widths between 2.6 and 4.2 m. (Ref: PIARC, 2021). The lane width becomes critical for pavement maintenance, as well as to ensure that vehicles can perform. (Ref: EU EIP, 2020).</p>

Scaled characteristics for prioritization (enabling AD; Safety, Traffic Efficiency, Costs): Reasoning

PDI support element	Enabling AD	Safety	Traffic Efficiency	Costs	Enabling AD ("How does this element enable AD?" Are there premises in other layers?)	Safety ("How does this element provide traffic safety?" "What are the risks?")	Traffic Efficiency (effect on transport network and traffic management)	Costs (How are the costs affected? What about maintenance? How long does an investment last?)
Lane width [Road infrastructure]	4	4	2	3	Lane width supports lane keeping functions.	Change on lane width could pose safety related challenges even in conventional traffic. (AUTOMOTO, 2021)	Automated vehicles with better lane keeping may allow for smaller tolerances for vehicle behaviour and for narrower lanes than today especially on sections without junctions nor driveways. If this could result in fitting an additional lane in the carriageway, the throughput of the road would increase considerably. (EU EIP, 2020) But, this is only possible with full automation, not with mixed traffic.	Costs for initial checks. Changes can lead to high costs. Narrow lanes would likely increase rut formation as the vehicle wheel paths would necessarily be focused in the same tracks on the lane cross-section. "Studies are required to analyse rutting and increased road fatigue potential in case of increasing unification of wheel paths. The optimal solution could be that the ADS developers impose variation into wheel paths of automated vehicles ensuring even wear of the pavement within a lane thereby negating the possibility to reduce lane widths due to automated vehicles." (EU EIP, 2020)

PDI schema elements and their characteristics supporting prioritization

Layer	PDI support element	Infrastructure type	Readiness	Highway	Rural	Urban	Enabling AD	Safety	Traffic Efficiency	Costs
E	Lane width [Road infrastructure]	Physical infrastructure	Ready	x	x	x	4	4	2	3
E	Static traffic signs incl. tunnel control signs [Traffic Control - Vertical Traffic Signs]	Physical infrastructure	Ready	x	x	x	4	5	1	2
E	Temporary signs [Traffic Control - Vertical Traffic Signs]	Physical infrastructure	Ready	x	x	x	4	5	2	1
E	Dynamic signs (including Variable Message Signs) [Traffic Control - Vertical Traffic Signs]	Digital and communications infrastructure	Ready	x	x	x	4	5	2	2

ACCAM prioritized PDI support classification schema for CCAM – Scaled characteristics for prioritization (excerpt)

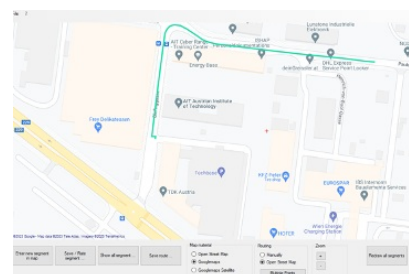
Layer	Infrastructure element	Type	Enabling AD	Safety	Efficiency	Costs
E	Lane Markings	Physical infrastructure	4	5	2	3
E	Road pavement surface	Physical infrastructure	4	5	2	3
D	Infra –localisation assistance	Digital and communications infrastructure	5	5	4	3
D	ACCAM Service -Minimum risk manoeuvre	Digital and communications infrastructure	3	5	3	3
D	C-ITS Day 1 In-vehicle signage & C-ITS Day 1 In-vehicle speed limits	Digital and communications infrastructure	4	5	2	4
C	C-ITS Day 1 Service: Hazardous location notification and equivalent services	Digital and communications infrastructure	2	5	3	4
C	ACCAM Service: Equipped VRUs protection	Digital and communications infrastructure	4	5	2	4
B	C-ITS Day 1 service: Slow or stationary vehicle(s) and equivalent services	Digital and communications infrastructure	2	5	4	3
B	Traffic Light Signal Priority services (C-ITS, TM2.0)	Digital and communications infrastructure	2	5	3	3
A	ACCAM Service: Emergency vehicle approaching	Digital and communications infrastructure	4	5	3	4

ACCAM prioritised PDI support classification schema for CCAM - Example of some high safety related services in different layers (excerpt)

PDI Segmentation Tool & Infrastructure Support Tools for CCAM

The ACCAM schema is being accompanied by two (2) web tools which serve as a practical translation of the schema content and value. Those are namely the **PDI segmentation tool** that aims to assist road infrastructure actors with the PDI readiness characterisation of their roads and the **Infrastructure Support Tools for CCAM** that one hand provides a tool to users to apply their criteria in a handy way and get returned with the priority PDI investments according to them, and, on the other hand, it gives the opportunity to any interested party to feed the schema and proposed additions and alterations, turning it to a continuously living content. Through the seamless integration between the two tools, their users will always access the latest (authorised) version of the PDI support classification schema.

Both tools will be soon published on the [project website](#).



ACCAM segmentation tool (under evolution)
- start screen with the chosen route for assessment (green line).



LOG IN REGISTER

Plan your infrastructure for CCAM (Connected, Cooperative and Automated Mobility) ©

[Manual](#)

A decision-making tool that assists road infrastructure operators, transport network managers and any authorized decision maker to decide on priority investments for their infrastructure at physical, digital and communication side, so that they make it CCAM (Connected, Cooperative and Automated Mobility) ready.

Apply your criteria

Select Vehicle Cohorts

Vehicle cohorts you would like to address (more than one options are possible)

☐ Conventional (L0) ⓘ ☐ Connected & Cooperative ⓘ ☐ L1-L2 automated ⓘ ☐ L4-L5 automated ⓘ

Select Priorities

Enabling AD rating

☐ 1-2 low ⓘ ☐ 3 medium ⓘ ☐ 4-5 high ⓘ

Safety rating

☐ 1-2 low ⓘ ☐ 3 medium ⓘ ☐ 4-5 high ⓘ

Efficiency rating

☐ 1-2 low ⓘ ☐ 3 medium ⓘ ☐ 4-5 high ⓘ

Select Readiness Level of the Service

Current Readiness of the service

☐ Ready ⓘ ☐ Tested ⓘ ☐ Under testing in ACCAM ⓘ ☐ Under testing ⓘ ☐ Under development ⓘ ☐ Unknown ⓘ

Select Support for Minimal Risk Maneuvers (MRMs)

Minimizing/mitigating unexpected MRMs

☒ Yes ⓘ ☐ No ⓘ

Select Key Road Context and Specific Infrastructure Conditions

(more than one options are possible)

Key Context Highway

☐ Applicable ⓘ
☐ Applicable under circumstances ⓘ

Key Context Rural

☐ Applicable ⓘ
☐ Applicable under circumstances ⓘ

Key Context Urban

☐ Applicable ⓘ
☐ Applicable under circumstances ⓘ

Specific infrastructure

☐ Occurrence of traffic lights ⓘ ☐ Road works ⓘ ☐ Restricted areas ⓘ ☐ Low GNSS signal ⓘ

Cost Range

Select the cost rate

☐ 1 ⓘ ☐ 2 ⓘ ☐ 3 ⓘ ☐ 4 ⓘ ☐ 5 ⓘ

Support for Special Infrastructure

Include specific recommendations for the following special infrastructure

☐ Road works ⓘ ☐ Tunnels ⓘ ☐ Bridges ⓘ

[VIEW RESULTS](#)



AUGMENTED CCAM aims to understand, harmonize and evaluate in an augmented manner adapted and novel support solutions of Physical, Digital and Communication (PDI) infrastructure, to advance its readiness for large scale deployment of CCAM solutions for all.



The AUGMENTED CCAM Project has received funding from the European Union's Horizon Europe programme under Grant Agreement No. 101069717

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contact@example.com

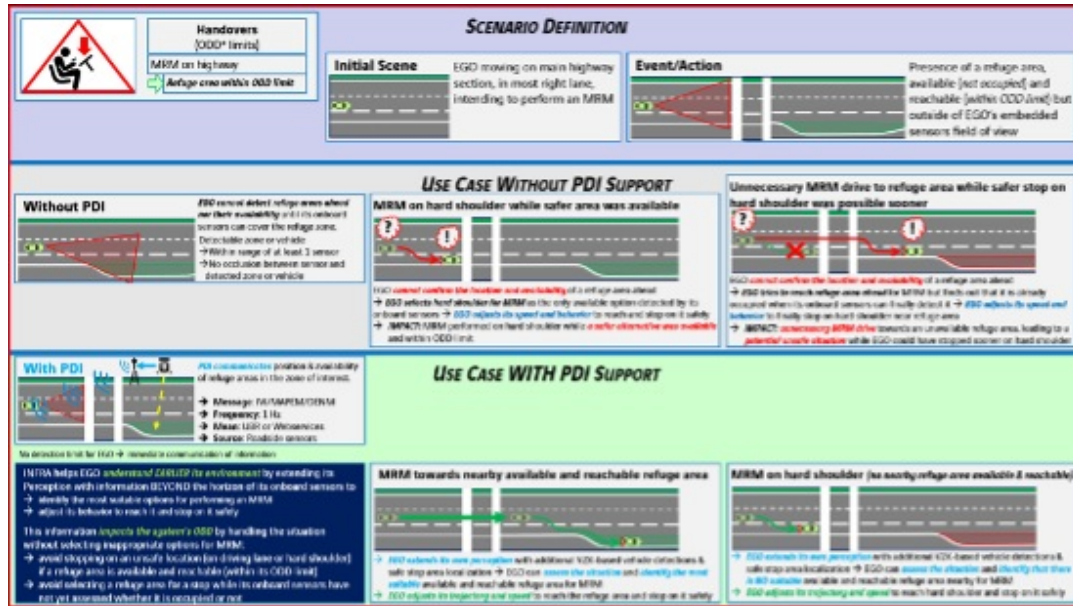
ACCAM Website

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Use Cases

The project has finalised its project **Use Cases** that are crosscutting to all following project phases – from design to validation and impact assessment. One of the focal points of the project Use Cases is to describe how the CAV functionality (ODD and further) is expected to change with the anticipated PDI support. There are **13 PDI enabled solutions for CCAM anticipated** and their implementation has already started according to the requirements they have set. Those deal with PDI support for CAV services about **Emergency Vehicle Approaching, Traffic Management optimisation, Logistics optimisation, protection of equipped/connected and non-equipped/connected Vulnerable Road Users (VRUs), Road Works as well Localisation, Minimum Risk Manoeuvre (MRM) and Insertion** driving cases of CAVs. The PDI-enabled services for CCAM are going to be validated in field in the seven (7) pilot sites of the project (controlled/closed environments, urban, peri-urban and highway open traffic environments in Spain, Latvia and France), as well as in Digital Twins, whilst further simulation activities with specific assessment objectives are going to be addressed through AV and Driving Simulators as well as microscopic and macroscopic traffic simulations. ACCAM implementations will be ready by April 2024 for the first demonstration activities that will serve for first data collection, interface and calibration of modeling in simulation test beds, whilst the 1st pilot round in field and Digital Twins is expected to start in all seven (7) test sites in Summer 2024.

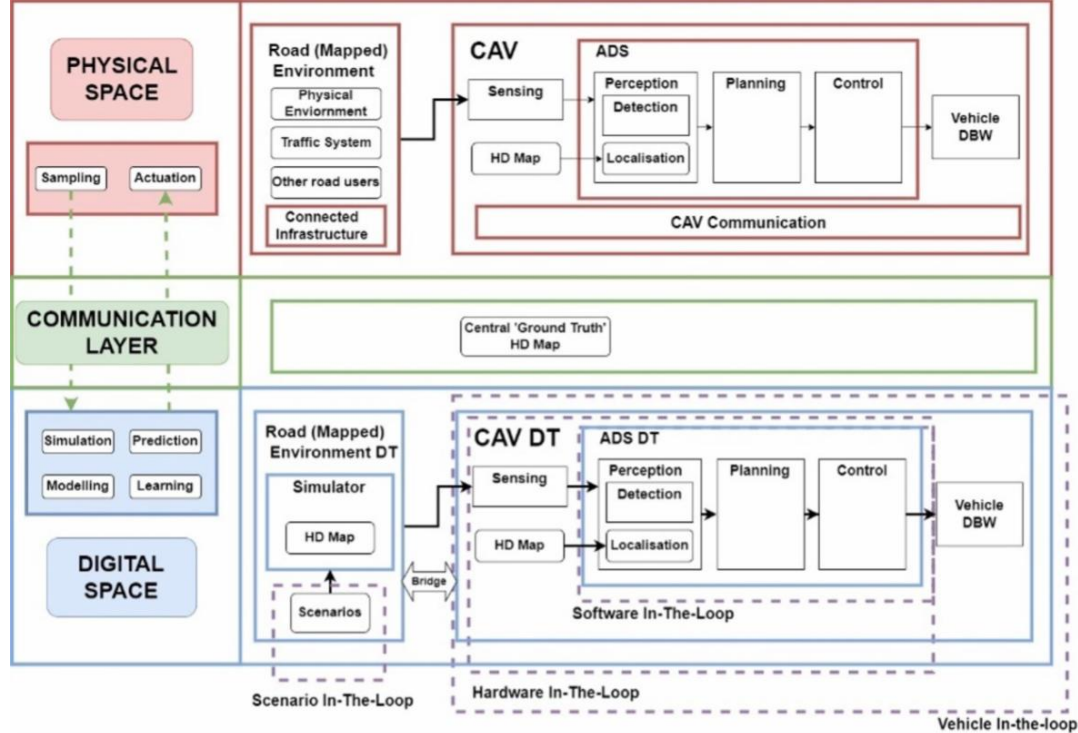


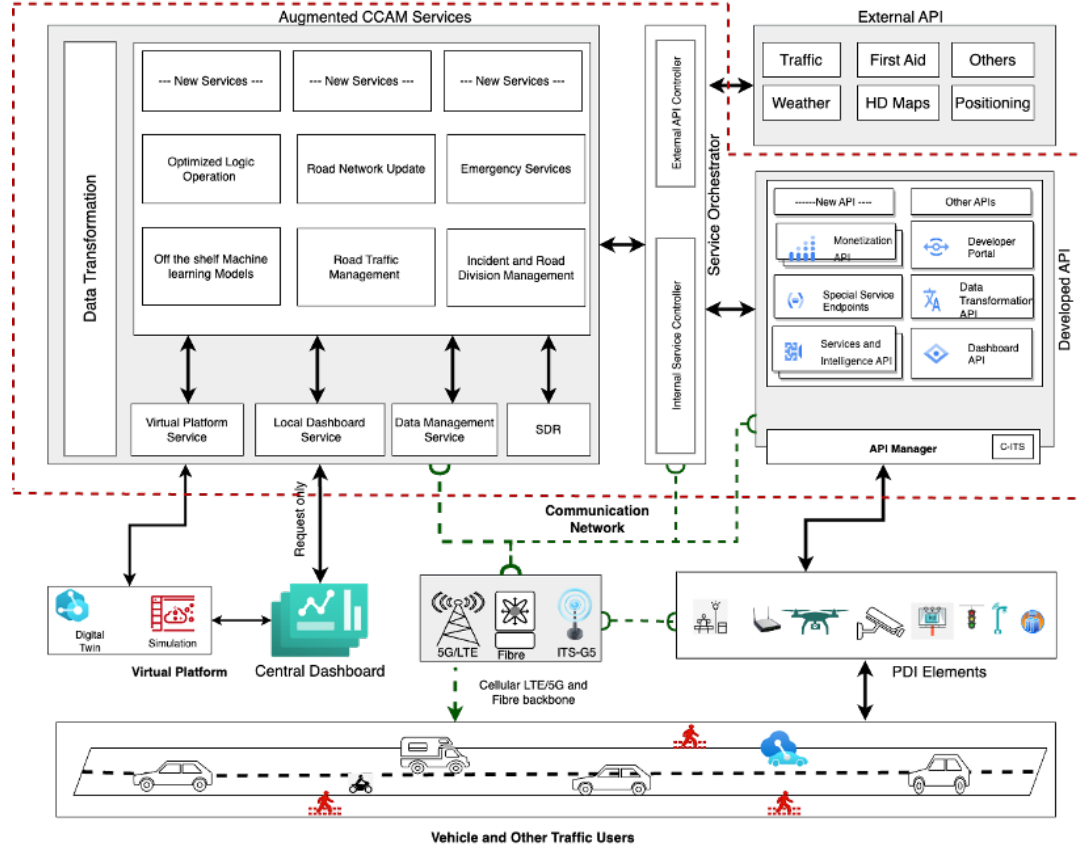
MRM Use Case – With & without PDI

ODD Taxonomy, HD Maps & Digital Twins

Aligned with the work on Use Cases, the ACCAM work on **ODD taxonomy** is evolving that builds on the PRISMA French national project and is being updated on the advancements of ACCAM with regard to PDI support classification. This taxonomy forms the cornerstone to accurately and consistently define the ODD and its associated scenarios, thereby bolstering the project's objectives and serving as the foundation for specifying driving scenarios and their attributes for the upcoming validation activities.

Among other, ACCAM aims to deploy **High Definition (HD) maps & Digital Twins (DT)**. Starting from the classification of both in the context of the PDI registry and having embedded them in the ACCAM prioritized PDI support classification schema, it has already moved on with a proposed DT architecture that aims to guide the corresponding development across its sites! DTs – across their various layers, namely Digital Models (DM), Digital Shadows (DS), and Digital Twins (DT) – are going to support in different ways the pilot sites implementations. In some cases, DT are there to support implementation, parallel to the field validation and later projection analyses while in other cases, DTs are active elements of the real transport network and inherent part of the integrated PDI based solutions. Among other, crowdsourced approaches for building and maintaining DT, varying across the pilot sites, will be implemented and evaluated. Stay tuned to learn more about the DT implementations in ACCAM in near future!

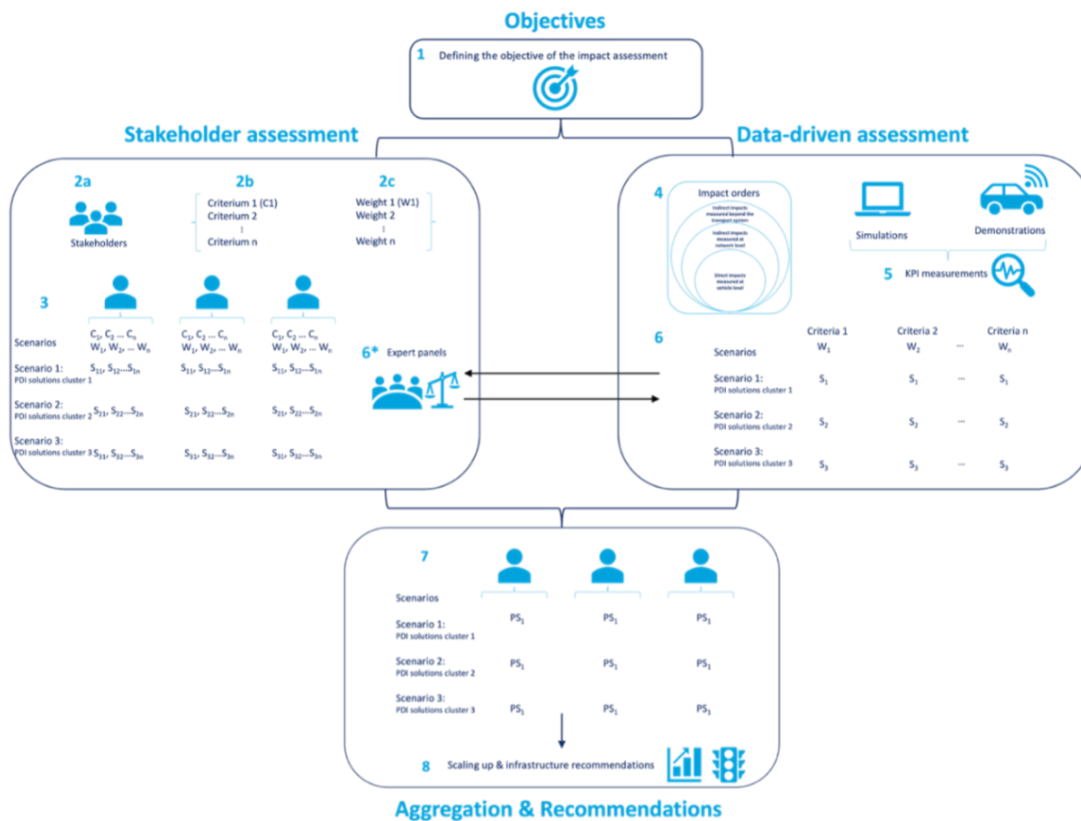




ACCAM Service-Oriented CCAM Architecture

Impact Assessment Framework

In the past period, ACCAM has come up with its [impact assessment framework](#). The AUGMENTED CCAM impact assessment framework is the first holistic impact assessment framework that aims to allow the systematic assessment of the overall impact of PDI use, novelty, adaptation and enhancements on CCAM but also on the transport road network as a whole. The framework builds further on existing frameworks like the FESTA framework, the Trilateral impact assessment framework and the M3ICA framework and combines subjective and data-driven assessment, having identified in total **37 Key Performance Indicators (KPIs)** across **eight (8) different impact areas** (extension of CAVs ODD and CVs operation capabilities, infrastructure functional safety, quality of service, trust and security of CCAM, driving behaviour of non-automated vehicles and VRUs behaviour, traffic safety of the overall network, traffic efficiency and environmental impact, logistics for CCAM and business models costs & benefits for key stakeholders).



1st Pan-European workshop

The project realised success in its 1st Pan-European workshop in Riga, Latvia (one of the pilot sites of the project) on the 13th of September 2023. The workshop was hybrid and was physically hosted by LMT, in collaboration with EDI and LVC (all being Consortium members) and gathered 51 physical representatives from various European organisations and bodies interested and being active in CCAM (Cooperative Connected and Automated Mobility) and Physical and Digital Infrastructure (PDI) for CCAM, across all layers (R&D, operational, policies & regulations). It consisted of keynote speeches, a visit to the Biķernieki race track (controlled test site of the project), where the progress on the Latvian PDI solutions was demonstrated, while it closed with a panel discussion with participants from within and outside the Consortium who discussed the priorities that should be given on infrastructure investments on technical, operational and organisational ground.

See more on the [website!](#)



Group photo at the Biķernieki race track visited during 1st Pan-European workshop

Multi-Actor Cooperation: the Pilot test sites

Workshops

The success of the project relies on effective multi-actor cooperation, requiring a thorough understanding of challenges and conditions. The project conducted workshops in Spanish, Latvian, and French test sites to engage with key stakeholders and gather insights for PDI solution deployment. [To know more check this news on the website.](#)



Spanish Test Sites

On June 15, 2023, a pivotal workshop convened in Madrid as a crucial step in preparing for the validation of PDI solutions demonstrations in Spain. EMT spearheaded the event, receiving support and insights from local partners TECNALIA and ETRA, actively contributing to the Spanish test trials. The workshop, also with the valuable involvement of Rupprecht Consult, drew 23 participants representing 15 key stakeholders. This diverse group encompassed public authorities at both local and national levels, infrastructure and service operators, technology providers, private sector representatives, an energy provider, and researchers from academia. The session aimed to foster cooperation, assess implementation roadmaps, and gain crucial insights into the challenges, barriers, and enablers for successful PDI solution deployment in Spain. The outcomes of this workshop will play a pivotal role in shaping the strategic direction and approach of the project as it advances in the Spanish-connected and autonomous mobility landscape.



Latvia Test Sites

In the lead-up to PDI solution demonstrations in Latvia, a pivotal workshop took place on June 19, 2023, in Riga. The event, organized by local project partners LMT, LVC, and EDI, with support from Rupprecht Consult, brought together a diverse group of 25 representatives from key stakeholders, including infrastructure operators, service providers, private entities, insurance (LTAB), academia (RTU), and local and national authorities. Participants engaged in active discussions to assess the implementation roadmap and impact of each PDI solution. The workshop aimed to identify requirements for effective multi-actor cooperation and understand key factors for PDI solution deployment in Latvia. This collaborative platform fosters engagement and cooperation at various levels, allowing AUGMENTED CCAM to glean valuable insights and address challenges in advancing CCAM solutions through diverse stakeholder collaboration.



French Test Sites

The workshop, held on August 3, 2023, in Paris, aimed to identify requirements for effective multi-actor cooperation and understand key factors and restrictions for PDI solution deployment in France. Local project partners, including VINCI COFIROUTE, VALEO, UNI-EIFFEL, CEREMA, and ATLANDES, played key roles in planning and implementing the proposed PDI solution. The diverse ecosystem involved VINCI COFIROUTE overseeing the A10-A11 Test Site, VALEO supporting technical activities, and UNI-EIFFEL leading other French Test Sites. A cross-sectorial and multi-disciplinary approach was emphasized, with 10 participants from local partners, Rupprecht Consult, and representatives from different VINCI departments. This collaborative effort served as a platform to foster engagement across various sectors, providing valuable insights into challenges, barriers, and enablers associated with PDI solution deployment in France.

[Click here to learn more about the test sites!](#)

[Sign up to be involved in the AUGMENTED CCAM project's stakeholders' list, getting updates on the project's dissemination activities!](#)

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Project Coordinator

Dr. Thierry Goger

Forum of European National Highway Research
Laboratories(FEHRL), 35,
Square de Meeûs, Brussels, Belgium

Technical Coordinator

Dr. Maria Gkemou

Centre for Research and Technology Hellas (CERTH)
Hellenic Institute of Transport (HIT)
52, Egialias, 15125, Marousi, Athens, Greece