HEADSTART

HARMONISED EUROPEAN SOLUTIONS

FOR TESTING AUTOMATED ROAD TRANSPORT

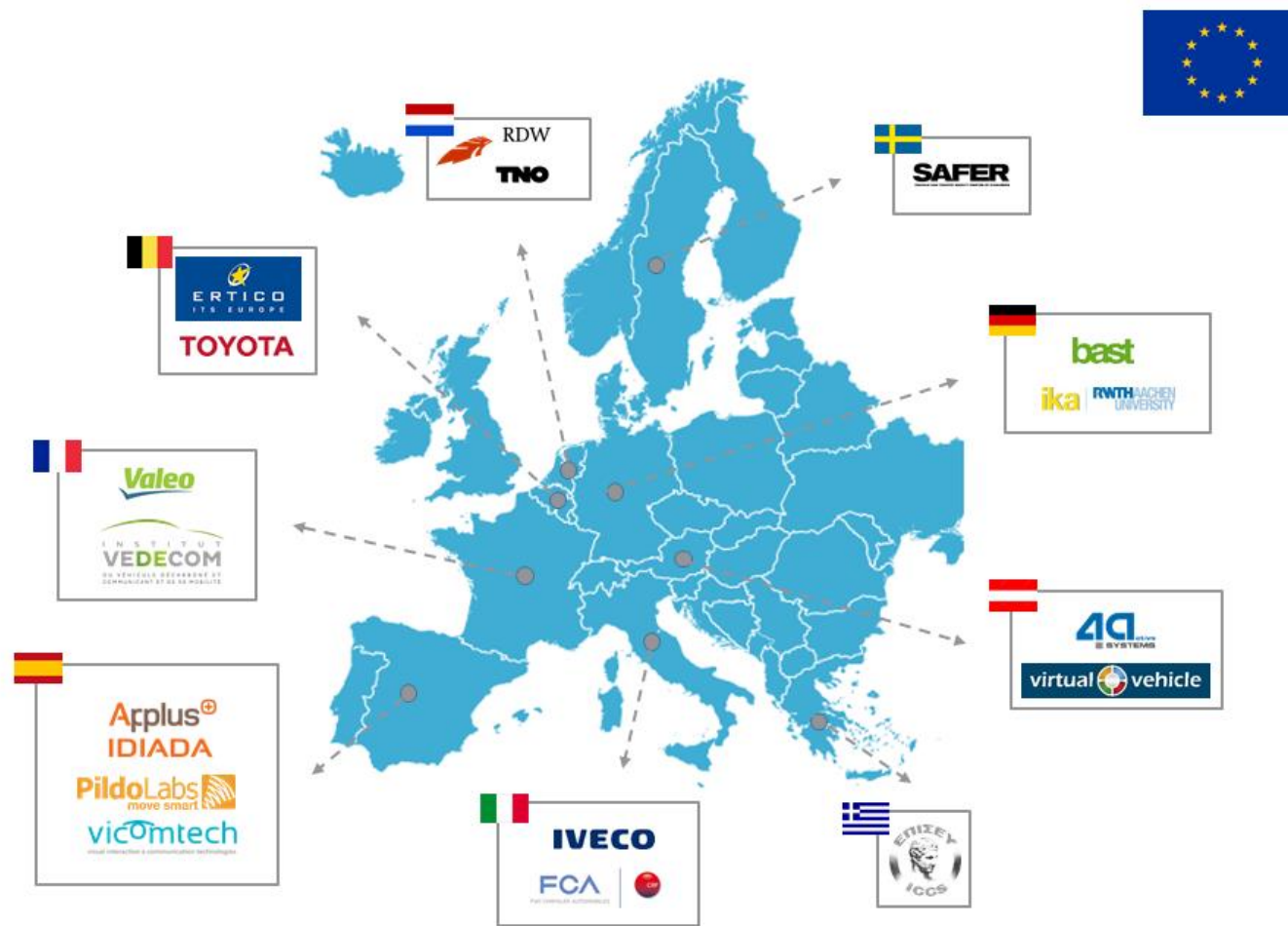Álvaro Arrúe – Applus IDIADA

Project coordinator

Outline

- ✓ HEADSTART project facts
- ✓ HEADSTART Consortium
- ✓ Overview
- ✓ Project's concept
- ✓ Project's objectives
- ✓ Work Package Structure
- ✓ Test sites
- ✓ Expected Technical Results up to M12
- ✓ Expected impact

- ✓ Cooperate with HEADSTART project
- ✓ HEADSTART Partners
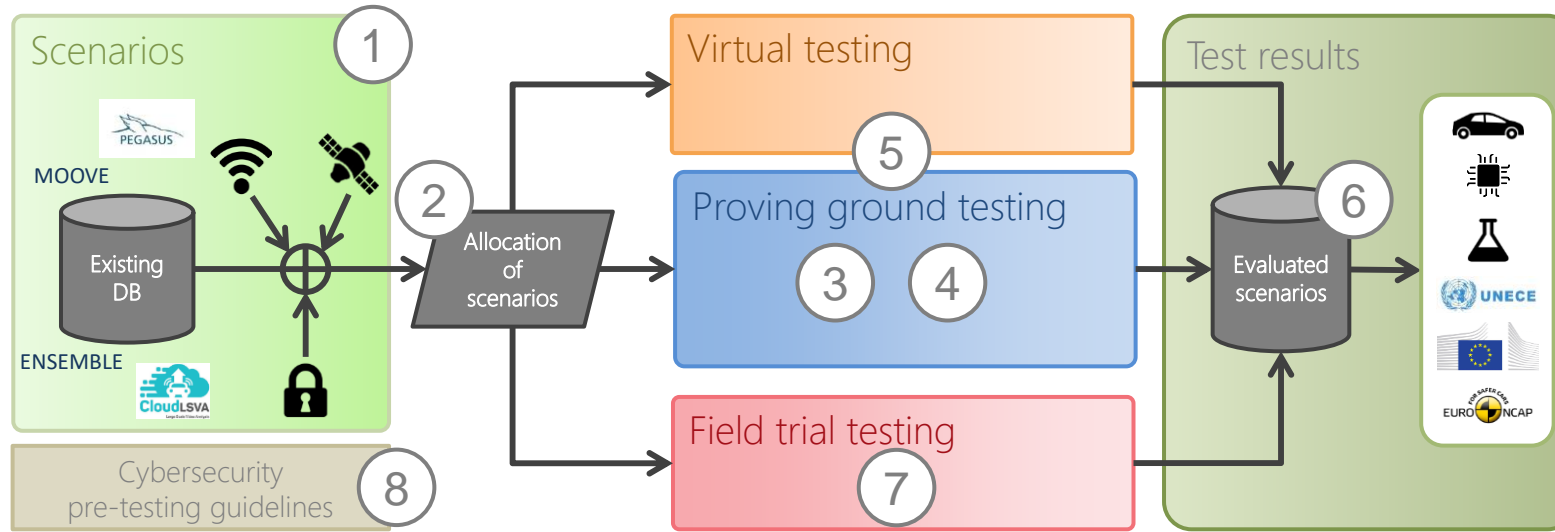- ✓ Stay connected with HEADSTART

HEADSTART project facts

- ✓ **Call identifier**: ART-01-2018

- ✓ **Type**: RIA

- ✓ **Duration**: 01.2019 – 12.2021 (36 months)

- ✓ **Budget**: 6M€

- ✓ **Consortium**: 17 partners

- ✓ **Coordinator**: Applus IDIADA, Mr. Álvaro Arrue, Project Manager

- ✓ **Dissemination Manager**: ICCS, Dr. Angelos Amditis, Research Director

- ✓ **Website**: https://www.headstart-project.eu

- ✓ **Social media**: 🐦 / HEADSTART_EU

  in / HEADSTART-PROJECT

  in / HEADSTART project

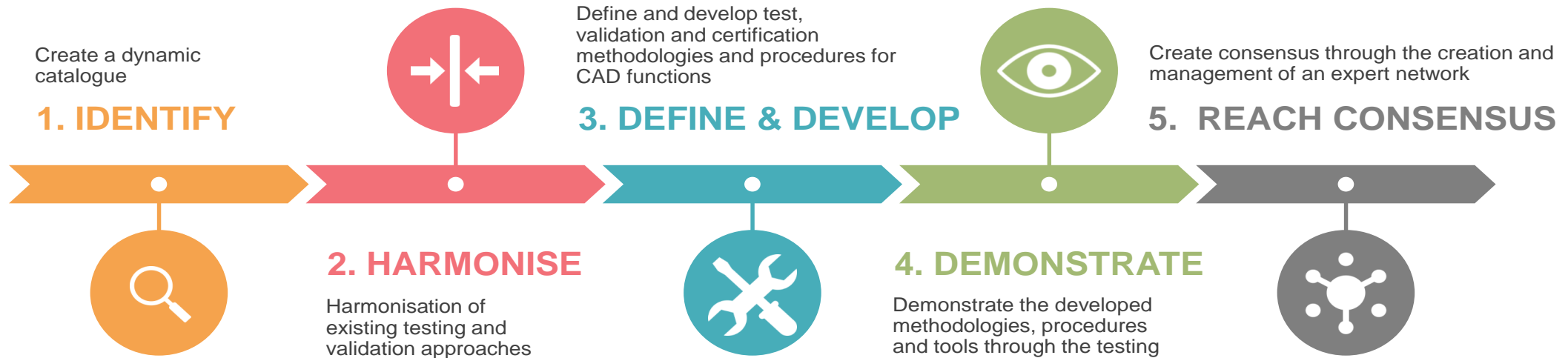 f / @HeadstartEUproject

HEADSTART Consortium

Project's Concept

1. Integration of positioning, communications and cyber-security in CAD test scenarios

2. Comprehensive procedure for the allocation of test cases per testing platform

3. Selection criteria and specification for proving ground test scenarios taking into account criticality

4. Proving ground testing and evaluation

5. Correlation between simulation and proving ground results

6. Harmonised, open result compilation and sharing

7. Field trial test methodology description

8. Cyber-security principles and integration in the testing methodology

Project's Objectives

HEADSTART will define testing and validation procedures of CAD functions including:

- its key enabling technologies (i.e. communication, cyber-security, positioning)
- by cross-linking of all test instances such as simulation, proving ground and real world field tests
- to validate safety and security performance according to the needs of key user groups (technology developers, consumer testing and type approval)

Create a dynamic catalogue

1. IDENTIFY

Define and develop test, validation and certification methodologies and procedures for CAD functions

3. DEFINE & DEVELOP

Create consensus through the creation and management of an expert network

5. REACH CONSENSUS

2. HARMONISE

Harmonisation of existing testing and validation approaches

4. DEMONSTRATE

Demonstrate the developed methodologies, procedures and tools through the testing

Cooperate with HEADSTART project

EXPERT GROUP PARTICIPATION

- Join as associated partner and our expert group

- Join the discussion group of your interest:

  - Cyber-security

  - Communications (V2X)

  - Positioning

  - Scenario selection

  - Consumer testing (NCAP)

  - Type approval

- Provide needs and requirements and evaluate project (intermediate) results

JOINT TESTING ACTION

- ✓ Joint cooperation between both projects for testing validation and certification purposes

- ✓ Align your project with the harmonized methodology and tools developed within HEADSTART

- ✓ Become one of our use cases!

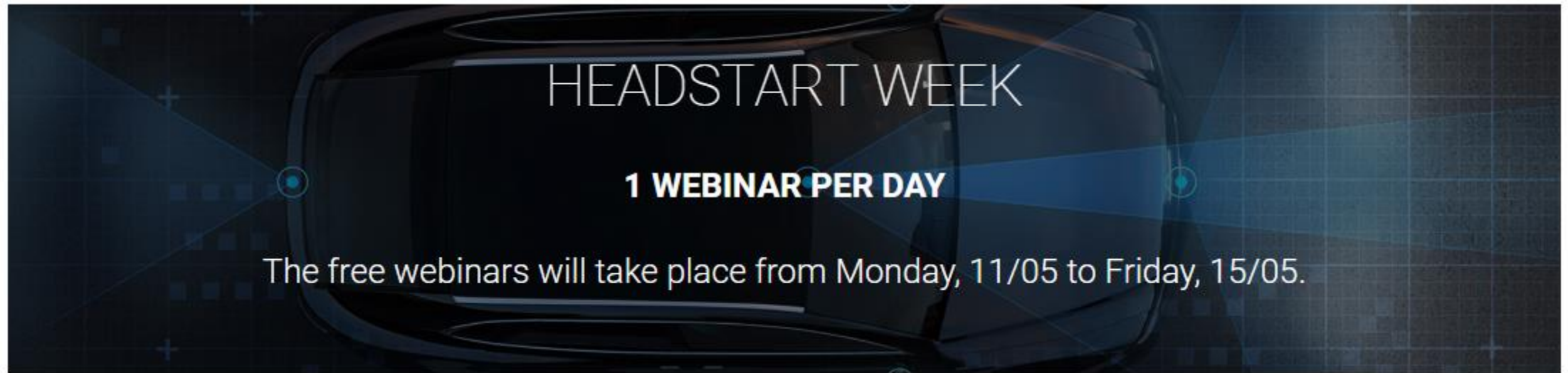Please let us know about your interest and join our distribution list.
Website: www.headstart-project.eu
Contact: info@headstart-project.eu

HEADSTART status update

✓ Available to be downloaded in www.headstart-project.eu
- D1.1: State of innovation of existing initiatives and gap analysis
- D1.2: Stakeholders and user group needs
- D1.3: Technical and functional requirements for KETs
- D1.4: Functional requirements of selected use cases
- D2.1: Common methodology for test, validation and certification
- D2.2: Criteria to choose optimal scenarios and tests for each KET

✓ HEADSTART Week
- WC20: 11/05 – 15/05: A dedicated webinar + discussion every day from 10-11:30 CET
- WB1: Methodology; WB2: Truck platooning; WB3: Traffic Jam assist; WB4: Cybersecurity

✓ International cooperation
- Engage with US and Japan projects in a Project-2-project basis
- Already discussing interaction with European initiatives

The HEADSTART week!

HEADSTART WEEK

1 WEBINAR PER DAY

The free webinars will take place from Monday, 11/05 to Friday, 15/05.

✓ HEADSTART project is organizing a week full of webinars, starting from Monday, 11/05 up to Friday, 15/05.

✓ These webinars will be interactive sessions engaging participants with questions and discussions.

The HEADSTART week!

✓ All participants will have the opportunity to discuss and find out more about:

- HEADSTART methodology, which has harmonized different European initiatives and included Automated Driving key enabling technologies;

- HEADSTART selected use cases (Truck platooning and Traffic Jam Chauffeur);

- How the validation methodology will be applied;

- How to validate the AD driving function;

- How the KETs will be handled;

- Cybersecurity as a transversal topic which has a great impact in CAD functions validation

The HEADSTART week!

✓ 4 Webinars: Different days for your convenience!

Monday	Tuesday	Thursday	Friday

Monday

Overall methodology and processes for testing and validation of automated road vehicles

Monday, 11/05/2020

10:00 - 11:30 CET

WEBINAR

Tuesday

HEADSTART validation methodology applied for the truck platooning use case

Tuesday, 12/05/2020

10:00 - 11:30 CET

WEBINAR

Thursday

Validation of use case: Traffic jam chauffeur

Thursday, 14/05/2020

10:00 - 11:30 CET

WEBINAR

Friday

Cybersecurity validation in automated driving

Friday, 15/05/2020

10:00 - 11:30 CET

WEBINAR

The HEADSTART week!

✓ Webinars are **free** and **independent**.

✓ This means that the participants are able to attend the webinars they prefer.

✓ As HEADSTART, our recommendation is to attend all webinars, so as to have a full overview of the project.

✓ **To register and find out more information** about each webinar, please **visit our webpage**

www.headstart-project.eu/headstart-wee

Stay connected with HEADSTART

✓Visit HEADSTART website

   www.headstart-project.eu

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✓Reach us via an e-mail:

   info@headstart-project.eu

✓Sign up to our newsletter:

   https://lists.iccs.gr/wws/subscribe/headstart-news

✓Get in touch with our partners

HEADSTART

Thank you!

Any questions?

Álvaro Arrúe

Project Manager – Connected and automated driving

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Applus⊕ IDIADA

Potential cooperation

✓ LEVEL 1:
- Information sharing
- Cross invitation to webinars and events

✓ LEVEL 2:
- Joint webinars or dissemination events
- Joint deliverables writing / reviews / contribution

✓ LEVEL 3:
- Distribution of results data (taking into account Data Privacy constraints)
- Joint research activities
- Joint testing activities
- Other?