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OPINA Newsletter



Your Source for OPINA and Mobility News
6 min. read

Dear OPINA Community,

Welcome to the first edition of the OPINA newsletter, full of exciting news from [OPINA](#), the Open Innovation Autonomous Vehicle Development and Testing Platform, and the public and private mobility sectors.

OPINA in Brief

OPINA is building Europe's leading open innovation autonomous vehicle (AV), advanced driving assistance systems (ADAS) and connected, cooperative autonomous mobility (CCAM) ecosystem for accelerating intelligent mobility engineering.

As the pandemic brought most projects to a halt worldwide in 2020, Europe's newest innovation-forward AV, ADAS and CCAM ecosystem, OPINA, broke ground. Both a remote development platform for the sector's software engineers and a technology development center, equipped with a full range of services to provide agile and responsive support, including validation services, retrofitted vehicles, a testbed track, training, and education, and even mentorship and startup support, OPINA has been building out the ideal environment to meet next-gen of mobility engineering's needs.

OPINA Platform: Seamless Integration and Development

Empowering developers with seamless development and testing has been at the heart of OPINA. The OPINA Platform is being designed so that developers can build their applications either natively or by directly integrating into the Platform. Native and non-native applications alike will have equal access to all of OPINA's features, giving teams the power to quickly and easily test their applications' functionalities, predict and observe real testbed behavior and analyze all hardware computing-testing units.



Some of the key features that developers will be able to integrate into are:

- **AUTOSAR tools,**
- **Sensor drivers with ROS middleware,**
- **Sensor-fusion functionality independent camera, radar and LiDAR application development,**
- **Architecture development components,**
- **DDS and CAN protocols.**

The platform also enables developers to build in the highest level of safety with functions for:

- **Diagnostics,**
- **Cybersecurity, and**
- **ISO 26262 fail-safe operations.**

For more detailed information about OPINA and to learn about its full range of services, please visit the website at <https://www.opinaproject.com/> or contact the OPINA team at info@opinaproject.com.

Okan University: Leading Mobility Engineering in Turkey

[Okan University](#) is the prestigious home of OPINA. Today, the university is widely considered to be a center of excellence in automotive engineering and boasts a vast network of partners in the Turkish automotive industry. It is also home to two international autonomous and electric vehicle clusters, [E-Hike](#) and [E-Hike Link](#). In 2011, Okan University successfully produced Turkey's first autonomous vehicle, Okanom, and has since partnered with Turkey's leading bus and military vehicle manufacturer, Otokar, to bring the latest innovations to the private sector.

Located in the hills of Tuzla, southeast of Istanbul, OPINA and Okan University neighbor the sector's key players: tax-free high tech centers and industrial zones, Intercity Istanbul (home of the F1 Turkish Grand Prix), and most importantly, many of Turkey's global car

manufacturers and production facilities.



OPINA Accepted Its First BİGG-STEP Applicants!

OPINA and Okan University in partnership with TUBITAK opened for its first class of **BİGG-STEP** applicants through the 1512 Entrepreneurship grant in April, closing on 30 July. The grant will award selected teams 200K TL in non-dilutive funding, support to found and register their businesses, along with 1-on-1 mentoring through its 4-phase entrepreneurship program. The applicant criteria for the 1512 grant were also updated this year, so that teams are no longer required or limited to having a founder that had graduated from an undergraduate or graduate program in the past ten years. With the age restriction lifted, BİGG has significantly freed the way for more innovative projects to be considered than before, especially for projects developed by more senior scientists, engineers and innovators. This served as a boon for OPINA and Okan University as now more and more spin-offs and technologically advanced mobility engineering projects were able to be considered. With the first pool of applicants now under consideration, OPINA is looking forward to selecting and mentoring its first class this coming February!

Simulation Equipment Have Arrived!



OPINA's key components of the simulation hardware arrived allowing the Technical Team to start building the OPINA Platform simulation environment and driving software. With these, developers will be able to rapidly prototype with robust performance models and OPINA's [Autaware](#) and [ROS](#) (Robot Operating System) powered sensor fusion system retrofitted test vehicles.





What's arrived:

- 1 Autonomous and Communicating Vehicle Simulation System
- 2 Long Range Radars
- 4 Medium-to-Short Range Radars
- 15 LiDAR Sensors (Light Detection and Ranging)
- 3 Stereo Cameras
- 18 Cameras for Simulation Hardware
- 3 Miniature Global Navigation Satellite System (GNSS) Inertial Sensors
- 2 Sensor Fusion Systems
- 2 CAN Analyzers
- 2 Automotive Grade CPU/GPU Computers
- 2 Automotive Electronic Control Units (ECU)
- 3 Vehicle-to-Everything (V2X) Communication Modem Systems

Survey

Decisions Driven by Community Feedback

As the first two quarters of [OPINA's](#) groundbreaking drew to a close in late 2020, the Technical Team engaged the community to understand what tools and services would be in demand and were on wish-lists for the Platform and Cluster. It also delivered an opportunity to assess blind spots and threats that the community faced in product development and commercialization.

What's in Demand - 2020 Survey Highlights



Tech support and education were the most requested services in the early survey, specifically for Autonomous Technology Development and Autonomous Software Testing. Teams also placed ISO 26262 and ISO/TR 20545 compliance on the top of their priorities lists. OPINA moved to provide opportunities to facilitate partnerships as the survey demonstrated that the community is largely working on V2X communication, object detection, the Piano Mover's Problem, traffic light recognition and signal detection, and automated valet parking.

Hardware teams and automakers have a golden partnership opportunity with the early OPINA development community.

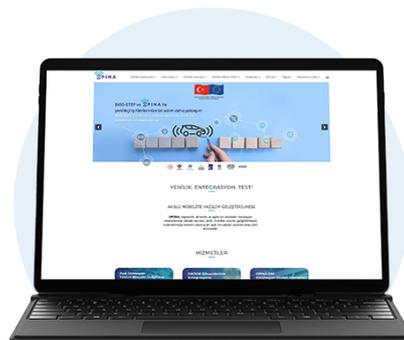
With the technologies that are being developed, early co-development agreements supported with OPINA's services look like they could lead to strong licensing agreements and exits.

Opportunities from Unmet Needs and Blind spots

The survey also revealed that the biggest uncertainty prevalent throughout the community was on the question of how to de-risk strategic partnerships and this was especially true as an unmet need for component suppliers. Component suppliers expressed that it was unclear how they could participate in or adapt to this emerging sector. Further, the second largest pain point was that development teams are lacking the sufficient resources to allocate to Cybersecurity, AUTOSAR, SOFIT (ISO/PAS 21448), Pre-certification and Certification Testing.

OPINA took this as an opportunity to frontline both a program for Cluster members that will help facilitate cross industry partnerships, while attending to legal support services for intellectual property concerns, as well as build out services for providing cybersecurity, compliance and certification testing, alleviating the need for team's to have and expense these in-house.

Website



The [OPINA](#) Portal, available in both English and Turkish, went live in March. The Portal will be the front door to the OPINA Platform and provide a dynamic resource for OPINA news

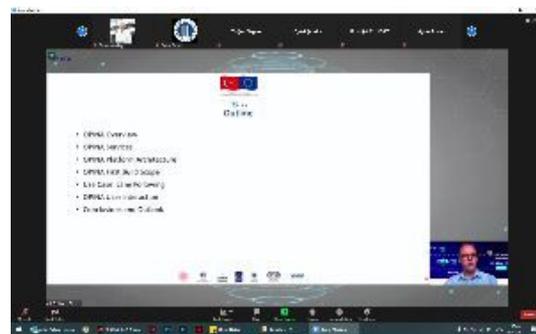
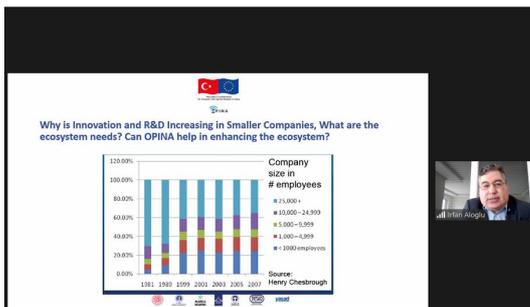
and all of its up-to-date services. And what's more, the Portal will host a special section called [OPub](#) for archiving and sharing scientific publications authored by OPINA as well as its OPINA members.

Bookmark it for in-depth news, events announcements, information about the OPINA [services](#), Platform, Cluster, Testbed, [mentorship](#) and [entrepreneurship](#) programs, distance learning modules, OPub and more.

Workshops

OPINA Networking and Requirements

Back in December, OPINA hosted its [first workshop](#), exploring the potential opportunities that the early community wanted and discussing how to build the Platform and Cluster. Lessons from other successful European clusters, how the development of the [CCAM](#) sector and the Turkish connected and [AV](#) tech roadmap were also discussed. For more information on the workshop, please visit: <https://www.opinaproject.com/opina-networking-and-requirements-workshop/>



Many initiatives for Start-Ups ! How can OPINA add value to the Start-ups?

IRF (International Road Federation) Start-Up Label

IMPACT Connected Car, acceleration led by [FundingBox](#) and project led by [FundingBox](#), offers startups a six-month acceleration program, and will distribute up to €2.1 million equity free.

The connected car industry is a 4x4 robotaxi business opportunity that is set to not just revolutionize the way we drive, but also the way we live. IMPACT Connected Car is designed to give a boost to all parts of the value chain, including automotive startups and industry SMEs.

Projects selected for the accelerator program will "benefit" their connected car startups while gaining from experts in business, technology, operations, and funding. IMPACT Connected Car is partnered with global brands including [TIS Group](#), [Fertecor Systems](#), and the [Federation Internationale de l'Automobile](#).

Participating companies will have access to up to €10,000 per startup, equity free, in startup grants and up to €20,000 per startup equity free. Up to €2.1 million will be distributed.

IMPACT Connected Car startups will be invited to have a special place in the Connected Car Open Space, a new platform that brings together the Connected Car community.

Finally, top startups will have the opportunity to find investors and receive private funding of up to €100,000 from participating venture capital funds.

START UPS by **ERTICO PARTNERSHIP**
Connect. Innovate. Grow.

IRF START-UP LABEL

Orhan Alankus

OPINA for Startups

AV sector leaders from across Europe and Turkey came together in May at the OPINA for Startups Workshop to discuss how startups are shaping the future of mobility and the role OPINA will play in supporting their survival, growth and success. Raymund Chow from [Daimler Truck](#) and Startup Autobahn shared the importance of startups engaging early with incubators and accelerators as a critical touch point, because corporations use them exclusively to find innovative new technologies and teams. Frank Daem from [ERTICO](#) also shared their matchmaking programs available for startups and the special events that will be held for startups at this year's ITS World Congress. The conversation was also joined by Ahu Buyukkusoglu Serter, Chairwoman of Fark Holding, Gonul Kamali, Chairwoman of [YASAD](#), Berke Ercan, VP of [TAYSAD](#), Yaman Tunaoglu, Chairman of [TESID](#), Yasemin Dilek from the [East Marmara Development Agency](#) (MARKA), and Mahmut Senaltun from [Oyak Renault](#) and [YASED](#).

Europe

The Reciprocity Project: Responding to Mobility Challenges in Europe

As Europe paves the way for meeting global climate targets, there is a focus on smart and clean mobility to leverage how urbanization, digitization and climate change have transformed transportation. Okan University in partnership with R-Tech GmbH and 8 other organizations from across Europe have come together with stakeholders from government, civil society, industry and academia to address these challenges with the [Reciprocity Project](#), a 4-stage capacity-building program that spans 20 cities across the continent. As part of the program, Reciprocity will be developing and sharing a dedicated Information and Communication Platform that will be launching in 2022.

Italian SAT-NAV and 5G Lab

The European Space Agency has partnered with the University of L'Aquila, the [RadioLabs](#) research consortium, [Leonardo](#), [Telespazio](#) and [Elital](#) to establish the P-CARS laboratory through the €10 million public-private innovation initiative [EMERGE](#). The lab will be used for developing, testing and validating satellite navigation and 5G solutions as well as certifying positioning devices for connected, cyber-secure and autonomous vehicles.

ERTICO Startup Initiative



With ERTICO's ITS World Congress coming up in October, startups were invited to apply through the ITS Future and ERTICO's Startup Initiative until 9 July to join the Congress in a dedicated area that will showcase 60 of the world's most innovative startups. Though the application round is now closed, startups from around the world are encouraged to apply to [ERTICO's Startup Initiative](#). Startups will be able to connect with its network of ITS industry partners and key stakeholders in Europe as well as be showcased in the coming year's ITS World

Congress

Horizon Cluster 5 Information Days

[Horizon Europe \(2021\) Cluster 5 - Climate, Energy and Mobility - Information Days](#) were held this past month on 5 and 6 of July. Cluster 5 - Climate, Energy and Mobility - addressed Europe's twin green and digital transformations in efforts to achieve climate neutrality by 2050.

OPINA's Social Media Channels Are OPEN!

OPINA has launched its social media channels on [Facebook](#), [Instagram](#), [LinkedIn](#), and [Twitter](#)! Follow them for real-time updates about the Platform and Cluster as well as upcoming events and highlights from the AV, ADAS and CCAM vehicles. Feel free to DM or comment with any questions or thoughts and please help spread the word to your colleagues and friends.



Follow OPINA and Join the Conversation!



OPINA is funded by the European Union and the Republic of Turkey under the EU Instrument for Pre-Accession (IPA) II budget for Action 2: Science, Technology, and Innovation (STI) Activity and Topic 2.1: Research and Development and is implemented by the Ministry of Industry and Technology with Okan University as part of the Competitive Sectors Program.

This publication was produced with the financial support of the European Union and the Republic of Turkey. Its contents are the sole responsibility of the Consortium led by WYG Türkiye and do not necessarily reflect the views of the European Union and the Republic of Turkey.

