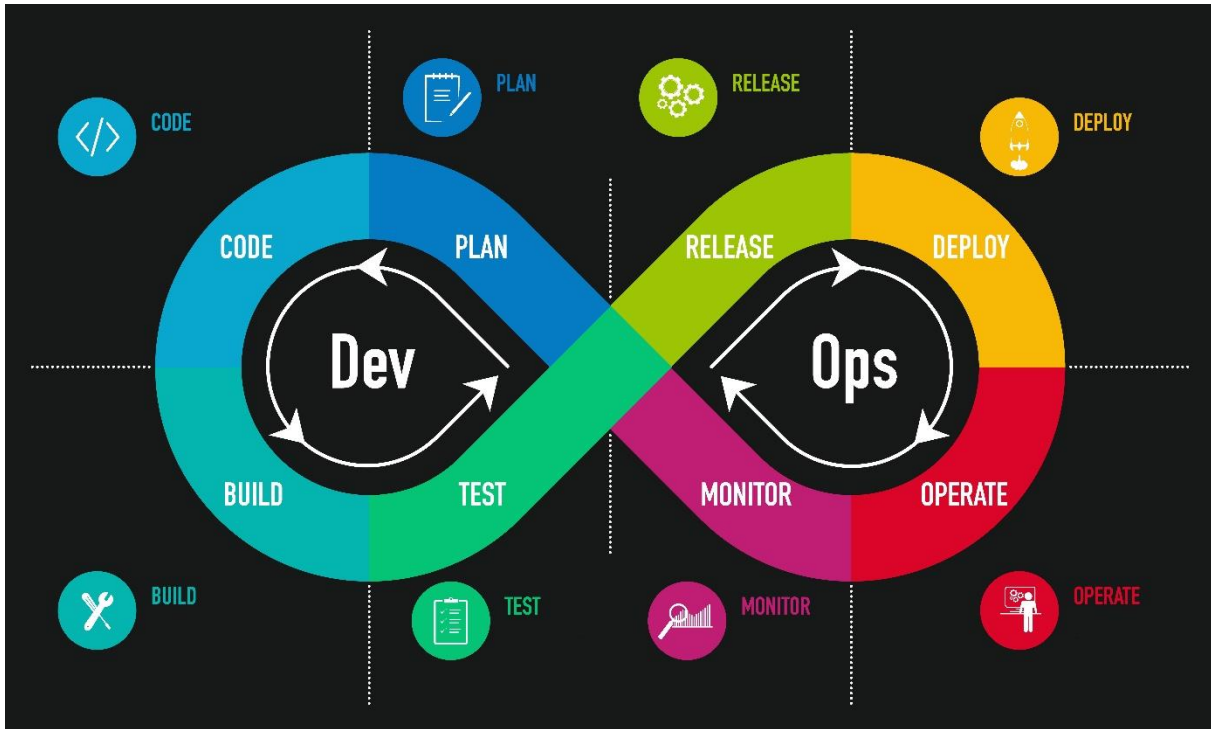# OPEN CALL – LIVING INNOVATION LAB
DevOps for ADAS Software, Systems Engineering and Simulation

BACKGROUND & ADDRESSED CHALLENGE

DevOps is a set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production, while ensuring high quality. The use of DevOps is considered state of the art for many tech companies and already quite widespread.

Nevertheless, DevOps was mainly developed for pure software development, while it is not that common in simulation and engineering due to slightly different methods and expertise.

Especially the ISO26262 for automotive safety plays a dominant role. The standard demands high standards on the developed software, and the latest version

For engineers to focus on their development work DevOps methodology has to be integrated to allow a seamless workflow for development in embedded systems and simulation.

OFFERED TECHNOLOGY

We can provide in-house infrastructure and knowledge for DevOps demonstrations:

- CI infrastructure including Jenkins/Bamboo, Ansible, Virtualization Technologies (Docker,KVM), Git

- (Co-)Simulation Technologies like MATLAB/Simulink, Carla, ViresVTD, Model.Connect, FMI, etc.
- Graph-based service which uses a NoSQL Graph Database which allows easy design of workflows and automatic generation of CI pipelines.

EXPERIMENT SCOPE

The addressed scope should be an extension of classical DevOps methodologies and tools to be better suited for systems engineering and embedded systems and simulations.

The scope of targeted experiments is broad.

Possible experiments could target:

- Automatic Deployment of software on hardware and vehicles
- Development of Computer Aided Risk Analysis and Assessment methods regarding safety in accordance with ISO26262
- Improvement of usability of existing services to enable better usage for non-experts.

Possible results:

- an overview of favoured standards and tools
- industrial applications or use cases and innovative solutions
- best practices how available technologies can be exploited
- Conference papers and journal publications.

The expected outcome of the experiments is further development of ideas and publication.

FUNDING OPPORTUNITIES

Start-ups and SMEs benefit from various opportunities of support from the VIRTUAL VEHICLE:

Membership

Financial support for project initiation

In case your application is selected, there is little effort and no risk for you. We help to initiate collaborations and research projects and embed you into VIRTUAL VEHICLE' s existing Partner-Network.

Conditions: Membership: 500 €/p.a.; In the event of project-proposal acceptance, we claim a success fee based on a bilateral agreement. This represents a low-risk activity for SMEs concerning proposal preparation efforts.

Accelerator Support

Financial support for accelerating product development to help SMEs to get to the market.

Depending on a successful project partnership and in case your innovative company is selected, your solution development could be accelerated. You will get access to international networks, know-how and infrastructure, as well as improved market access. VIRTUAL VEHICLE would embed your product / service into follow-up research activities and disseminate your solution via the VIRTUAL VEHICLE network. Finally, we offer proportional funding to accelerate your product development.

Conditions: After successful completion of the product development and market exploitation, we claim a later repayment based on a bilateral agreement. Generated intellectual property rights remain with you.

K2-Research Project

Aligned with the defined long-term Austrian COMET K2 research program **fast-track experiments (up to 6 months)**, executed at VIRTUAL VEHICLE, can also be public (co-)funded within the K2 funding scheme.

Seed Innovation Action for SMEs and Start-ups will be free of charge.

Your application will be reviewed by our Scientific Assessment Board. The board will evaluate the applicant's proposals and select proper candidates. The final number of applications being selected might be different for each call.

Only selected applications will get our support.

CALL INFORMATION

Call Opening	01.02.2021	**Project Duration**	1-12 months; Seed Innovation Action: ~2 weeks
Proposal language	English, German	**Targeting Group**	Start-ups, SME, or mid-caps from EU member states

If you have a promising smart idea, we are happy to receive your application!

Please use our online application form to send us your proposal and describe:

- In which technology field or discipline are you active
- Your planned application concept and its expected use
- The preliminary benefit
- The industrial relevance and potential impact of your experiment, as well as your plans for exploitation of the results and the future business outlook

Your experiments should be designed to be completed in a maximum of 12 months.

Experiment proposals are very welcome from organisations located in any EU member state and must be written in English or German. Submissions done in any other language will not be evaluated.

Contact: lil@v2c2.at

By transmitting your proposal for the "Open Calls – Living Innovation Lab", you agree to our Data Protection Notice and that your submitted application will be evaluated by an expert jury of VIRTUAL VEHICLE representatives. Virtual Vehicle reserves the right to reject any application at any time without giving reasons. The decision is binding and final. The right to appeal at court is excluded. Further details will be agreed in a separate agreement between accepted applicants and Virtual Vehicle. Any liability of Virtual Vehicle is excluded, except as stipulated by applicable mandatory law. Furthermore, you confirm that the contents of the submitted proposal are independently developed by you without the use of confidential information from third parties and are free of third-party rights to the best of your knowledge.

LIVING INNOVATION LAB – BRIDGING THE GAP

Bridging the Gap
LIVING INNOVATION LAB

VIRTUAL VEHICLE facilitates SMEs, Start-ups, and Enterprises to experiment and innovate with new technologies.

The LIVING INNOVATION LAB enables the transfer of knowledge – from academia to industry and the development of highly innovative product solutions. Together with academic and industrial partners, VIRTUAL VEHICLE is bridging the gap between your innovative solutions and early technology adopters.

Successful demonstrations of highly innovative technologies maximize the benefit in exploitation as well as the realistic chances for a market uptake. That's why the LIVING INNOVATION LAB initiates open calls for experiment proposals to expand and strengthen the transfer of technical capabilities and **making innovative solutions, platforms, and data available for experimentation.**

YOUR PARTNER: ACCELERATING INNOVATION WITH VIRTUAL VEHICLE

The Virtual Vehicle Research GmbH is Europe's largest R&D center for future vehicle technology with 300 employees. Our research priority is targeting on supporting virtual system development, which leads to manifold and powerful system design and automation of testing and validation procedures. The focus is on industry related research and thus makes VIRTUAL VEHICLE the innovation catalyst for upcoming digital mobility and transportation technologies.

WHO CAN APPLY?

You are…

- developing smart, innovative solutions in digital future technologies?
- bridging the physical and virtual world with advanced approaches and industrialized solutions?
- wishing to access the network, infrastructure, and know-how of VIRTUAL VEHICLE to improve your product or service?
- interested in using VIRTUAL VEHICLE's decades of experience in interdisciplinary and virtual system development?
- Interested to be embedded into upcoming and funded R&D-projects via a Single-point-of-contact-institution?
- Looking for a chance for financial support with manageable long-term costs

…then do not miss this outstanding opportunity and apply to one of the open calls to make your innovative idea come true!