

Innovation Booster New Mobility Call III

AI & Robotics in Mobility

Summary

SBB is constantly striving to develop innovative and sustainable mobility solutions that both meet customer needs and are economically viable. Rapid developments in artificial intelligence (AI) and robotics are opening new opportunities for efficiency gains, automation, and safety improvements within the mobility sector.

Starting Point

As SBB, we strive to develop sustainable, cost-effective mobility solutions that meet the needs of our customers. With our Market-passenger Transport, Rail Production, Infrastructure and Real Estate divisions, we are convinced that intelligent and sustainable growth is possible in the core business of an integrated railway, i.e. where the railway has its strengths. To achieve these goals, there are challenges to overcome. These include enhancing the customer experience along the travel chain, optimizing operational processes, improving service quality, and enhancing passenger and employee safety. Rapid developments in AI and robotics are opening new areas for solutions.

In this challenge, we want to explore how AI and robotics can help increase efficiency, automation, and safety in the mobility sector. The focus is on the use of AI and robotics to improve operational processes, customer experience and safety in public transport.

SBB hopes that the use of AI and robotics will lead to radical innovations that not only increase efficiency and safety, but also improve the customer experience and promote sustainable mobility solutions.

Working Hypothesis

The goal of the challenge is to identify radical innovations from Switzerland for Switzerland in the field of Artificial Intelligence & Robotics. These innovations should provide systemic solutions that add value to society and sustainably improve mobility in Switzerland.

Subject areas

- 1. Maintenance and repair:** Using robotics in operational activities in the maintenance shops to save time and costs, and increase security e.g. train or infrastructure inspection, lifting heavy equipment, hazardous environments, automating heavily redundant tasks.
- 2. Optimization of passenger flow:** Leveraging predictive analytics to optimize passenger movement by forecasting crowd density at platforms or train stations. This can be achieved by analyzing various factors such as weather conditions, historical data, and scheduled events.
- 3. Improving customer experience along the travel chain:** Enhancing the overall travel experience by providing personalized, real-time travel information during disruptions, ensuring passengers are well-informed and minimizing inconvenience.

4. Autonomous driving: Developing a comprehensive travel chain that integrates autonomous driving technologies, including the use of autonomous vehicles for in-house logistics and seamless transitions between different modes of transport.

Innovation Booster New Mobility Lab

The New Mobility Lab aims to solve mobility problems by promoting radical innovations from the Swiss market. With a strong network of research partners, including HSLU, ETH, HSG and other institutes, and the support of over 50 industry partners, the Lab strives to make mobility CO2-neutral and break through existing silos. The aim is to develop systemic solutions that offer added value to society. The Innovation Booster supports these ideas with agile and user centric tools methodically, and financially to turn these radical ideas into marketable products.

Who can apply?

You are a...

Start-up, SME, or large company, a non-for profit, research team, student, city, canton or basically anybody with...

1. Expertise in the field of mobility and the willingness of participating in challenge workshops regarding radical innovations
2. An interest to develop an idea for a new product, service, process or business model
3. Willingness for co-creation, diversity, and gender equality
4. Intention of testing your solution in Switzerland and beyond after the booster program...

then go on and apply to participate in our workshops!

Your Benefits

To enable and accelerate innovation, we bring experts and partners from the industry and academia together to solve challenges and develop ideas for new products, services and processes in an open innovation setup. Thanks to the approved application within the Innovation Booster program of Innosuisse, we can support you financially with CHF 25'000 per radically innovative idea, if you convince our jury!

Start now!

Questions?

Contact us via maximilian.richter@building-excellence.ch