



Aktenzeichen: mop / BAV-021.11-00007/00007

Fact sheet on research and innovation FOT

Why does the Swiss Confederation (Federal Office of Transport) fund research and innovation?

Each year, the Swiss Confederation spends almost CHF six billion on public transport and rail freight transport. It is the Federal Office of Transport's task to manage this expenditure as constructively and efficiently as possible in respect of maintaining assets and expanding the rail infrastructure, providing grants for regional passenger transport and funding freight transport.

By funding research and development, the Federal Office of Transport (FOT) seeks research findings that help to optimize costs and boost safety, energy-efficiency and environmental compatibility in its areas of responsibility. Funding research means that the Confederation is able to perform its duties as economically and effectively as possible. The knowledge generated, supported by carry-over effects, benefits the whole economy and makes it more productive.

For this reason, FOT devotes around CHF 10–15 million each year, approximately 0.2 percent of its overall expenditure, to research and innovation. FOT funds research and development via subsidies and as part of contract research.

What is research and innovation?

- **Research** generates new knowledge by means of scientific methods. It is novel, creative, systematic, transferable and reproducible, and its results are uncertain¹. Funding research is an important governmental task.
- **Innovation** means the development of new products, methods, processes and services in industry and society through research². Innovation is primarily a task for industry and should only be funded by the state occasionally in predefined areas.
- **Federal government research** is research for which the results are needed by the Federal Administration or by federal policy makers to fulfil their tasks, or which is in accordance with the special legal provisions and strategies of federal agencies.

What areas of research does FOT fund?

1. Infrastructure:

-*Research* that provides benefits for preserving the value of the rail infrastructure and its efficient, safe operation and maintenance, or for expanding the rail infrastructure, may be funded within the context of the Rail Infrastructure Fund (RIF).

-*Innovations* that are conducive to operations and asset maintenance (including technology upgrading) and that meet traffic requirements may be promoted through service level agreements (SLA). And certain innovation projects may be supported in various expansion phases via development loans (e.g. project management loans).

2. Passenger transport:

-*Innovations* in the sense of novel solutions for the procurement of vehicles and the creation of facilities and installations serving regional passenger transport can be funded from the regional passenger transport credit in the same way as the tender process. The focus here is on reducing costs and creating added value for customers.

¹ Definition in line with: Frascati Manual – OECD (2015)

² Definition as per Article 2 of the Federal Act on the Promotion of Research and Innovation (RIPA – SR 420.1)



Aktenzeichen: mop / BAV-021.11-00007/00007

3. Freight transport:

-*Innovations* in the sense of technological developments may be financially supported for freight transport. The focus here is on test applications and pilot applications, as well as on accelerating technical migration processes. Funding will be provided within the framework of lending for freight facilities and technical innovations for freight transport.

4. Energy Strategy 2050 – public transport

-*Research* and development, and also demonstrations, such as pilot projects/facilities, field trials, etc., may be supported as part of implementing the Confederation's energy strategy.

-*Innovations* that are conducive to improving the energy-efficiency of operations, the infrastructure or vehicles, and that promote the production of renewable energy, may also be supported, as may innovations that are conducive to the dissemination of methods, knowledge and good practice, the development of principles and mechanisms for managing incentive systems and their implementation.

5. Rail noise control programme

-*Research* targeted primarily at reducing rail noise and therefore at measures to address the source of noise, in other words, rolling stock and rails, may be supported as part of the restructuring plan. The Federal Office of Transport, together with the Federal Office for the Environment (FOEN), has drawn up a strategy for government research in this area.

Innovations that reduce noise emissions from freight transport to very low levels may be supported with investment assistance from the FOT.

What other sources of funding exist for research and development (Confederation/EU/third-party countries)?

- [Swiss National Science Foundation \(SNSF\)](#)
- [Innosuisse \(formerly CTI\)](#)
- [Coordination Office for Sustainable Mobility \(KOMO\)](#)
- [FEDRO road research](#)
- [SECO tourism funding](#)
- [SECO new regional policy](#)
- [Horizon 2020](#)
- [Shift 2 Rail](#)
- [EUREKA](#)
- [Eurostars](#)
- [ERA-NET Smart City](#)
- [SBB LAB](#)
- [VöV](#)
- [RAILplus](#)
- [SVI](#)

Contact FOT:

forschung@bav.admin.ch