



# Research Management armasuisse Science and Technology

Dr. Hansruedi Bircher  
Feuerwerkerstrasse 39  
CH-3602 Thun  
Tel. +41 58 468 30 03  
Fax. +41 58 468 28 41  
hansruedi.bircher@armasuisse.ch



**Never before has the pace of technological progress been so rapid. This is the fundamental driving force behind the development of modern armed forces and a key factor in the successful conduct of operations. Research carried out today generates the knowledge needed to meet our country's future security requirements. In this sense, research is an investment in safeguarding future expertise and thus represents a basis for reducing any planning and procurement risks to our security forces.**

In the current environment, planning, procuring and managing resources for the armed forces has become a more demanding task. This is due not just to rapid technological progress, but also to changes in the economy and the society we live in. Risks and vulnerabilities have multiplied because of far-reaching interconnectedness and internationalization. This is reflected in the essential capabilities and operational assets which need to be kept at a manageable level even for militia-type armed forces. The complexity of this environment requires a comprehensive consideration of risk so as to maintain a balance between the costs and benefits of operational assets. Appropriate technologies play an important role in this. When planning for, procuring and while managing their operational assets, the Swiss Armed Forces are reliant on technical and scientific skills so as to be able to objectively assess the risks in relation to cost, benefit and vulnerability and to represent their interests credibly to third parties.

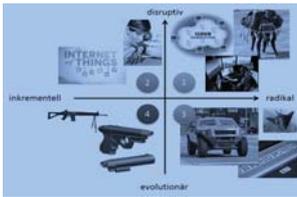
The aim of the research is to establish long-term, sustained and timely expertise by involving partners from internal and external centers of competence, from Swiss and international security organizations, and from the worlds of science and industry. Ensuring future expertise demands a multidisciplinary approach to research. In order to support the armed forces' planning processes, demonstrators can help to illustrate how technical and

scientific developments influence the operational capabilities of security forces.

armasuisse's research activities are divided into research programs with content that is largely aligned to the operational capabilities of the armed forces. As a result, the research programs are interdisciplinary in nature and form the basis for expertise networks comprising universities, universities of applied sciences, research institutes and industries. Annual research reports provide information about significant technology trends, research results and lessons learned and about the future direction of the programs.



# Strategic management



## Long-term research plan 2017-2020

The long-term research plan defines the strategic direction, main focus of the research and priority topic areas. These are derived from security policy directives, armed forces' requirements and technological developments. Particular attention is devoted to revolutionary and disruptive technology developments.



## Research supervision

The research supervisory body is responsible for the strategic management of research activities. This body is composed of representatives of Armed Forces Planning and armasuisse S+T. The research supervisory body is responsible for the correct strategic alignment of research, for establishing an appropriate strategic setting for the research topics and for integrating research into the armed forces' planning and development processes.

# Implementation



## Procedure

The annual research plan provides information about research activities at program and project level. Operational implementation takes place within projects comprising six programs and in one area common to all programs. Knowledge is transferred in workshops, symposia and presentations. Because the staff members who produce the expert reports also manage the research projects, a seamless transition from research findings to the services provided by S+T is guaranteed.

# Research programs



**Research program 1**  
Reconnaissance and surveillance



**Research program 2**  
Communications



**Research program 3**  
Cyberspace un Information



**Research program 4**  
Impact, protection and safety



**Research program 56**  
Unmanned Mobile Systems



**Research program 7**  
Technology Foresight



**Topics common to all programs**  
Complexity management and human factors



**Topics common to all programs**  
Materials sciences and energy

Further information and reference documents can be found at

[www.sicherheitsforschung.ch](http://www.sicherheitsforschung.ch)

