Swiss Federal Innovation Promotion Instruments

L.-P. Nolte
Senior Innovation Advisor
Definition of Innovation

The process of **translating** an **idea or invention** into a **good or service** that creates **value** or for which **customers will pay**.
Swiss Federal Innovation Promotion

Government produces knowledge

Universities + Public R&D Centers

Basic Financing
- 25% 4.5 Billion
- 5% SNSF 900 Mio
- 3% EU 500 Mio

EU

≈ 1 cinema ticket per inhabitant-year

InnoCH
≈ 1%

Early Stage Fund

Projekte

Start-ups

Persons
- Mandates
- Problems
- Experience

The economy valorizes knowledge

Economy

GDP
600 Billion

18 Billion R&D (3%)

The economy
valorizes knowledge

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy

Economy
Swiss Federal Innovation Promotion Instruments

INNOSUISSE / FORMER CTI

FOUR TYPES OF INNOVATION PROMOTION

START YOUR INNOVATION PROJECT

START AND GROW YOUR BUSINESS

BE CONNECTED

GO GLOBAL
Innovation Projects

- Innosuisse primarily supports **science-based innovation projects**
- To be conducted jointly by **companies** and **research institutions**
- Special case: **Feasibility studies**
- Both parties get offered a flexible way of getting started

BRINGING TOGETHER SCIENCE AND THE MARKET

**Research offers**
Scientific expertise and research infrastructure

**and gains**
Access to the market

**SME offers**
Economic and entrepreneurial know-how as well as marketability

**and gains**
Access to resources, expertise and infrastructure in research & science

**INNOVATION PROJECT**
Innosuisse covers max. 50% of the project costs and pays and Overhead contribution of 15% to the research partner’s institution.

The implementation partner comes up for at least 50% of the Project costs (incl. 10% cash), mainly in form of labour.

MARKET IMPLEMENTATION
Regular Projects

Example

- Research partner has **R&D expenses of CHF 450’000** to do the work, e.g.,
  - Personnel: CHF 400’000
  - Equipment: CHF 15’000 !
  - Disposables: CHF 35’000 !
- Innosuisse will cover the **research partner’s R&D expenses**
- Implementation partner needs to **match with at least CHF 450’000 in R&D**
- Implementation partner needs to pay at least **10% of CHF 450’000**
- Research partner’s institution receives **15% Overhead (only on Personnel)**

Funding for research partner at Uni Bern:

$$450’000 + 45’000 + 60’000 / 2 = \text{CHF 525’000}$$
BRINGING TOGETHER
SCIENCE AND THE MARKET

Research offers

- Project with considerable innovation potential and a clear business idea
- With the current R&D state, there is a high risk of the project not succeeding on the market
- You intend to convince potential implementation partners soon
- Project staff has the skills required to execute the project

INNOVATION PROJECT WITHOUT IMPLEMENTATION PARTNER

Innosuisse covers 100% of the project costs and pays and Overhead contribution of 15% to the research partner’s institution.

www.innosuisse.ch/inno/en/home/start-your-innovation-project/projekte-ohne-umsetzungspartner.html
Feasibility study

Example

- Research partner has **R&D expenses of CHF 450’000** to do the work, e.g.,
  - Personnel: CHF 400’000
  - Equipment: CHF 15’000
  - Disposables: CHF 35’000
- Innosuisse will cover the **research partner’s R&D expenses**
- No implementation partner, i.e. no matching funds and no Cash!
- Research partner’s institution receives **15% Overhead (only on Personnel)**

Funding for research partner at Uni Bern:

\[
450'000 + \frac{60'000}{2} = \text{CHF 480'000}
\]
Application Management: Need for a Ranking System

- The size of Innovation Council (small!) needs an efficient evaluation and decision-making process for applications in project promotion.
- Implementation of ranking system to decide efficiently about applications with given budget restrictions, is needed.
- Evaluation and decision-making by quantifiable criteria to compare the applications, is necessary.
Value Creation (1): Business Targets

- Business model, target value chain position
- Competitive situation, USP
- Market size/access and marketing approach
- Planned revenue and profitability development
- Implementation plan
- Business plan (e.g., net present value (NPV) scenarios with/without project)
- For projects without implementation partners: potential impact of future value creation by implementation partner
Value Creation (2): Social & Environmental Sustainability

e.g., with respect to
- Sustainable use of resources
- Avoidance of waste
- Climate protection
- Biodiversity
- Quality of life
- Health
- Minimize grey energy
- Maximize use of local / Swiss resources
- Contribution to the circular economy
Innovation Degree

- Novelty of technology, product, business model, process etc.
- Uniqueness created: product, process, services
- Mono-field, cross-fields, cross-clusters approach
- Own position vs. international state of the art
- Scientific / technical ambition and risk
- If applicable: technology readiness levels (TRL) and / or levels according the theory of inventive problem solving (TIPS).
- Wider interest in / applicability of research results
- IP Situation
## Consolidation of Assessments by Office

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Description</th>
<th>Points per Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Approve - Eligible for funding</td>
<td>7-8 points</td>
</tr>
<tr>
<td>B</td>
<td>Discuss - Indecisive</td>
<td>5-6 points</td>
</tr>
<tr>
<td>C</td>
<td>Reject - Not eligible for funding</td>
<td>0-4 points</td>
</tr>
</tbody>
</table>

### Fast track of decision by IC subgroup:
- **Triple A** = Fast Track Accepted
- At least one C = Fast Track Rejected
- All other applications will be discussed in more detail in the meeting.

### Points System

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Points Assessor</th>
<th>Points Co-Assessor</th>
<th>Score per Criteria</th>
<th>Rank (ABC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation Degree</td>
<td></td>
<td></td>
<td>(max. 8 points)</td>
<td></td>
</tr>
<tr>
<td>Value Creation</td>
<td></td>
<td></td>
<td>(max. 8 points)</td>
<td></td>
</tr>
<tr>
<td>Quality of Methodology</td>
<td></td>
<td></td>
<td>(max. 8 points)</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Intellectual Property (IP)

- Implementation partner has at least non-exclusive access to IP that has been created in the project (FIFG Article 41)
- Necessary to promote the transfer of scientific knowledge to the market
- Contracting parties are free to design separate IP agreement
- Innosuisse pays 50% of the subsidy on project start
- Second tranche will only be paid out if the parties have concluded an IP agreement and have confirmed this to Innosuisse in a signed statement

Unitectra (www.unitectra.ch)
MAXIMUM CHF 15’000

- Easy access into the world of science-based innovation funding
- Aim: to clarify the effective feasibility of an innovative idea
- Access up to CHF 15,000 of research services from a research partner

- Funding preliminary studies, such as concept developments and idea studies or analyses of the innovation and market potential of processes, products, services or technologies
- **Voucher to SME**, short financial and content report provided by research partner, co-signed by SME

www.innosuisse.ch/inno/en/home/start-your-innovation-project/Innovationsscheck.html
Two funding schemes:

- **Proof of concept**: for young researchers, an initial step into industry practice

- **Discovery**: for experienced researchers, implementing the innovation potential of research results

https://bridge.ch/en/
BRIDGE Instruments

Bridge - Proof of Concept
- Support for young researchers to develop an innovation based on their own research results
- Full time commitment
- 12 (+6) months
- CHF130’000 eligible costs /year
- Open to all type of innovations
- 4 calls per year (09.09. & 09.12.2019)
- 5 pages project description
- Success rate 25-35%
- About 25 - 40 projects per year

Bridge - Discovery
- Support to 1 to 3 exp. researchers to explore and implement the innovation potential of research
- Up to 4 years
- Max eligible costs CHF850’000 per appl. for 4 years, without appl. salary
- Technological innovations
- 1 call per year (LoI Feb; propal Apr)
- 20 pages project description
- Success rate 14% (last call)
- 2017: 8; 2018: 12 projects
Innosuisse supports entrepreneurial thinking via:
- Targeted training programs
- Personalized coaching to start-ups

www.innosuisse.ch/inno/en/home/start-your-innovation-project/innovationsprojekte.html
Entrepreneurship Training Program

**INNOSUISSE START-UP TRAINING**

**MODULE 1**
1/2 Day
1. **BUSINESS IDEAS**
   - FEEL THE START-UP GROOVE

**MODULE 2**
1 semester
1. **BUSINESS CONCEPT**
   - GET THE START-UP TOOLBOX

**MODULE 3**
5 days
1. **BUSINESS CREATION**
   - JUMPSTART YOUR BUSINESS

**MODULE 4**
5 days
1. **BUSINESS GROWTH**
   - GROW YOUR VENTURE

For members of universities & universities of applied sciences (students, doctoral students, research assistants, professors)

For Start-ups
- Cluster-based courses: ICT, advanced engineering, biotech/medtech, social entrepreneurship


Artur Baldauf, Uni Bern
Department of Management and Entrepreneurship
Start-up Coaching Program

START-UP COACHING
THREE TYPES OF VOUCHERS

INITIAL COACHING
up to CHF 5,000

CORE COACHING
up to CHF 50,000

SCALE-UP COACHING
up to CHF 75,000

BORN GLOBALS

EIGHT INTERNATIONALISATION CAMPS IN FIVE COUNTRIES

For start-ups who want to gain a foothold in the international market:

- Market entry camps/market validation camps
- Testing products or business models abroad
- Getting to know partners, customers or future colleagues

www.innosuisse.ch/inno/en/home/go-global/market-entry-camps.html
WE BRING YOU TO THE TOP

<table>
<thead>
<tr>
<th>SECTORS</th>
<th>RANK</th>
<th>STARTUP</th>
<th>HEADQUARTER</th>
<th>CATEGORY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT</td>
<td>1</td>
<td>Ava AG</td>
<td>Zürich</td>
<td>Medtech</td>
<td>Oxalation tracking bracelet</td>
</tr>
<tr>
<td>LIFE SCIENCES</td>
<td>2</td>
<td>Bestmile SA</td>
<td>Lausanne</td>
<td>Software</td>
<td>Plant automation platform for the intelligent operation of autonomous vehicle fleets</td>
</tr>
<tr>
<td>CLEANTech</td>
<td>3</td>
<td>Lumaphone Technologies SA</td>
<td>Lausanne</td>
<td>Medtech</td>
<td>Tumor analysis platform</td>
</tr>
<tr>
<td>HEALTHCARE</td>
<td>4</td>
<td>Flyability SA</td>
<td>Lausanne</td>
<td>Electronics, Mechanics</td>
<td>Drone for inaccessible places</td>
</tr>
<tr>
<td>PRODUCT SES</td>
<td>5</td>
<td>Cutiss AG</td>
<td>Zürich</td>
<td>Biotech</td>
<td>Personalized skin</td>
</tr>
<tr>
<td>FILTER</td>
<td>6</td>
<td>Piavita AG</td>
<td>Zürich</td>
<td>Medtech</td>
<td>Piavita offers a holistic system for high-precision medical monitoring of horses – from anywhere at any time.</td>
</tr>
<tr>
<td>TECHNOLOGY</td>
<td>7</td>
<td>Vangra SA</td>
<td>Zug</td>
<td>Electronics, Mechanics</td>
<td>Fly like an airplane, take-off and land like a helicopter</td>
</tr>
<tr>
<td>LOCATION</td>
<td>8</td>
<td>Gamma SA</td>
<td>Lausanne</td>
<td>Software</td>
<td>Decision support and automation solutions for precision agriculture</td>
</tr>
<tr>
<td>FOUNDED YEAR</td>
<td>9</td>
<td>Ascension AG</td>
<td>Zürich</td>
<td>Software</td>
<td>Disrupting the investing market</td>
</tr>
<tr>
<td>SUPPORT</td>
<td>10</td>
<td>Versantis AG</td>
<td>Zürich</td>
<td>Biotech</td>
<td>Life-saving liver disease medicines</td>
</tr>
<tr>
<td>UNIVERSITY</td>
<td>11</td>
<td>Allthings Technologies AG</td>
<td>Basel</td>
<td>Software</td>
<td>Allthings: For a better life in buildings</td>
</tr>
</tbody>
</table>

Performance of Innosuisse Start-up Promotion

9 of 11 top Swiss Start-ups were or are in the Innosuisse coaching program!

Other success stories:
- Another 30Mio. of fresh money
- One of the fastest growing European start-ups
- In operation at over 30 airports worldwide
Networking Promotion Instruments

BE CONNECTED

- Innosuisse engages **innovation mentors**
- Supports **networks** and **events** in important innovation fields
- Goal: bring together Swiss SMEs and Research partners
Innovation Mentors

ADVISORS FOR SMEs

FREE SERVICE FOR SWISS SMEs

- Facilitate access to technology and research
- Help you find the right partner
- Can assess innovation projects
- Provide application support
- Help you to revise rejected applications

www.innosuisse.ch/inno/en/home/be-connected/mentoring.html
National Thematic Networks - NTNs

- «innovation motors» of Switzerland
- 11 National Thematic Networks
- Nationwide networks specializing in a specific innovation topic important to Swiss industry
- Provide access to infrastructure, research and potential industry partners

www.innosuisse.ch/inno/en/home/be-connected/nationale-thematische-netzwerke.html
Globalization

Innosuisse helps companies work together across national borders.

- **Eurostars 2 program** - SME can develop their products or services together with partner firms or research teams at the international level
- **EUREKA: cross-border innovation** - Independent initiative of the European Commission’s framework programs for cross-border cooperation projects in market-oriented industrial R&D
- **Bilateral cooperation** - Innosuisse funds and supports open-topic bilateral and multilateral cooperation (Canada, South Korea, Sweden)
- **ERA-NET** - Are you dependent on an international partnership with a research institution or an industry partner when it comes to implementing your innovation?

Globalization

- **EEN** - an international network for SMEs and Start-ups
  - Support in finding international partners from academia, industry and science for research, innovation and business collaborations
  - Organization of partnering events at international fairs
  - Information and advice on existing funding options
  - Advice on the legal and regulatory framework in new markets

- **Active and Assisted Living (AAL) Program** - Innovations for an ageing society
- **ECSEL** - Cross-border cooperation in the electronics field

Need any further Assistance

• Call 079 - 663 65 45
• Email: lutz.nolte@research.unibe.ch

THANK YOU VERY MUCH

www.innosuisse.ch

• twitter.com/_Innosuisse
• linkedin.com/company/Innosuisse
• www.facebook.com/Innosuisse
UBERN - Grants Office (GO); VRF
Support for acquiring research and innovation funding

Rolf Klappert, Grants Office (rolf.klappert@research.unibe.ch)
26 June 2019, UBERN DBMR
Grants Office (GO)

What do we do?

- Information/advice on major public funding agencies and complex international grants
- The GO is part of the Swiss Euresearch network (whole range of H2020 Instruments)
- For submissions with the Uni Bern and “Inselspital”
- Pre-award and post-award support
- New: also “innovation project” support
- Support for young researchers

https://www.unibe.ch/forschung/nachwuchsfoerderung/vision_news/index_ger.html

http://www.forschung.unibe.ch/grantsoffice
Uni Bern internal tools

Accessible through Uni Bern’s “intranet”

Research professional
- Data base for funding opportunities
- Create a user profile and safe search profiles
  - Weekly E-Alerts
  - [Link]

Foundations
- Searchable list of foundations
  - [Link]
Useful information /1

Links

Uni Bern internal websites (proposals)

Grants Office website
- http://www.forschung.unibe.ch/grantsoffice

Bridge
- https://bridge.ch/en/

Innosuisse “with”

Innosuisse “without”

Innosuisse FAQ
Useful information /2

Links

Internal Uni Bern funding
–  http://www.unibe.ch/research/promotion_of_research/uni_internal_grants/id_grants/index_eng.html

Foundations and private organizations & Reasearch Professional
–  http://www.unibe.ch/research/promotion_of_research/funding/funding_search/foundations_and_funds/index_eng.html

At a glance
–  http://www.unibe.ch/research/at_a_glance/index_eng.html

Factsheet: You have finished your PhD – What now?