




Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs FDEA
Federal Office for Professional Education and Technology OPET
Innovation Promotion Agency CTI

The role of CTI as innovation promotion agency


Vincent Moser
SATW Tansferkolleg on industrial photonics
* Zurich, 17 November 2008




Science to Market

Science to Market : CTI Promotes

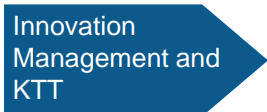
- **Market-oriented R&D projects, conducted by companies in collaboration with universities**



R&D Project Promotion
- **Creation, setting up and development of companies, as well as an entrepreneurial climate**



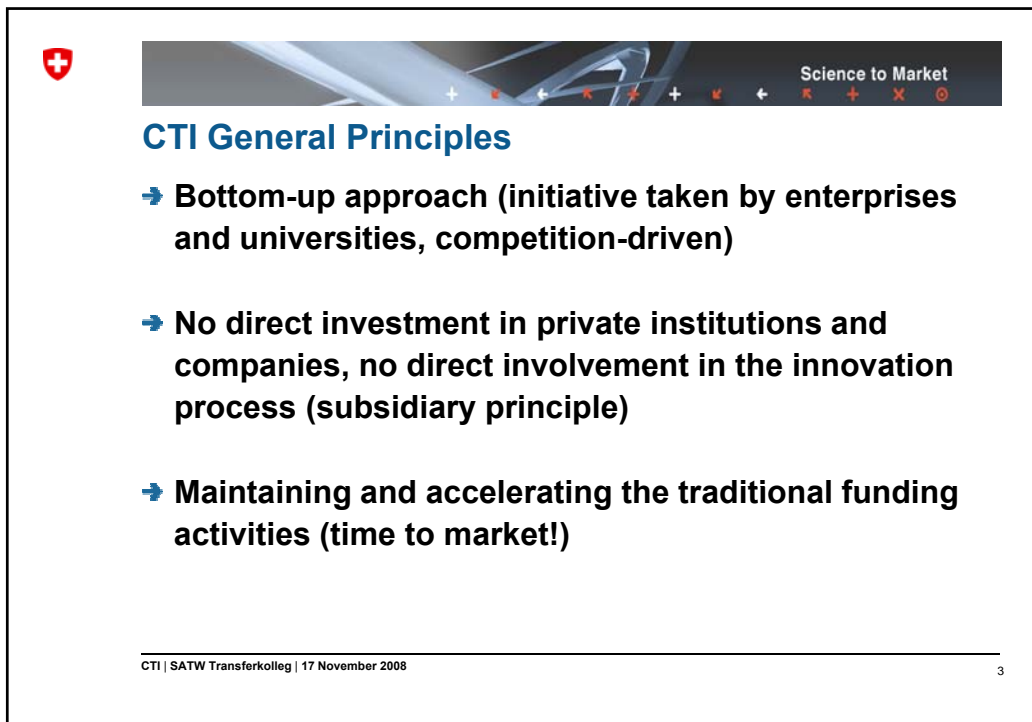
Start-up Promotion and Entrepreneurship
- **Transfer of knowledge and technology (KTT) at regional level, and good innovation management**



Innovation Management and KTT

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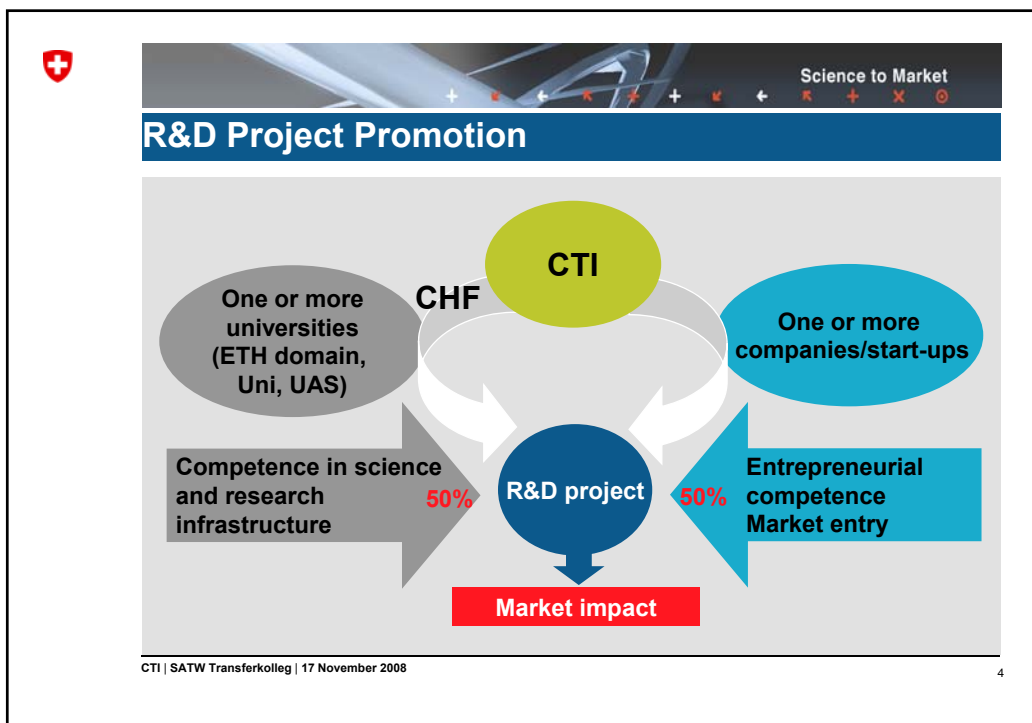
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CTI General Principles

- Bottom-up approach (initiative taken by enterprises and universities, competition-driven)
- No direct investment in private institutions and companies, no direct involvement in the innovation process (subsidiary principle)
- Maintaining and accelerating the traditional funding activities (time to market!)








Areas of Promotion and Expert Teams

CTI Life Sciences	CTI Enabling Sciences	CTI Micro- and Nanotechnologies	CTI Engineering Sciences
<p>CTI Biotech</p> <p>CTI Medtech</p> <p>Biochemistry, Pharmacology Biotechnology Medical Technology Food Technology, Nutrition Agronomy</p>	<p>Business Management and Finance Public Management, Tourism, Urban Planning Design, Arts, Architecture Macroeconomics, Social Sciences, Public Health Information and Communication Technologies (ICT) Integrated Production, Logistics</p>	<p>Microelectronics Electronic Engineering Optoelectronics, Photonics Sensors and Actuators Miniaturised Systems Engineering Microsystems Technology Nanotechnologies</p>	<p>Production Technologies Materials Research Machines, Mechanical Engineering Electrical Engineering Civil Engineering Chemical Engineering Environmental Technologies, Ecology Processes and Methodologies</p>



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Key Criteria for CTI Projects

- Innovative product/service/process
- Market opportunity
- Realistic way to market
 - Context and motivation
 - Description of the project, state of the art
 - Involved partners
 - Business idea and goals, market
 - Scientific and technological goals
 - Project plan: deliverables, milestones, risk management, IPR
 - Financial plan

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Evaluation Process and Rules

- 10 evaluation meetings per year – no calls
- Reaction time: 1-6 weeks
- Financials: 50-50 rule + cash contribution
- Infrastructure and consumables usually not supported

- If the project idea is good but grant application formally not acceptable, support is provided

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In Development: 2-Phase Evaluation Process



- Pre-proposal → Evaluation → Full proposal

- Easier and faster for applicants to obtain first feedback on project idea

- New: Companies can submit projects directly, even before involvement of university partners

- CTI supports in identifying possible university partners



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Feasibility Studies

- **Goal**
 - More support for feasibility and principle studies
- **Flexible handling of 50:50-rule**
 - Limits of feasibility studies: 6 months, CHF 100,000
 - After proof of feasibility, full commitment of industrial partner for a following CTI project required
 - Excluded: planning of R&D projects, market research and state-of-the-art description do not belong to this category of CTI support



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Discovery Projects

- **Goals**
 - More support for high-risk projects
 - CTI supports more venturesome R&D projects
 - Condition: Prospect of above-average economic potential
- **Flexible handling of funding 50:50-rule**

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Issue of Intellectual Property in CTI Projects

Principles

- CTI claims no ownership or use rights with regard to projects results
- Project partners settle the questions of rights to the project results and of nondisclosure before project begin by a written agreement
- CTI takes no responsibility for the content of the agreement but it reserves the right to examine the agreement
- Should the examination of the agreement reveal that the arrangements reached by the project partners could jeopardise the success of the project and/or the promotion goals of the CTI, the CTI may insist that changes be made by the project partners or, if necessary, refuse funding.


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R&D Consortia


- **Goal: Generate high quality CTI projects out of business and technology networks**
- **Objectives and performance indicators, such as project turnover, success, and customer satisfaction, are defined together by consortium and CTI**
- **Monetary bonus based on the degree of achievement of the R&D consortium**

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Science to Market


R&D Consortia Supported by CTI




swiss
mnt network
micro & nanotechnology




Ecademy^{CH}




SWISSLASER.NET




TourEspace
Technique & Laboratoire




manuFUTURE-CH




brenet
building and renewable energies network of technology



BioteCHnet




SWISS FOOD NET




netzwerkholz.ch

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Science to Market

Start-up Promotion

Public money	
Entrepreneurship 	→ Getting the relevant business knowledge
R&D Projects	→ Getting the technology right
Start-up Coaching	→ Setting up a solid and sustainable business
→ Raising money needed for success	

Private money

CTI Invest ^{*)}

*) private association

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CTI Start-up Label: “ready for growth”

Business plan based on facts



- Marketing and sales strategy
- Technology Development plan
- IPR strategy
- Financial planning
- Management team and executive board




CTI Start-up label
 “Ready for sustainable growth”
 and / or
 “Ready for venture financing”

**Conclusion: More competitive start-ups
 More demanding jobs**



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Knowledge and Technology Transfer (KTT)

- ➔ Targeted measures to reinforce the capacities of universities to transfer knowledge and technologies to businesses (Push process)
- ➔ Initiatives for companies to more clearly communicate their need for knowledge and technology (Pull process)

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KTT Consortia

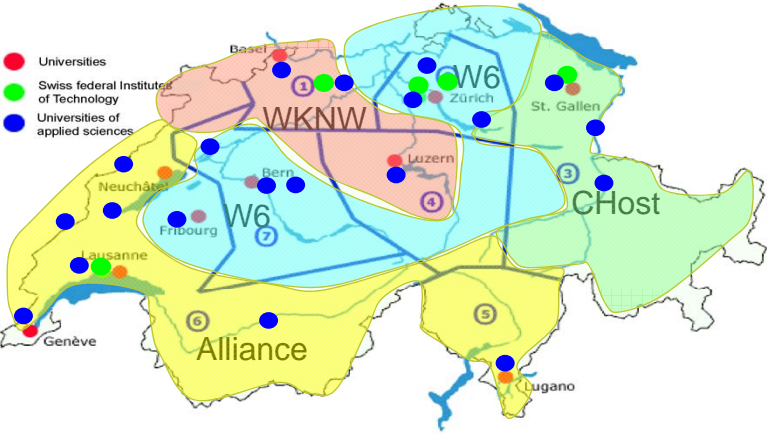
Professionally led service centres to reinforce and expand collaboration between companies and universities

- Reinforcing demand of companies for university knowledge and research results
- Enabling companies to better identify existing knowledge and future requirements
- Reinforcing companies, above all SMEs, in their contact with universities
- Improving ability of universities to transfer their knowledge to companies
- Improving joint development of problem resolutions between universities and business

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5 KTT-Consortia Information and consultation



Legend:

- Universities
- Swiss federal Institutes of Technology
- Universities of applied sciences

Map labels: Alliance, W6, WKNW, CHost, W6, Lugano, Genève, Lausanne, Neuchâtel, Fribourg, Bern, Luzern, Zürich, St. Gallen.

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Facts & Figures: CTI Project Promotion 2007

- ➔ Applications for project promotion received 493 / approved 277 (56%)
- ➔ Federal contribution (MCHF) applied for 166 / granted 89.3 (54%)
- ➔ 217.1 MCHF total funding for approved projects, of which federal funding 89.3 (41%) / private sector 127.8 (59%)
- ➔ 531 companies involved, of which 414 SMEs (78%) / 117 larger corporation (> 250 FTE) (22%)

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Fund Allocation for Education, Research and Innovation

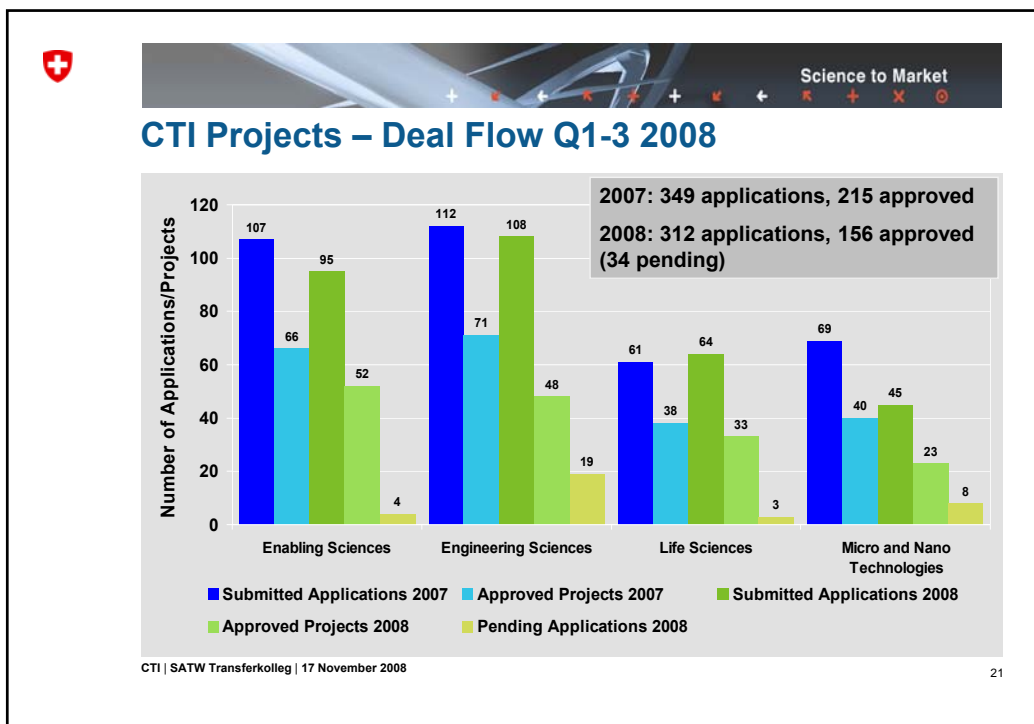
2008 – 2011

Sector	Allocated funds 2008-2011 (CHF million)	Allocated funds 2004-2007 (CHF million)
FIT sector	8235	7543
SNF	2828	1950
Cantonal universities	2811	2424
Professional Education	2708	1988
Universities of Applied Sciences	1705	1134
CTI	532	403
Space affairs	480	411
Bilat., multilat. Cooperation	275	163
Research institutions outside the university sector	218	215
scholarship funds	188	340
Academies	115	110
Steering of the education system	14	0

Requested budget: 20'109 CHF million (+ 3'428 CHF million compared to 2004-2007)

Growth rate p.a.: 6%

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SNSF NRP 62 Smart Materials in Collaboration with CTI


- To develop new intelligent materials and combinations of such with new functions
- To establish their application potential for various sectors of industry
- To serve as a model for future cooperation between SNSF and CTI

→ 3 November 2008 **Call for NRP pre-proposals**
→ 30 January 2009 **Submission deadline for pre-proposals**


www.nrp62.ch

 Smart Materials
National Research Programme NRP 62

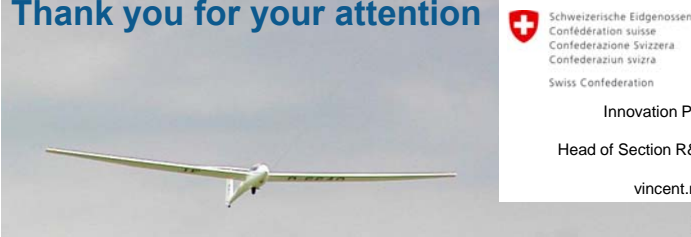
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CTI: Take off for new ideas



Thank you for your attention



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