# SLN

# Swiss Laser and photonic Network

**Christoph Harder** 

harder@swisslaser.net

April 27, 2011



#### **SLN** Association

- Goal of SLN:
  - Increase innovation funding and revenue of its members
  - Support Photonics community (from lasers to photovoltaics)
- SLN: Swiss Technology Platform for Photonics:
  SLN supports innovation from basic science to industrial research
  - Swiss National Science Foundation: National Resewarch Programs
  - CTI: R&D Consortia
  - EU: Program funding



#### 1. «Directed» Basic Research: NCCR

- NCCR: National Centres of Competence in Research
  - 27 NCCRs with roughly 60Mio/year funding in 2011
- NCCR: Better structure of Swiss research environement
  - requests started by groups of Professors
  - controlled by
    - director and international experts (world class, but no knowledge of Swiss industry)
- NCCR: Knowledge and technology transfer
  - Encouraged to involve partner from beginning
  - Big gap to industry
- > NCCR-KTT: Directed research, but challenge to close gap to Swiss industry due to guidance by international experts for scientific excellence
  - > NCCR QP (S. Pochon is on SLN board) and NCCR MUST (Ch. Harder is TT delegate) work closely with SLN to close gap to industry



## 2. «Bottom Up» Innovation: CTI

- CTI: Commission for Technology and Innovation
  - 100Mio/year with roughly 300 concurrent projects running
- CTI: Promotion of «bottom up» Innovation
  - projects are submitted by Professor/CTO team on any topic
  - CTI projects are selected and controlled by Swiss experts
  - Matching funds go to research institute (universities of applied science),
    industry usually has to pay some cash
- CTI has three instruments to improve «bottom-up» project submissions
  - 1. CTI Start-up: Business development
  - 2. WTT: Local support, technology driven
  - 3. R&D consortia: Swiss technology platforms, market (technology) driven
- > CTI-KTT: Bottom up funding of university research:
  - > SLN organizes workshops to match the best university/industry partnerships and to improve the quality of CTI projects



### 3. Program Research

- Switzerland spends 300Mio/year in «top down» program research
  - 200Mio/year go to research institutes
  - 100Mio/year goes directly to fund companies! (as big as the CTI budget!)
- Funds are paid through Brüssel
  - Makes it more complicated (FP-7, CSF, COST, ....)
  - Acceptance rate is very low (15%) and sometimes random
  - Programs are determined by European agenda and international experts and often serve German, French or Great Britain needs
- Makes it difficult for Switzerland to reach technology leadership
  - > SLN works together with mirror group (S. Oberholzer) representative
  - > SLN starts to support its members in workshops to access these funds

