

# Technology Foresight Programme in the Czech Republic

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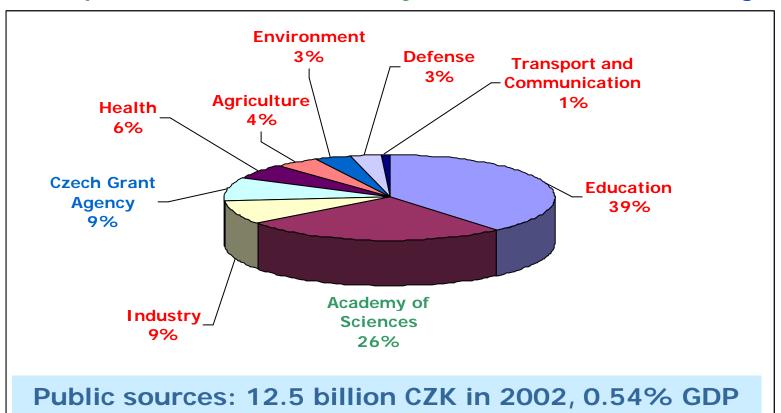
## Structure of this presentation

- State-supported R&D in the Czech Republic
- Technology foresight exercise
  - Reasons
  - Objectives
  - Method
  - Results
- Conclusions and future activities



#### State-supported R&D (public sources)

#### Main recipients: Ministries, Academy of Sciences, Czech Grant Agency

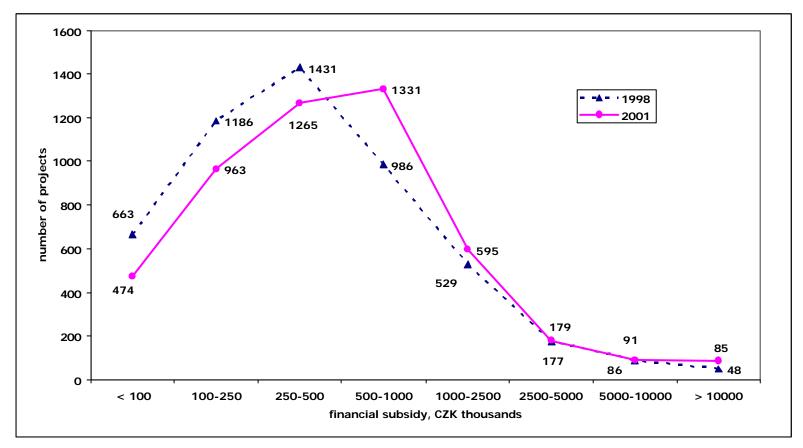


Private sources: 16.5 billion CZK in 2002, 0.75% GDP



## State-supported R&D

- Large number of small underfinanced projects
- Too many research topics supported





## **TF-basic objectives**

#### To select

 a limited number of "key research directions" (national research priorities) for new National Research Programme (NRP)

#### To suggest

- a suitable system for management of the NRP
- rules for the NRP implementation

Limited number of selected national research priorities should receive preferential funding from public resources ~ 80% of the total project-type financing available

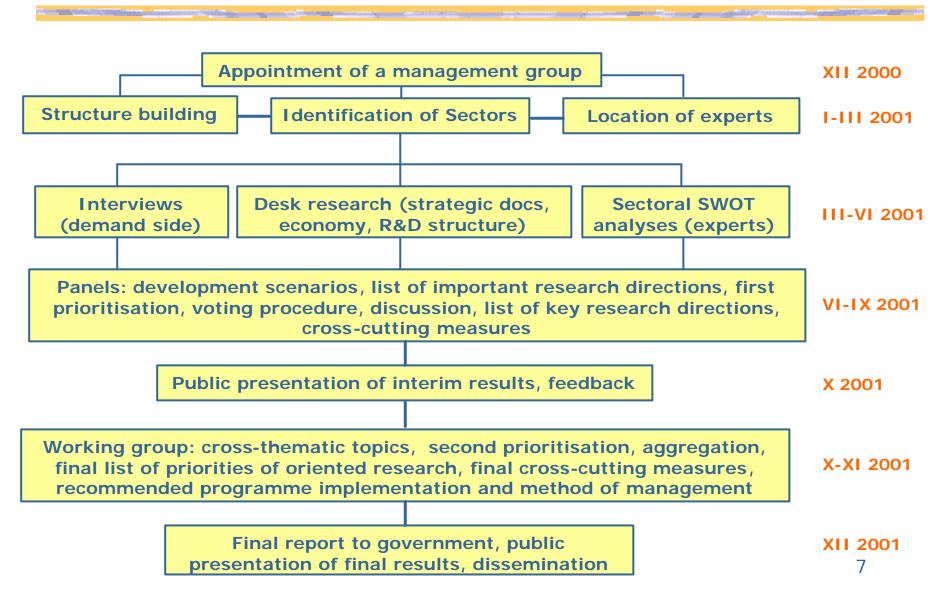


## TF – background information

- Project was ordered by the Czech Government through the Ministry of Education
- Project was managed by the consortium of the Technology Centre AS CR (principal contractor) and the Engineering Academy CR
- Project deadline: 30.12.2001 (exercise lasted 13 months)

## TF - stages of the project





## TF - panels



- Agriculture and Food
- Environment
- Health and Pharmacy
- Construction, Urbanism and Housing
- Information Society
- Materials
- Discrete Manufacturing
- Machinery and Equipment
- Devices and Instruments
- Chemical Products and Processes
- Transport Systems
- Energy and Raw Materials

- Social Transformation
- Human Resources for R&D
- Integrated R&D
- Regional and International Co-operation in R&D
- Management and Implementation of the National Research Programme
- 13 application sectors (panels)
  - 3 cross-cutting panels
  - 1 systemic panel

## Panels creation

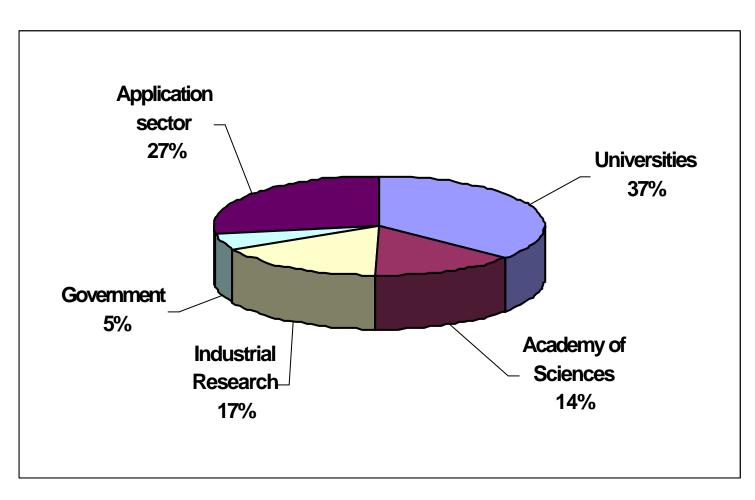


- one of the most critical points of the project
- typically 15-20 experts
- mixed background research, industry, business, government
- chairperson a respected "strategic thinker" assisted by secretary
- members suggested by important stakeholders (institutions), individual recommendations, conomination
- about 300 experts of 1000
- panel members received a modest fee to compensate for travels and other expenses

#### **Panels**



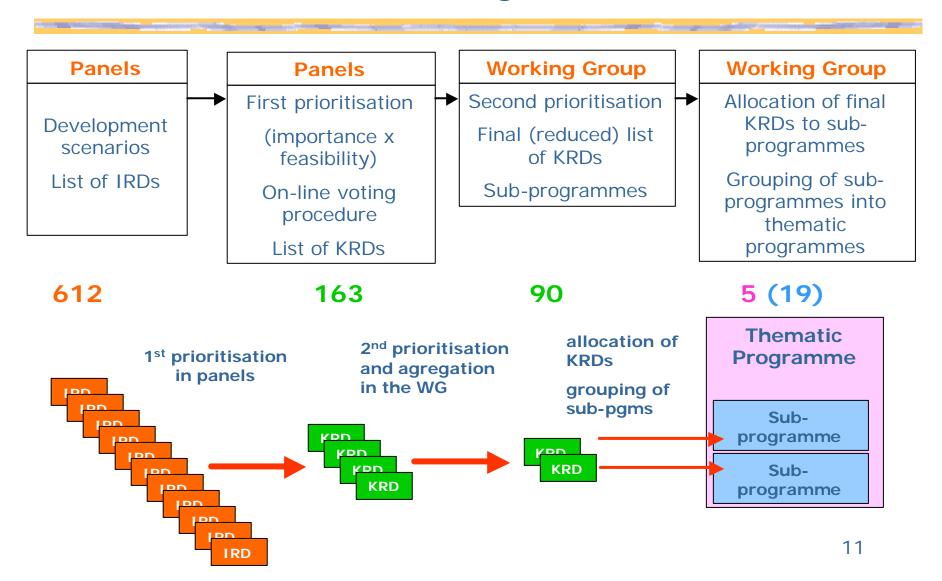
#### representation of sectors



## Results development



#### **Thematic Programmes**





## Final remarks (1)

- Project +
  - full commitment of the Government as a consequence of the Government demand
  - clearly defined tasks
  - wide support of the research community
  - understanding in industry
- Project
  - expertise and policy mixed
  - insufficient time (12 months) stressing conditions, each mistake was dangerous, no time for complex consensual discussions across the society





- Project resulted into 19 thematic and 19 cross-cutting sub-programs, 90 key research directions
- Implementation principles and operational rules outlined
- Important side-products: interviews of ~300 industrial and service companies (a demand side), complex analyses of application sectors, development scenarios for main industries
- General principles of the National Programme of Research (NPR) based on the Project results was approved by the Czech Government in May 2002
- Minor modifications in the NPR management still expected till the end of March 2003 (new Act on the Public Support to the R&D)
- Assumed start of the NPR: 1 January 2004
- NPR will have a budget corresponding to ~80% of the project-type funding from public resources (about 50% of the total public funding for R&D)

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## Final remarks (3)

- A permanent discussion forum established via Internet (former panel members +)
- Raising interest on foresight activities in "decisionmaking circles" (Czech Government)
- Follow-up:
   National Technology Foresight Programme a strategic competence building for policy-makers, likely to start in January 2004
- For more information: www.foresight.cz