# Central Finland

## *The Region of Knowledge, Skills, Entrepreneurship and Quality of life*

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***Programme manager; HR, Education, learning***

***Regional Council of Central Finland***

# Central Finland in figures

- Population 267 200
- Total area 19 400 $km^2$
- Water area 3 100 $km^2$
- Mean temperature 2,6 $^oC$
- Rainy days 12/year
- 6 sub-regions
- 30 municipalities

# Regional Profile

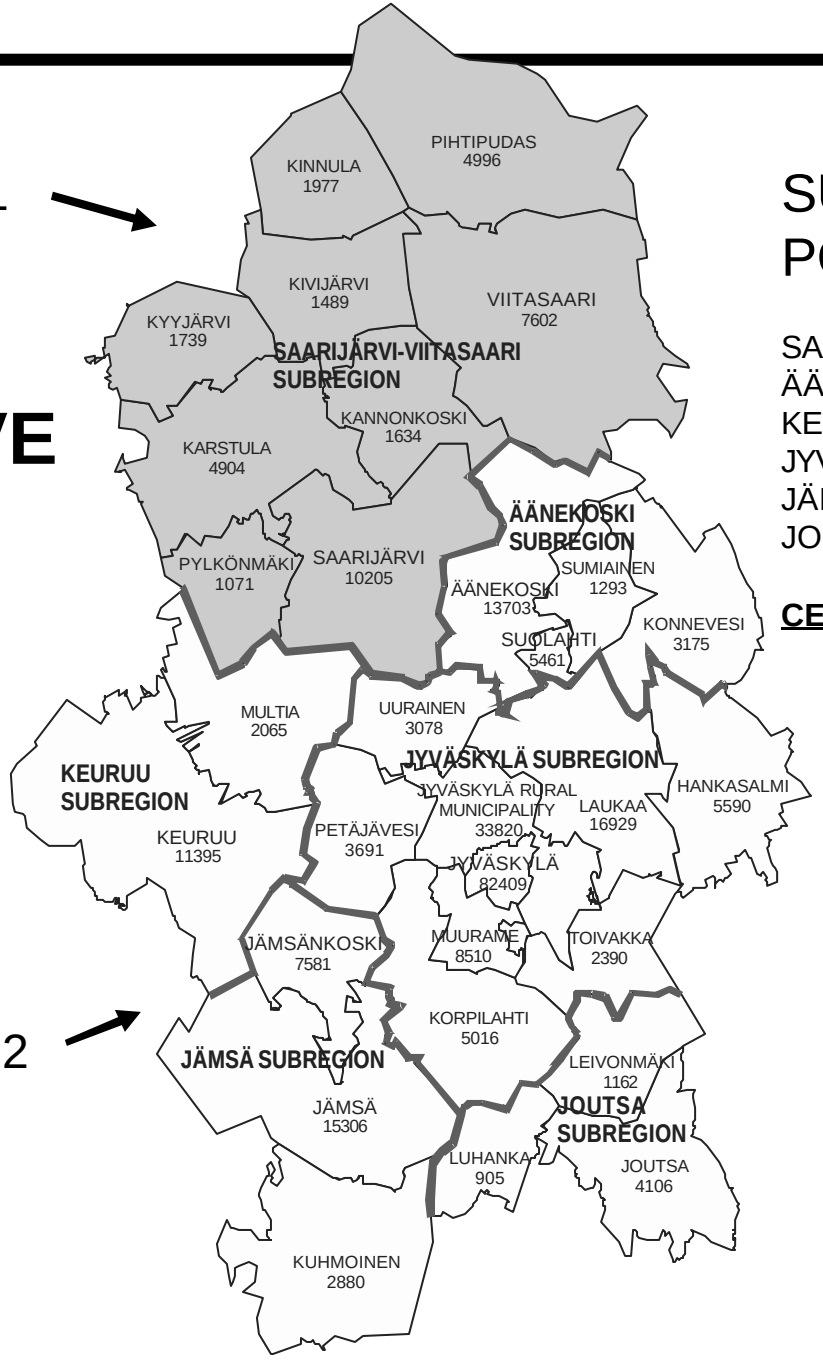
Share of figures in Finland

- **Population 5,1 %**
- **Enterprises 4,4 %**
- **GDP 4,2 %**
- **Unemployed 6,1%**
- **Employment**
  - Agriculture 5,8 %
  - Manufacturing 5,2 %
  - Construction 4,7 %
  - Private Services 3,9 %
  - Public Sector 5,0 %

# EU OBJECTIVE AREAS IN CENTRAL FINLAND 2000-2006

OBJECTIVE 1

OBJECTIVE 2 AND 3



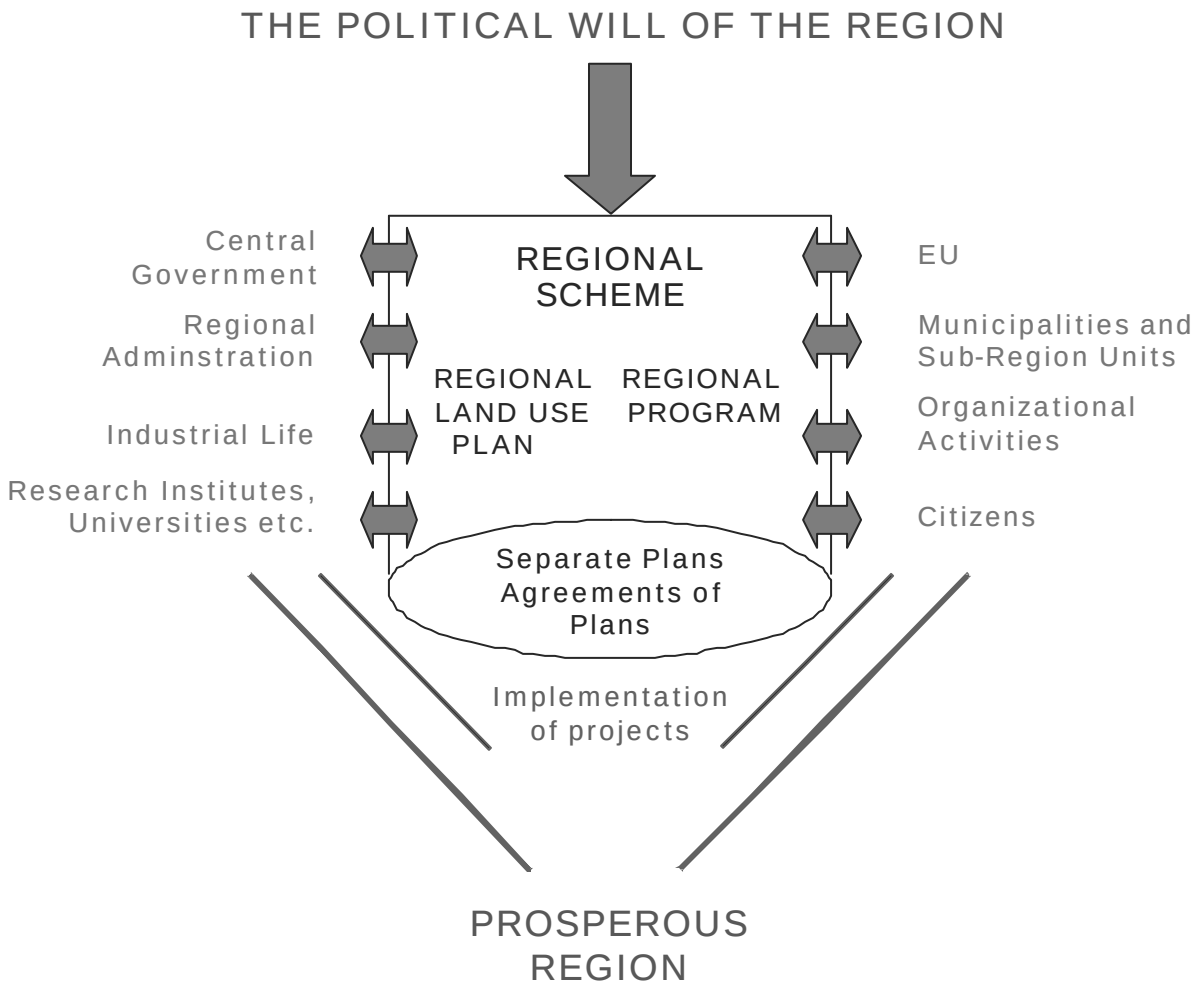

## SUBREGIONS AND POPULATION

| | |
|---|---|
| SAARIJÄRVI-VIITASAARI | 35176 |
| ÄÄNEKOSKI | 23577 |
| KEURUU | 13290 |
| JYVÄSKYLÄ | 163369 |
| JÄMSÄ | 25658 |
| JOUTSA | 6094 |
| **CENTRAL FINLAND** | **267164** |

# Employment and Enterprises 2005

| | Employment | Enterpresis Premises |
|---|---|---|
| • Agriculture and Forestry | 6000 | 434 |
| • Mining of Minerals | 250 | 102 |
| • Industry | 22500 | 1342 |
| • Electricity and Water Maintenance | 750 | 86 |
| • Construction | 6600 | 1526 |
| • Trade, hotel and catering | 13500 | 3155 |
| • Transport, storage,telecommunication | 5700 | 1285 |
| • Financing and Insurance | 1100 | 174 |
| • Services for Enterprises | 10500 | 2054 |
| • Public Service | 35900 | 1643 |
| • Others | 210 | |
| | 104900 | 11801 |
| | | (10769) |

# Strategic co-operation



# Central Finland

## knowledge based strengths

- Environment
- Energy
- Engineering and technologies
- E-learning
- Education
- Entrepreneurship

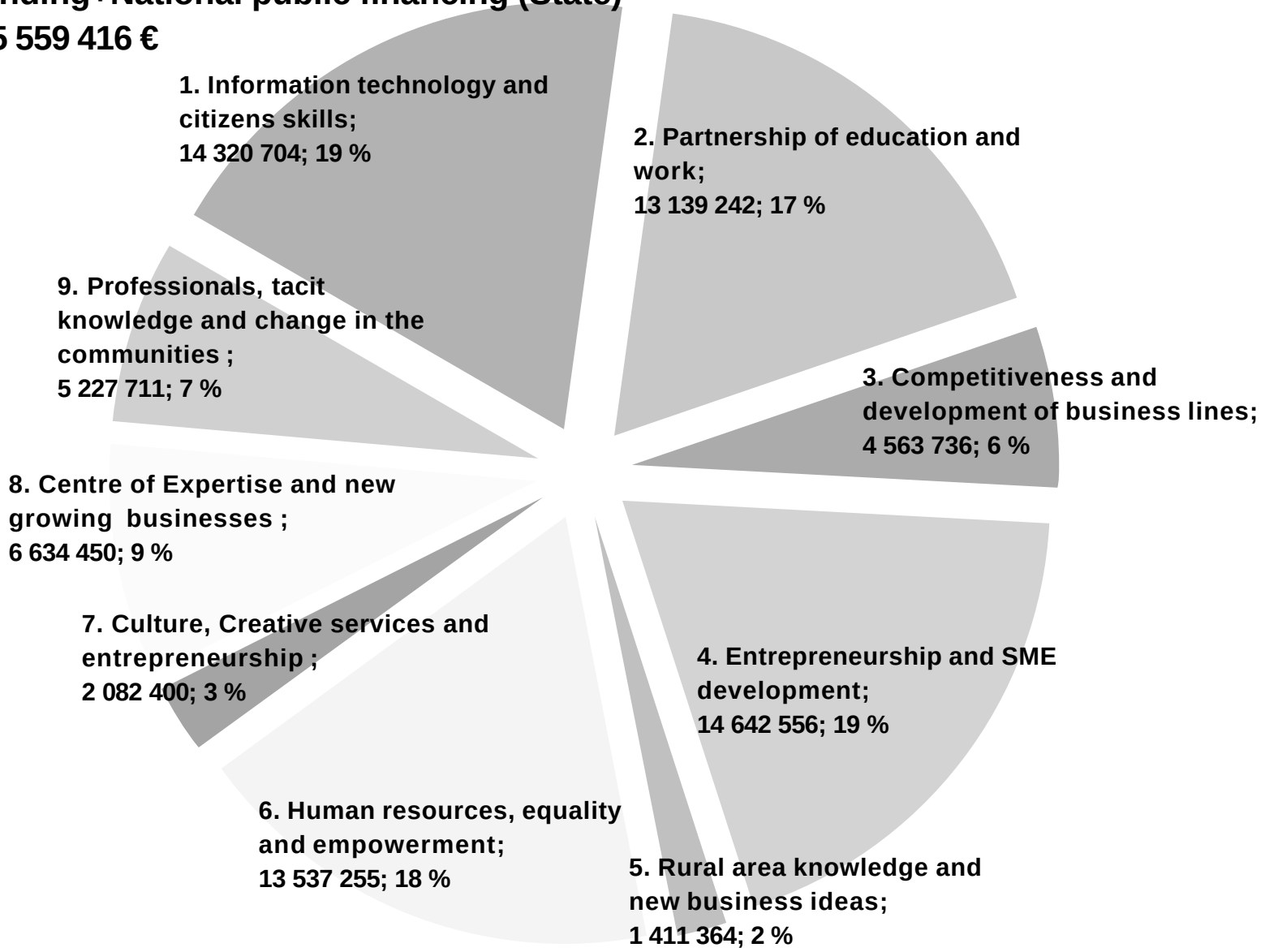
# Taking Charge of Regional Development

**Creation of the Development Strategy**

- Goverment budget and regional funding
- Objective 1 Programme
- Objective 2 Programme
- Objective 3 Programme
- Regional Rural Programme
- Centre of Expertise Programme
- Community Initiatives
- Development Themes

# EU FUNDING OBJECTIVES 1, 2 AND 3 IN CENTRAL FINLAND
## Knowledge based Priorities and Implementation

**EU funding+National public financing (State)**
**All: 75 559 416 €**



# EU FUNDING OBJECTIVES 1, 2 AND 3 IN CENTRAL FINLAND
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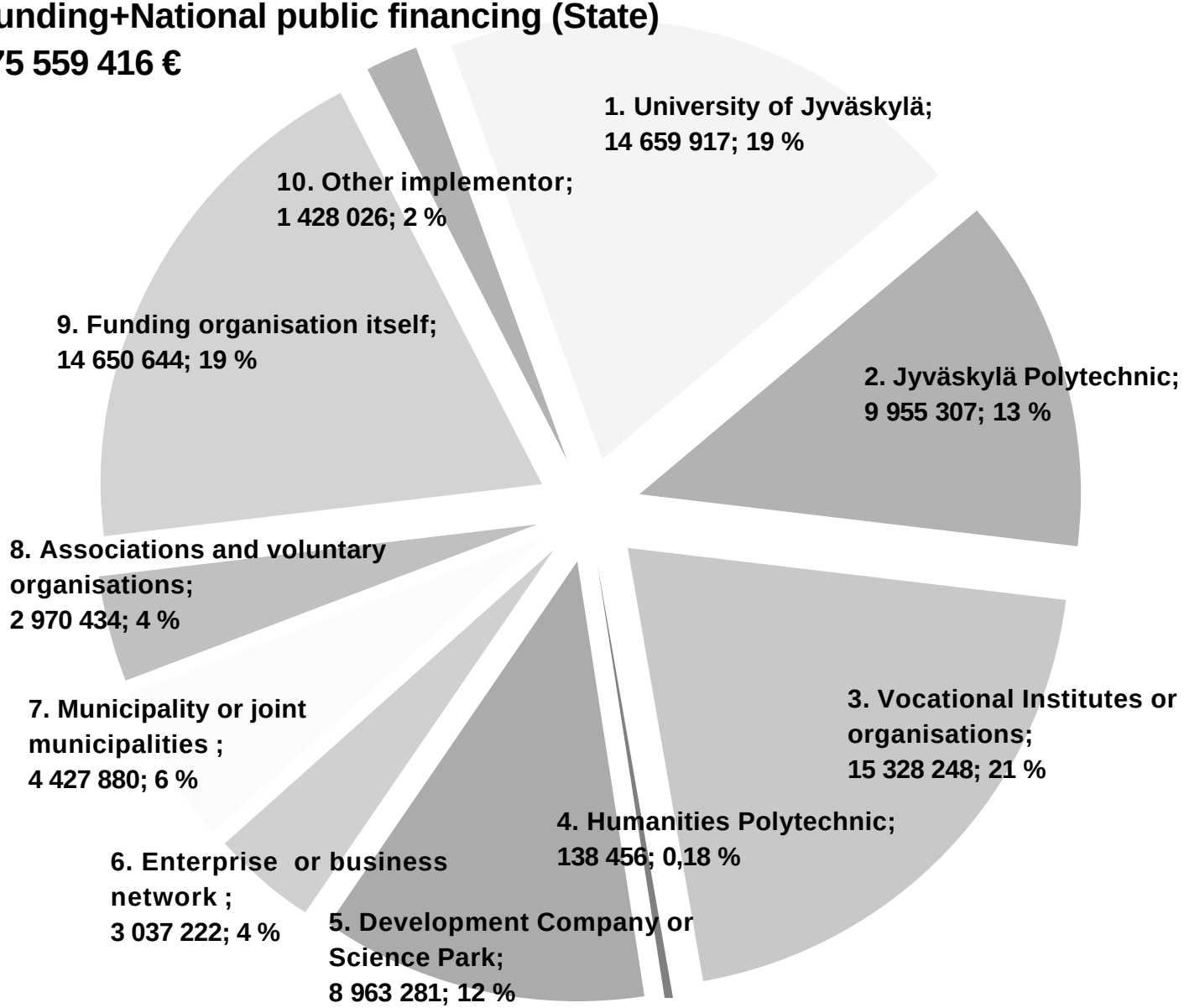
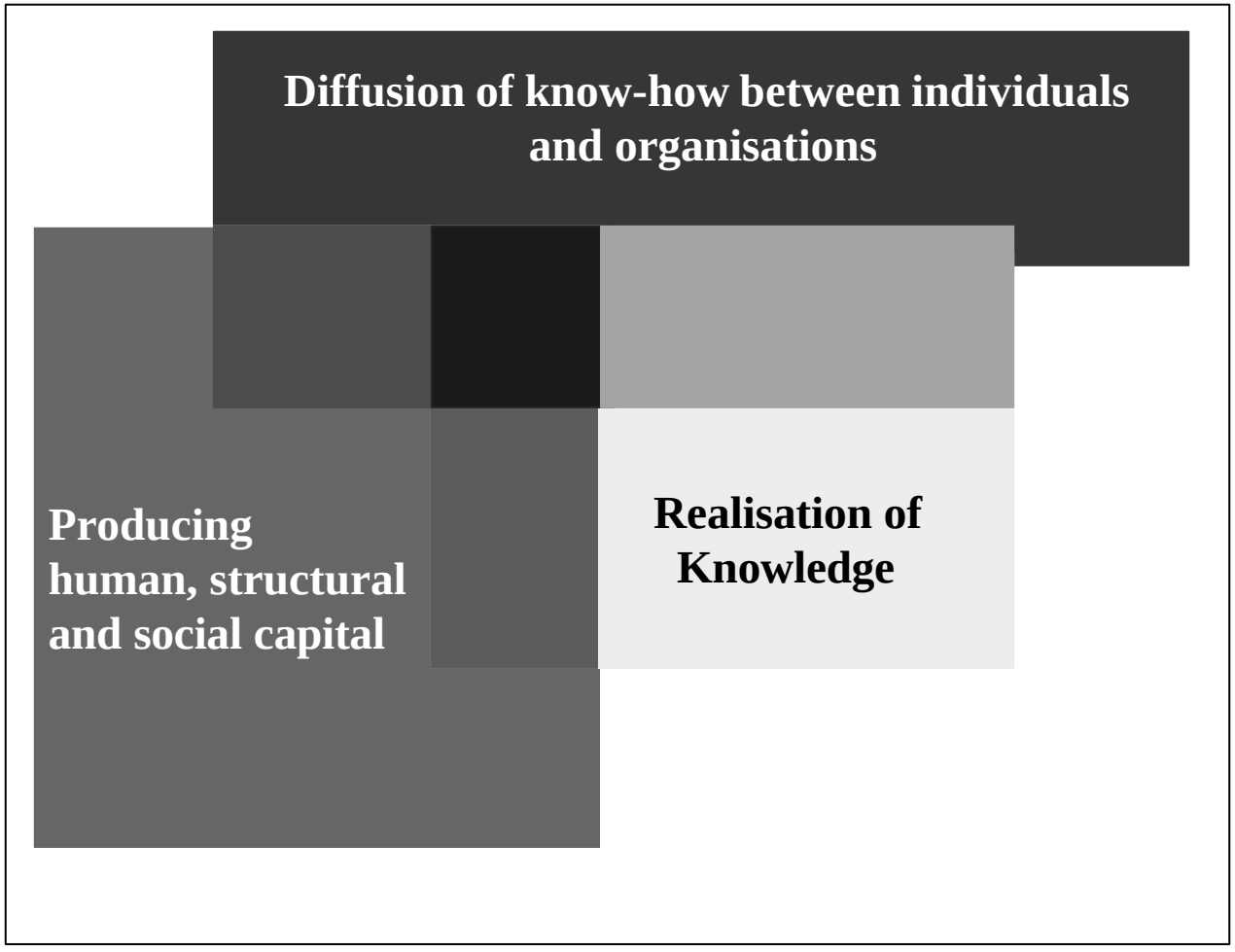
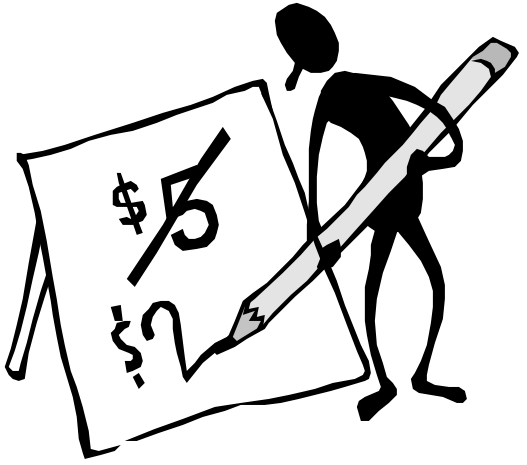


# Figure 1 The key processes of learning region



# The determinants of index of producing, diffusion and realisation of know-how (Figure 2)

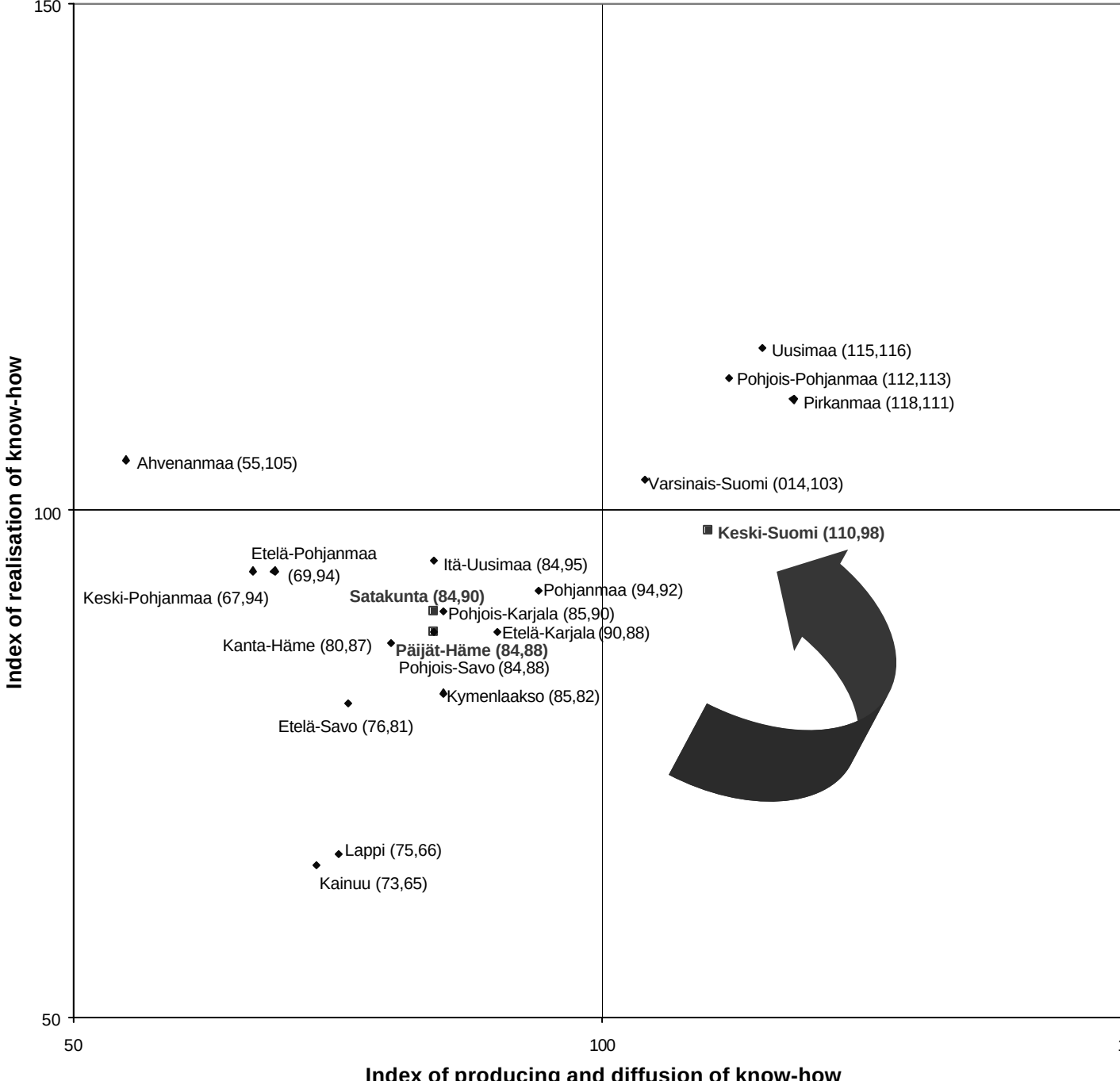
- Passed degrees in different levels of education (Statistics Finland)
- R&D investments per value added (Statistics Finland)
- Patents per stock of firms in regions (Statistics Finland)
- Employment in clusters related to labour work in regions (ETLA)



- Population density (Statistics Finland)
- Stock of firms (Statistis Finland)
- Value added per stock of firms (Statistics Finland)
- Value added per capita (Statistics Finland)
- Employment rate (Statistics Finland)
- Unemployment rate (Statistics Finland)
- Educational level (Statistics Finland)
- Efficiency of regional economies and production factors (Susiluoto & Loikkanen, 2001)

**Figure 2**

**The producing, diffusion and realisation of know-how in different regions (whole country = 100)**



# Learning region

- *Vision for the Future*
- *Strategic co-operation*
- *Regional economy  and educational structure*
- *Forecasting the future*
- *Action plans in the sub-regions*
- *Managing changes – focusing resources*
- *Networking for learning and innovations*
- *Life long learning – personal paths*
- *Evaluation of projects and development*

**Important for us**

# THE DEVELOPMENT OF EDUCATION FOCUS IN EU-PROGRAMMES

**BASED ON PARTNERSHIP**

- curriculum supporting knowledge and growth in enterprises
- joint learning and training programmes for different organisations
- using and developing e-learning
- the development of educational organizations
- strengthening the co-operation (communication) between working life and training organizations
- including the elements of entrepreneurship to all training in different levels of education
- forecasting the needs of labour, skills and education
- understanding entrepreneurship and contributing the positive attitude and motivation

KESKI-SUOMEN LIITTO
Sepänkatu 4,
40100 Jyväskylä
www.keskisuomi.fi

# Educational organisations

| Organisation | Number of organisations | Students, pupils |
|---|---|---|
| Basic education<br>Schools | 212 | 30530 |
| Upper secondary<br>Schools | 27 | 5865 |
| Vocational institutes<br>and Vocational Schools | 3<br>5 | Studying for degrees<br>Young 6667 Adults 6285 |
| Jyväskylä Polytecnic<br>Humanites Polytecnic | 1<br>1 | 7924<br>130 |
| University of Jyväskylä | 1 | 15000 |
| Adult training | All organisations | 37000 |

***Budget for education 500 M€, EU funding 15 M€/year,***
***Employees 10000 in the work of education and training***

KESKI-SOMEN LIITTO
Sepänkatu 4,
40100 Jyväskylä
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# Regional learning and innovation networks in Central Finland

**DEVELOPMENTAL NEEDS OF SUB-REGIONS**

**Sub-regions**

**Region**

Round Table

- **Regional Development companies**
- **Municipalities**
- **SMEs**
- **Education and Training /Schools**
- **Services for Enterprices and employees**

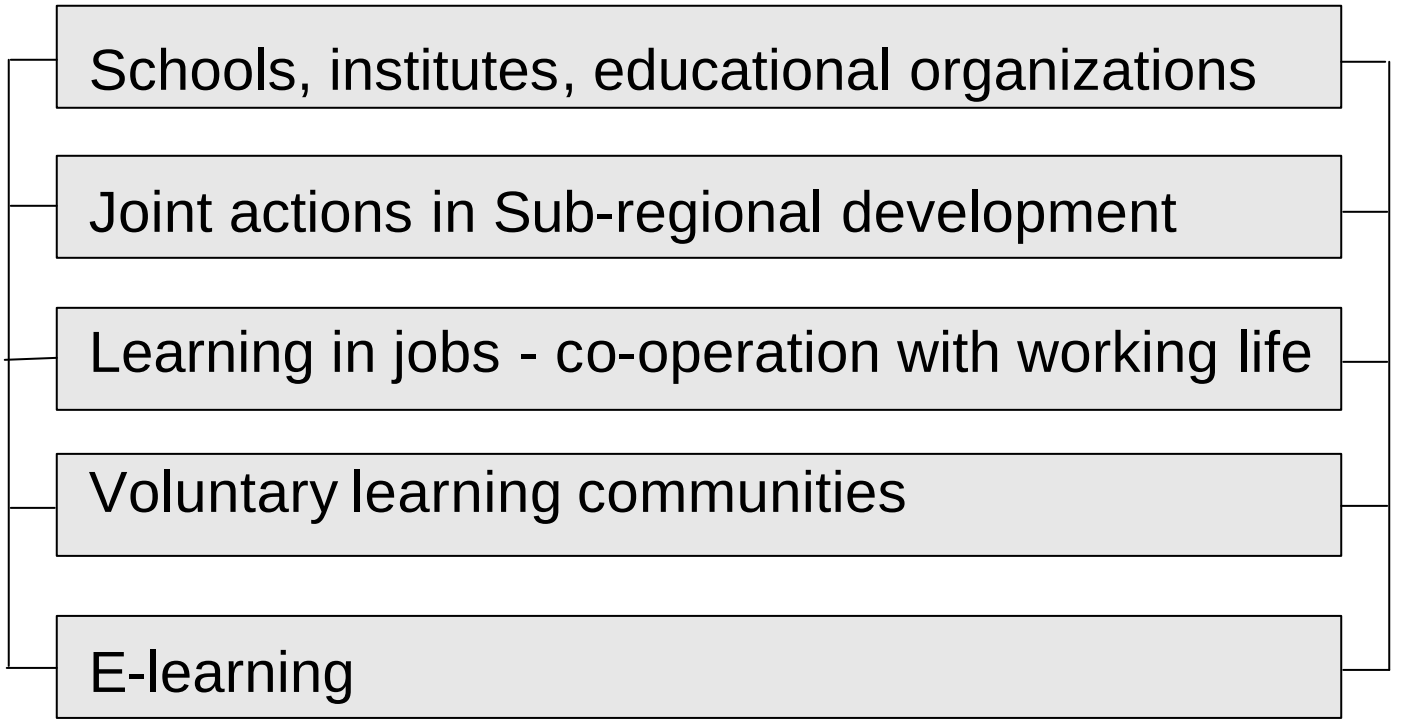

- **University of Jyväskylä**
- **Jyväskylä Science Park and Technical Research Centre of Finland**
- **Jyväskylä Polytechnic**
- **Vocational Education and Training**

**Regional Council of Central Finland**

**Team of Experts**

**SUPPORT FOR KNOWLEDGE SHARING AND PROMOTING INNOVATIONS**

# THE ELEMENTS OF LEARNING ENVIROMENT IN THE NETWORKS - Education and Training



# Discussing about the competence

- Working professionally through results
- Seeing facts and using methods/processes
- Learning by experiences
- Mastering information
- Evaluating and seeing the “ whole picture”
- Communicating, networking and co-operating
- Having self-confidence and commitment
- Seeing to the future and having visions

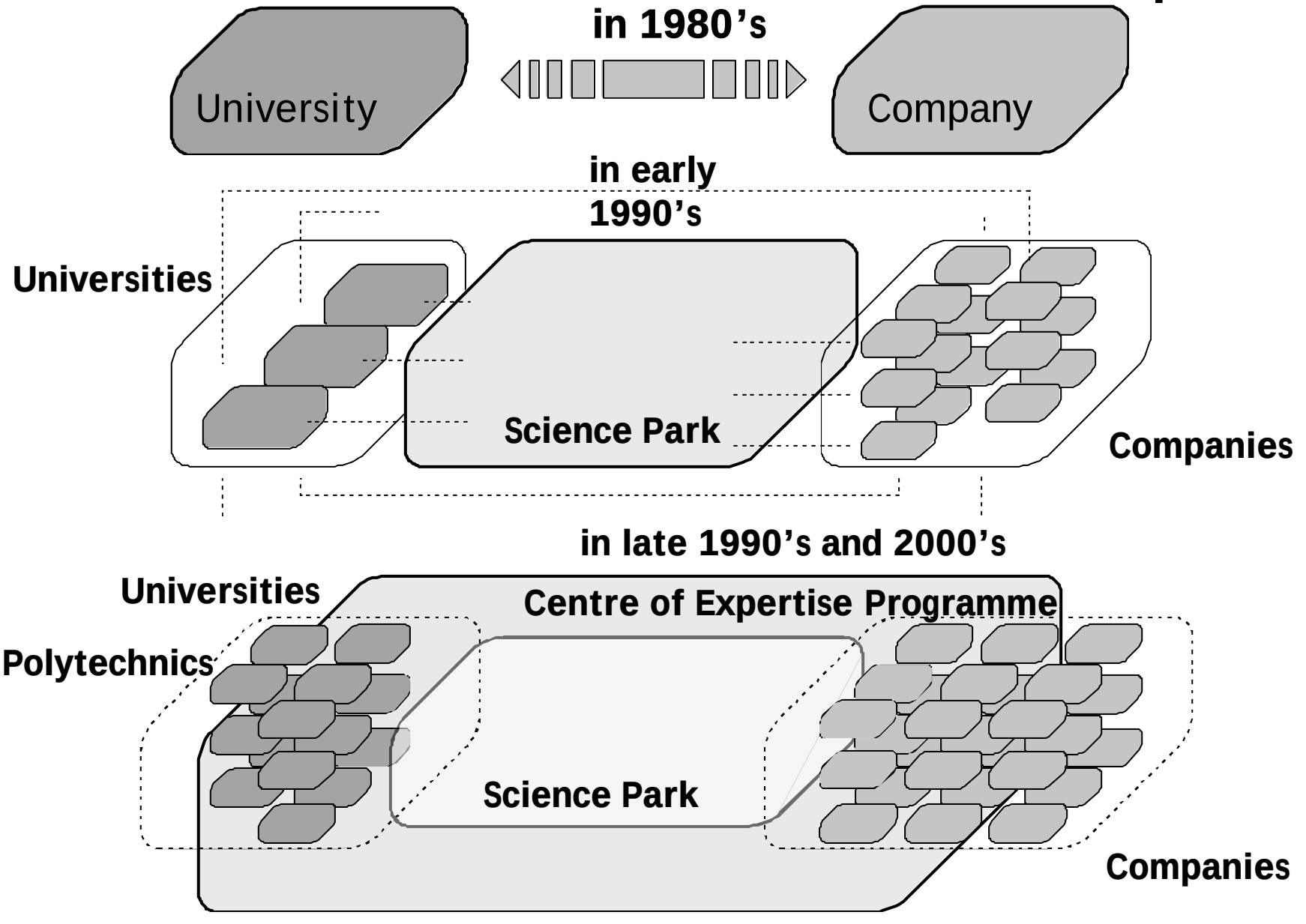
# Idea of the Centre of Expertise Programme

**To utilise top level knowledge and expertise**
**as a resource for business operations, job creation and regional development**


# Key actors of the Finnish innovation system


**Source: Tekes**

# Science Parks in 1980 – 2000 and CoE concept



# Centres of Expertise 1994-2006

Period

2003 -2006

1999 -2002

1994 -1998

**Lapland CoE for the Experience Industry**
•Experience Industry

**Oulu Region CoE**
•IT, Medical-, Bio- and Environmental Technology

**Raahe –Nivala –Tornio CoE**
•Metal and Maintenance Services

**Kokkola Region CoE**
•Chemistry

**CoE for Western Finland**
•Energytechnology

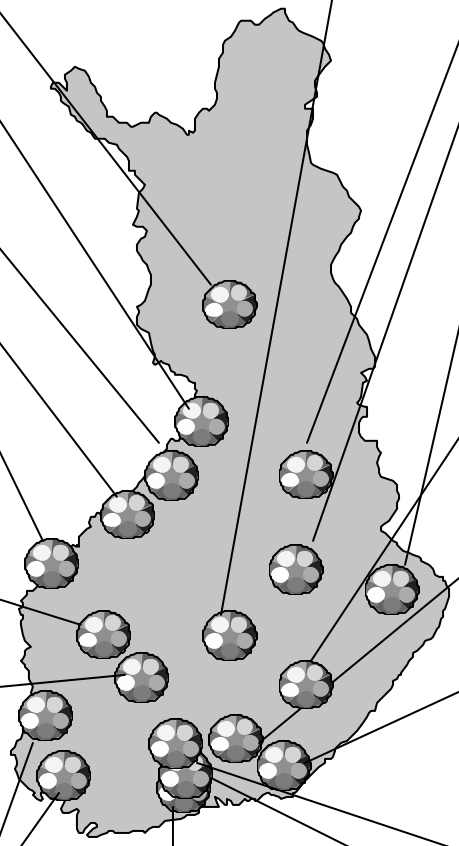
**Seinäjoki Region CoE**
•Foodindustry and Embedded Syst.

**Tampere Region CoE**
•Engineering and automation, ICT, Media Services and Health Care Tech

**Satakunta CoE**
•Materials and Distance Technology

**South-West Finland CoE**
•Biomaterilas, Diagnostics, Pharmaceutical Development, Surface Tech. of Materials, ICT and Cultural Content Production

**Jyväskylä Region CoE**
•IT, Control of Papermaking, Energy and Environmental Technology



**Helsinki Region CoE**
•Active Materials and Microsystems, Gene Technology, Software Product Business, Digital Media, e-Learning and Cultural Industry, Health Care Technology and Logistics

**Kainuu CoE**
•Measuring Technique and
•Chamber Music

**Kuopio Region CoE**
•Pharmaceutical Development, Health Care- and Agrobiotechnology

**North Carelia CoE**
•Wood Technology and Forestry, Polymer Technology and Tooling

**Mikkeli Region CoE**
•Composite and coatings

**Lahti Region CoE**
•Design, Quality and Ecology

**South-East Finland CoE**
•High Tech Metal Structures, Prosess and Systems for Forest Industry, Logistics and Expertise on Russia

**Häme CoE**
•Vocational Expertise and e-Learning

**Hyvinkää Region CoE**
•Lifting and Transfer Machines

**Network CoE for Food Development**

**Network CoE for Turism**

**Network CoE for Wood Products**

Regiona

Netwo

# Concept for the Centre of Expertise Programme


## Competitive tendering

- **basic funding (catalytic) and status Goals**
- **critical mass through specialisation and clustering**
- **focusing on world class excellence**
- **co-operation**
- **pooling of resources**

## National Co-ordination

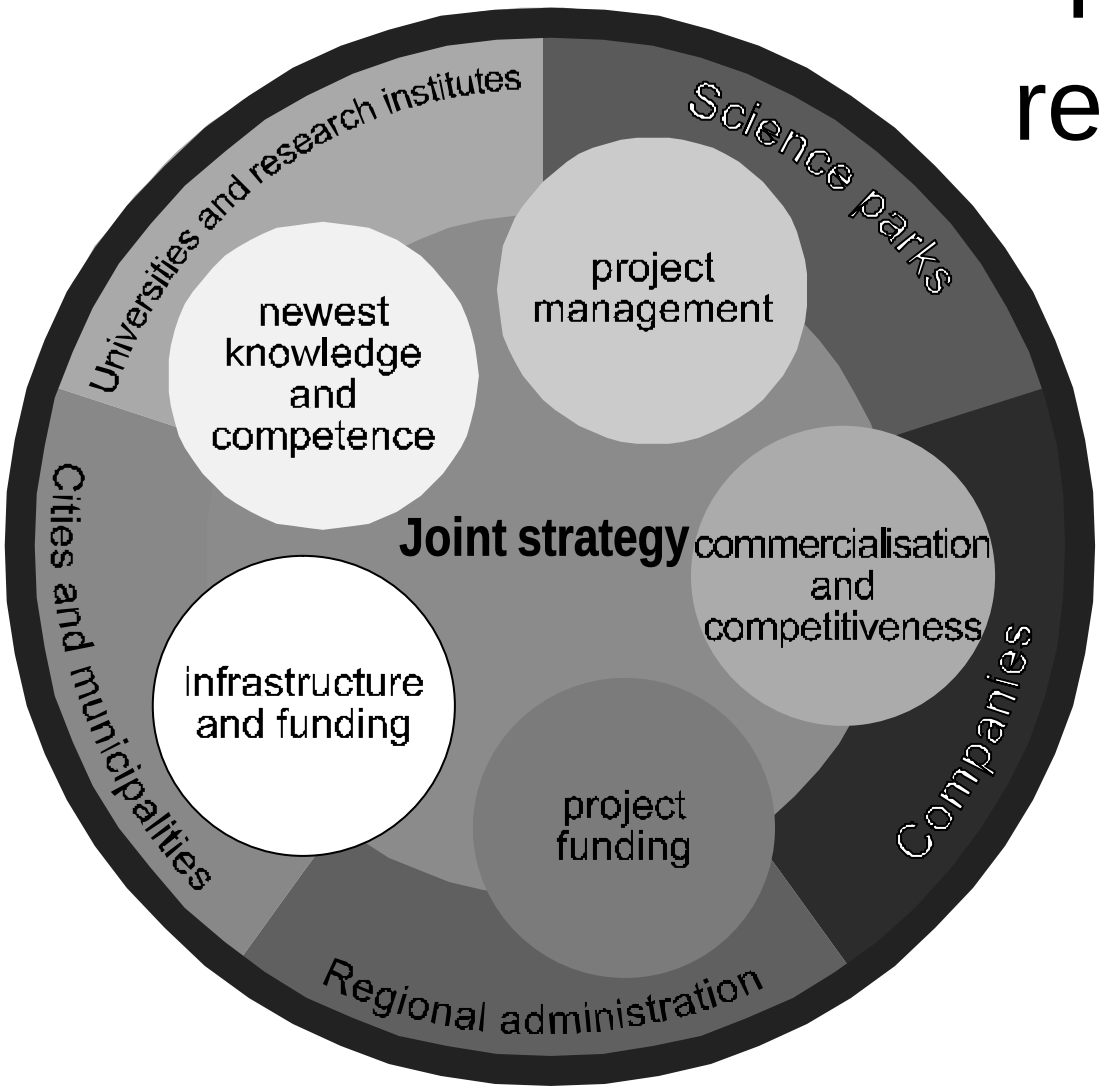
**Tools**

- **Committee**
- **National Development Project (FISPA)**

## 22 Regional Programmes

- **Joint strategy for business development**
- **Needs of companies and local innovation system**
- **High quality business services**
- **Regional co-operation and project implementation**
- **Science parks as an operational environment**

# Partners at regional level



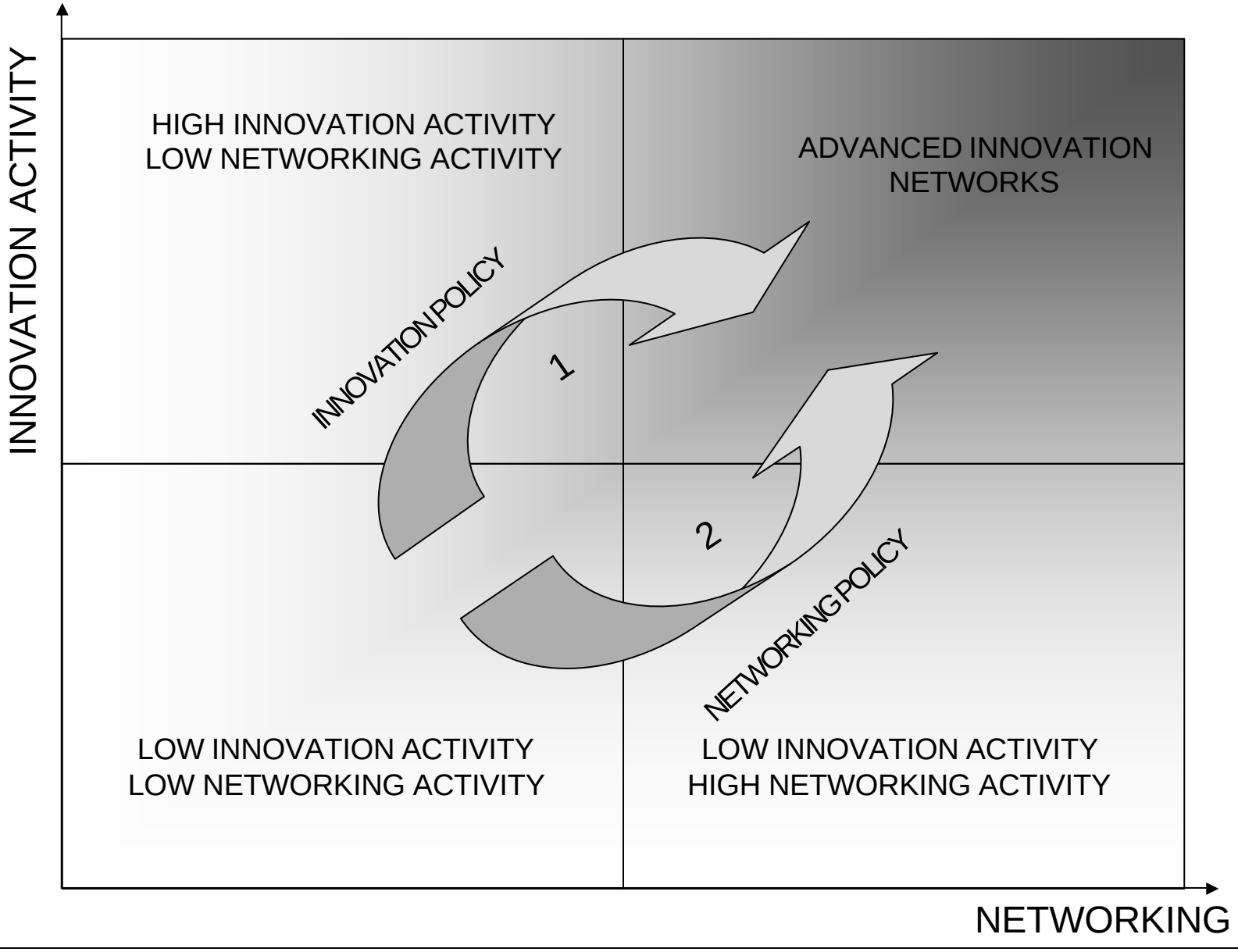
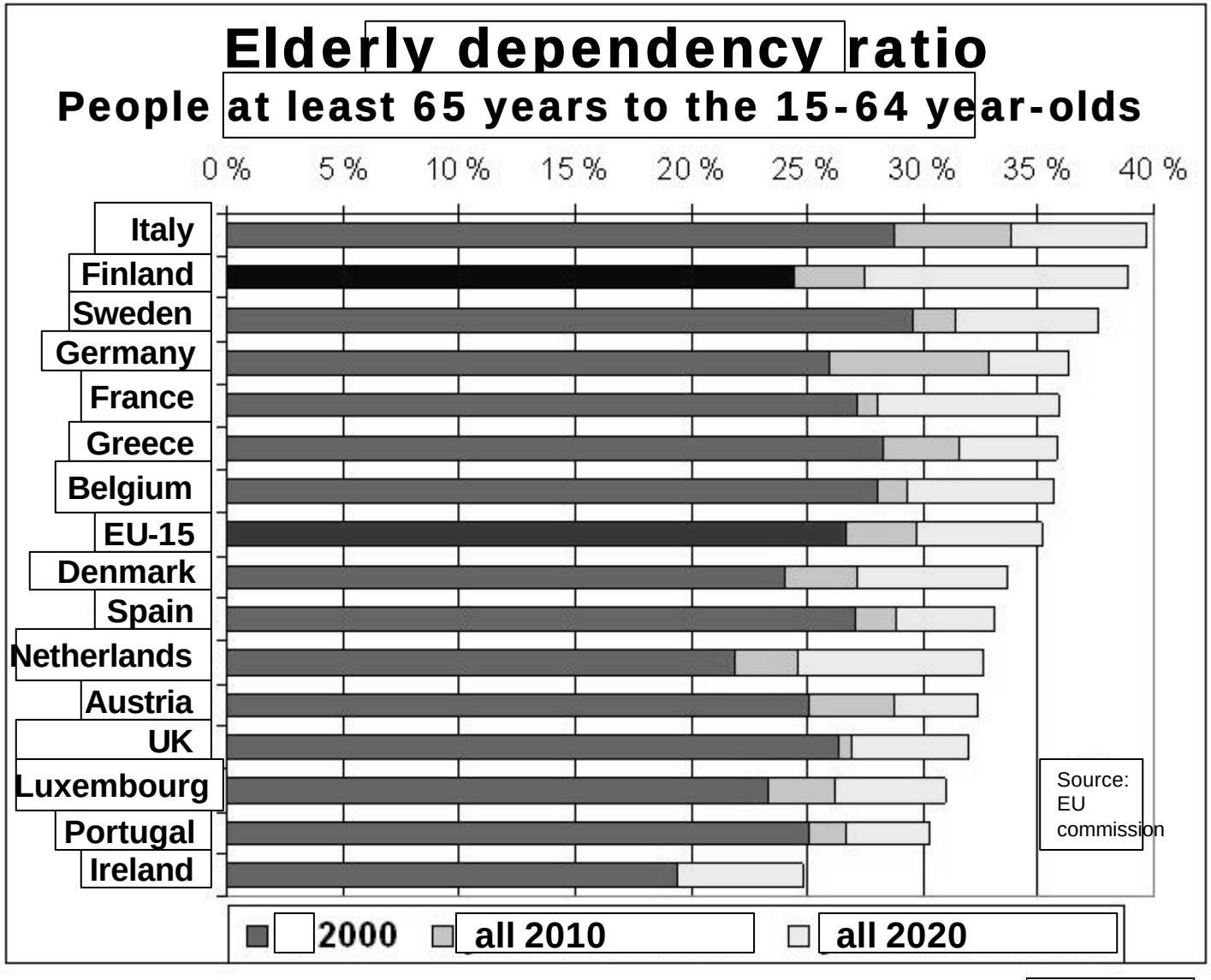



**Figure 3 Policy interventions supporting innovation networks**

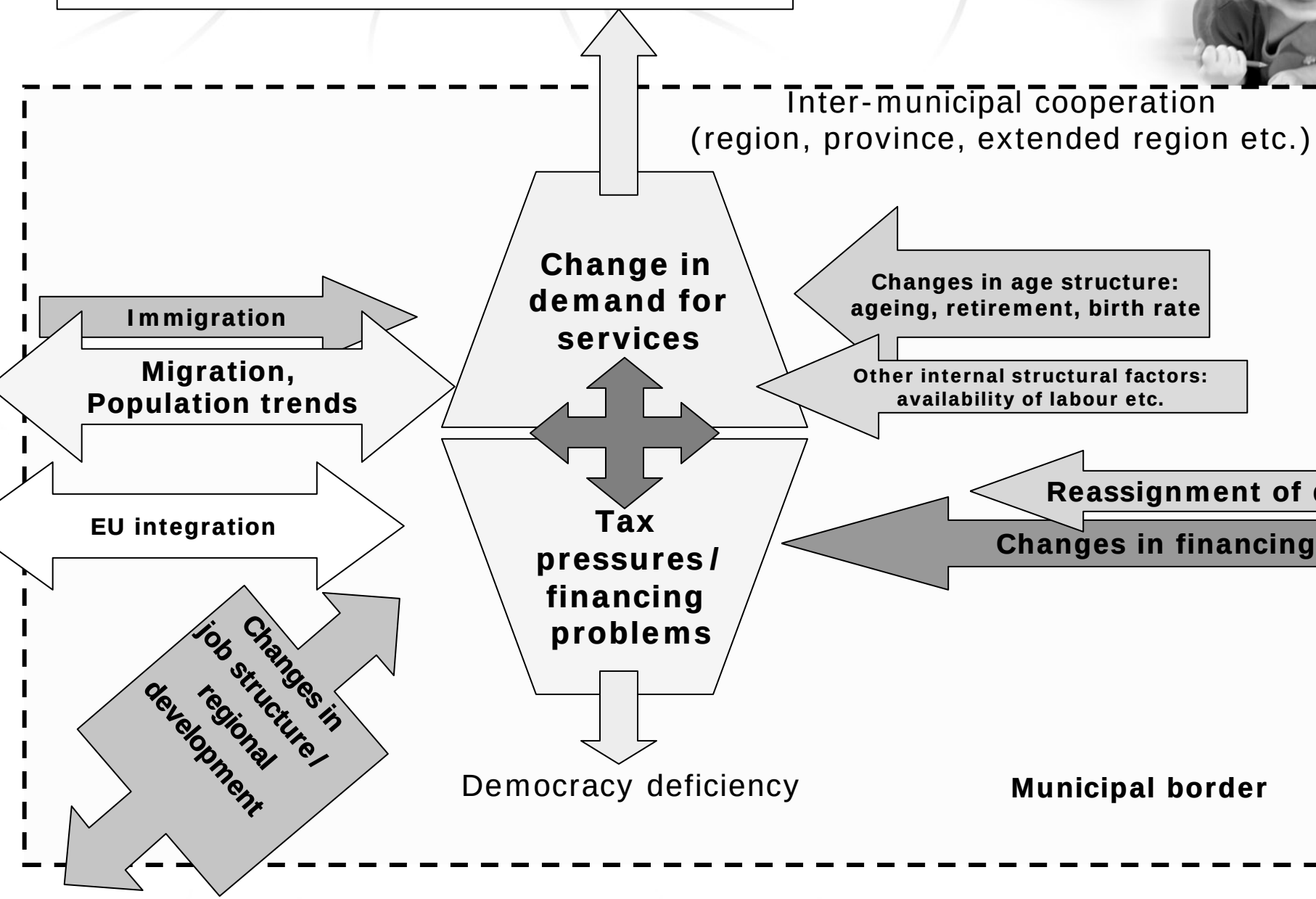

Elderly dependency ratio
People at least 65 years to the 15-64 year-olds
0 %
5 %
10 %
15 %
20 %
25 %
30 %
35 %
40 %
Italy
Finland
Sweden
Germany
France
Greece
Belgium
EU-15
Denmark
Spain
Netherlands
Austria
UK
Luxembourg
Portugal
Ireland
Source: EU commission
2000
all 2010
all 2020

# Effect of population factors on the demand of basic services (Index 2005=100)

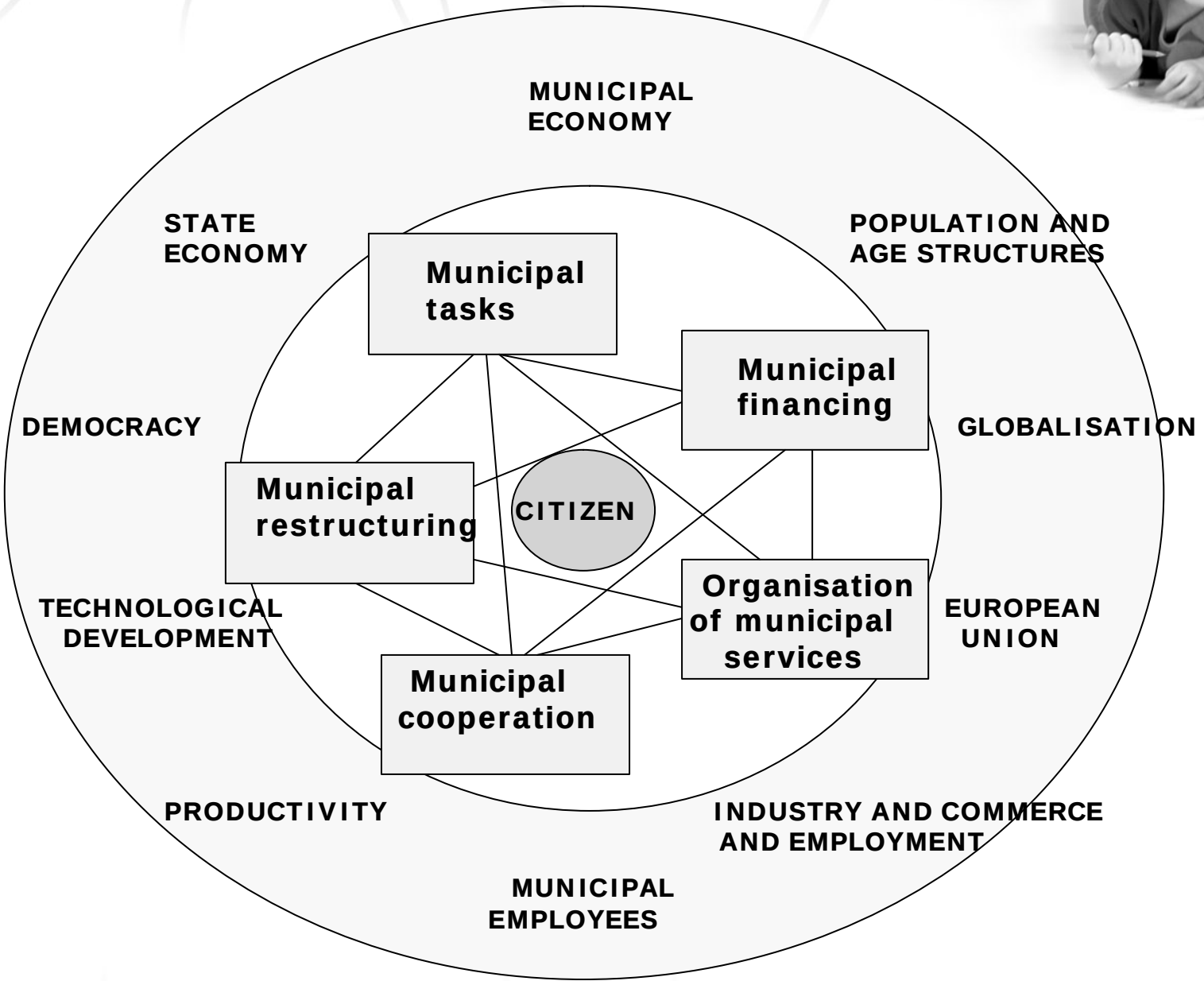
| | Changes % in year | | | | | |
|---|---|---|---|---|---|---|
| | Expenditure, million € | | | | | |
| xpenditure | 2003 | 2005 | 2010 | 2020 | 2006-2010 | 2011-2020 |
| DUCATION SERVICES | **5368** | **100** | **97** | **95** | **-0,5** | **-0** |
| reschool education | 65 | 100 | 99 | 102 | -0,1 | 0 |
| omprehensive school | 3134 | 100 | 93 | 92 | -1,4 | -0 |
| pper secondary school | 528 | 100 | 104 | 92 | 0,8 | -1 |
| ocational education | 1136 | 100 | 102 | 92 | 0,3 | -0 |
| olytechnic | 505 | 100 | 102 | 92 | 0,3 | -0 |
| EALTH SERVICES | **5914** | **100** | **104** | **117** | **1** | |
| pecialised hospital care | 3853 | 100 | 104 | 109 | 0,6 | 0 |
| ealth centres | 2061 | 100 | 105 | 130 | 1,7 | 1 |
| OCIAL SERVICES | **4051** | **100** | **111** | **135** | **2,1** | **1** |
| aycare for children | 1928 | 100 | 99 | 101 | -0,2 | 0 |
| stitutional elderly care | 723 | 100 | 116 | 149 | 2,9 | 2 |
| ome care | 541 | 100 | 113 | 139 | 2,5 | 2 |
| ervice accommodation | 859 | 100 | 109 | 128 | 1,7 | 1 |

Source: Ministry of Socia

# Challenges facing the municipalities by the year 2015



# Framework criteria and working tools of the new



# Portfolio of projects:

## Development of businesses

- **Product development**
- **New companies**
- **Commercialisation, business expertise**
- **Other business orientated training**

## Strengthening know-how

- **Special expertise of research- and education units**
- **Structure of education (professors etc.)**

## Development of innovation systems

- **Cooperation and cluster based actions**
- **Research and feasibility studies**
- **Common training and seminars**
- **R&D -services**
- **Databases and other information services**
- **Development of CoE -functions**

# Selection criteria

**Knowledge and know-how**

- **connections to available top knowledge (research, education, production)**
- **usability of top knowledge from a business point of view**
- **international scope**
- **regional infrastructure supporting the programme**

**Effectiveness**

- **effects on existing business operations and the transformation of knowledge into an actual product**
- **effects on new business operations**
- **effects on employment and regional development**
- **effects on human resources**
- **effects on innovation structures**
- **effects on networking and clusters**
- **effects on the attractiveness of the region**

**Organisation and commitment**

- **operative organisation and administration**
- **financial plan and its volume**
- **operative resources**
- **regional commitment**

**Innovation ability**

- **new operative models and projects**