

# Challenge Driven Innovation Policy for Healthy Ageing

## Better Life for Older People in Sweden

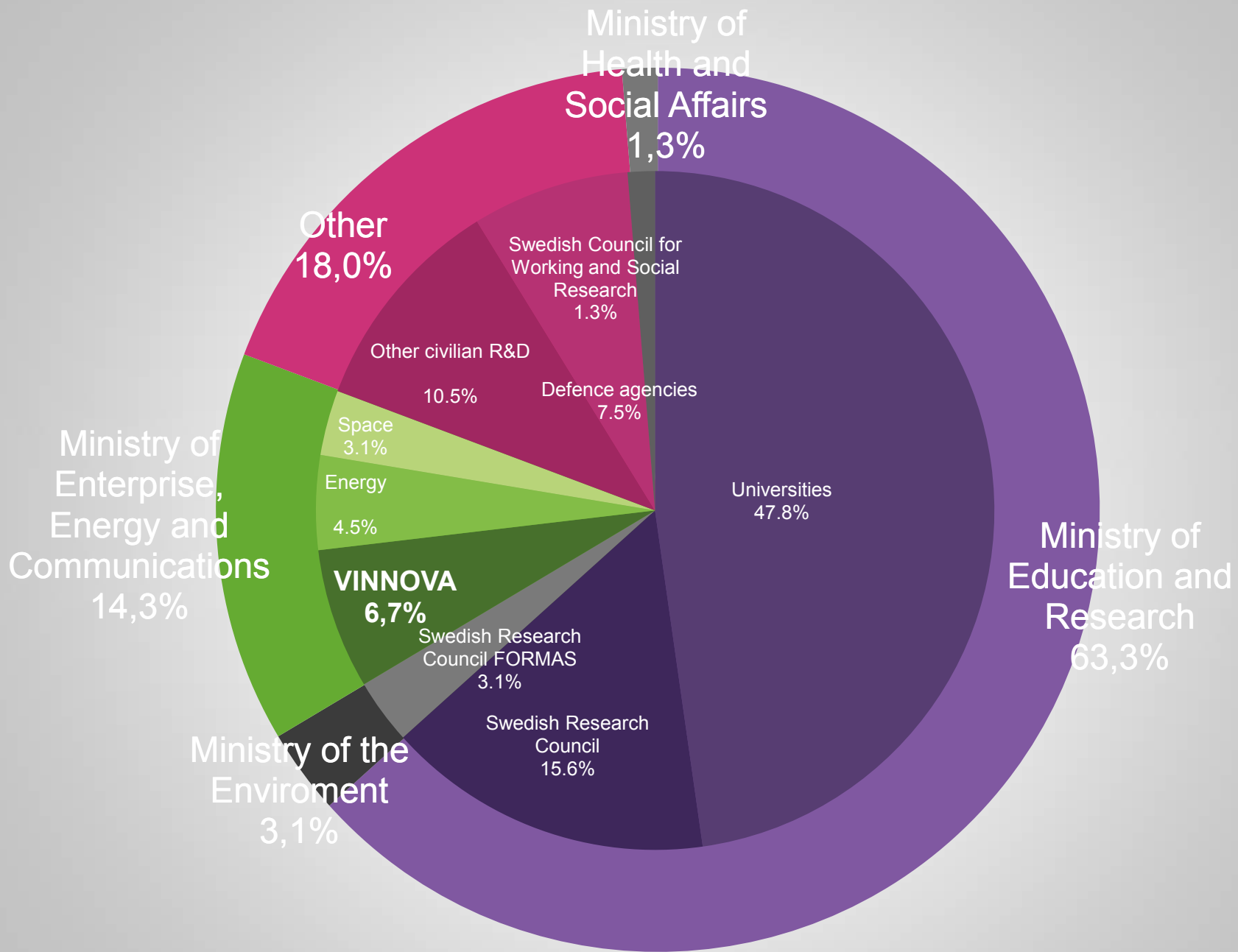
OECD Round-table  
Seoul, 2013-11-22

Jenni Nordborg, PhD  
Head of Dept Bioentrepreneurship  
Heath Division, VINNOVA

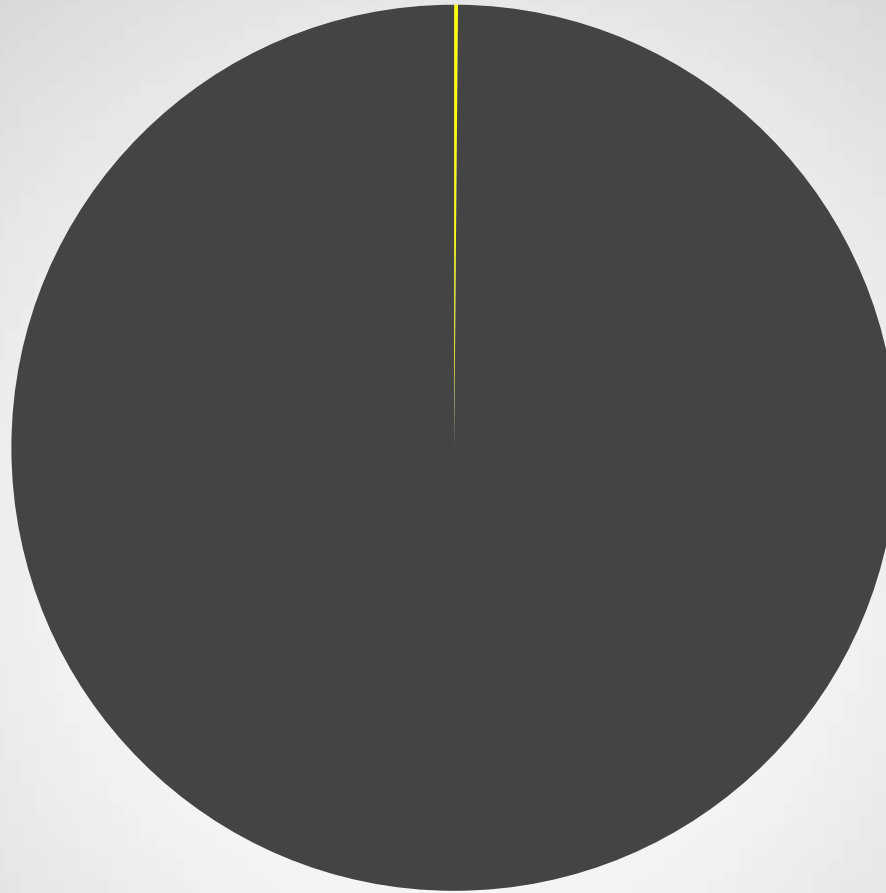
# Sweden's innovation agency



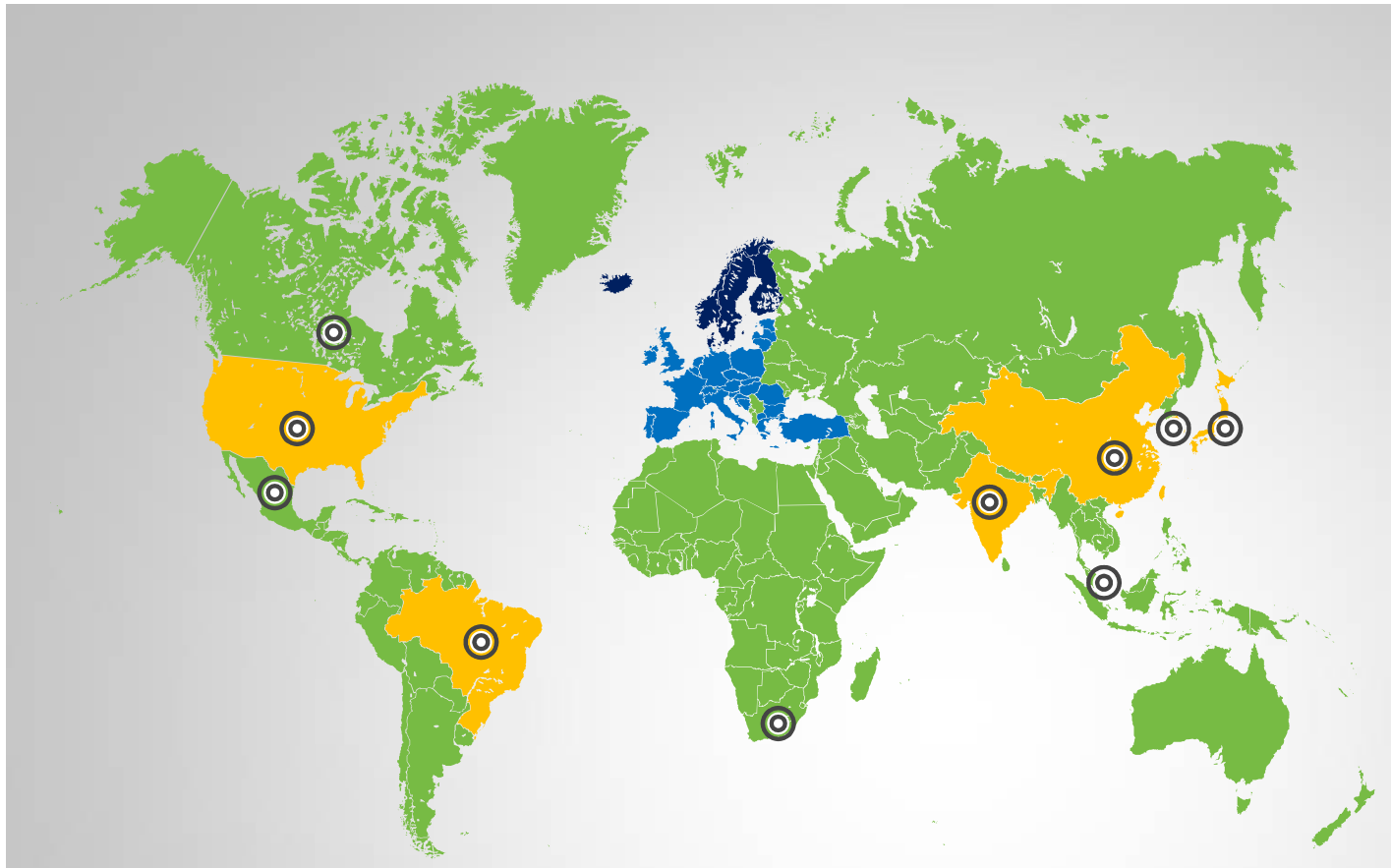
Strengthening Sweden's  
innovativeness, aiding sustainable  
growth and benefiting society



Sweden: 0,14% of the world's population



**20 cities in the world have a larger population than Sweden**



**North och South America**

- **USA:** Road/Vehicle Safety Innovation program
- **Brazil:** Industrial innovation program

**Europe**

EU FP7, ERAnets, INNOnet, INCOnets, AAL, Artemis, Eniac, EUREKA, COST, Eurostars, TAFTIE, IMI

**Nordic region**

ICT, e-Gov't

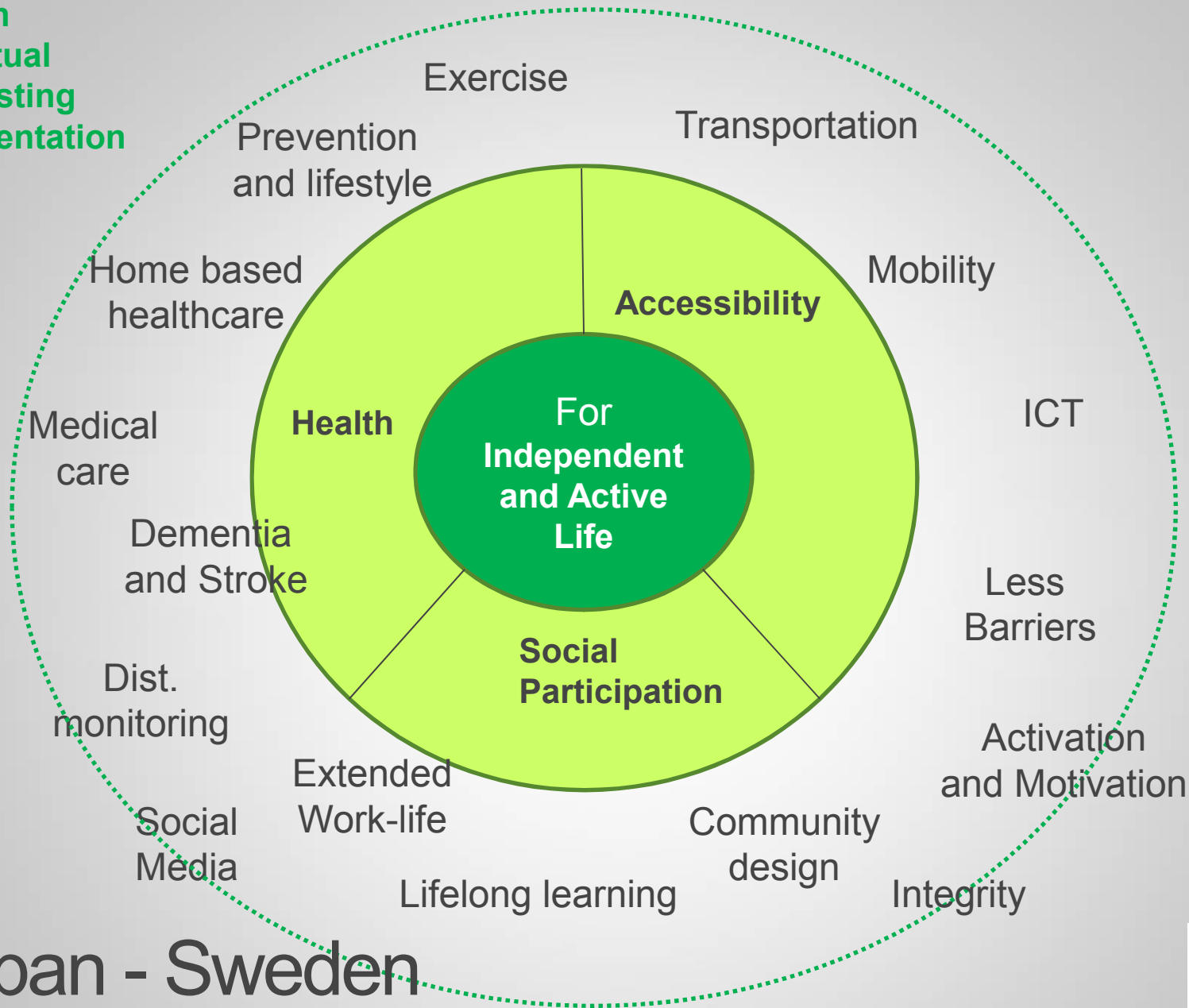
**Asia**

- **India**  
Biotechnology/health, ICT, e-Health program
- **Japan**  
MultiBio (JST), network projects (JSPS)
- **China**  
ICT, material science, clean tech

◎ Active government agreement in S&T and/or innovation
 ■ Formalized cooperation with budget

# VINNOVA's international co-operations and networks

e-Health  
Contextual  
Field testing  
Implementation



Japan - Sweden  
Silver Economy collaboration



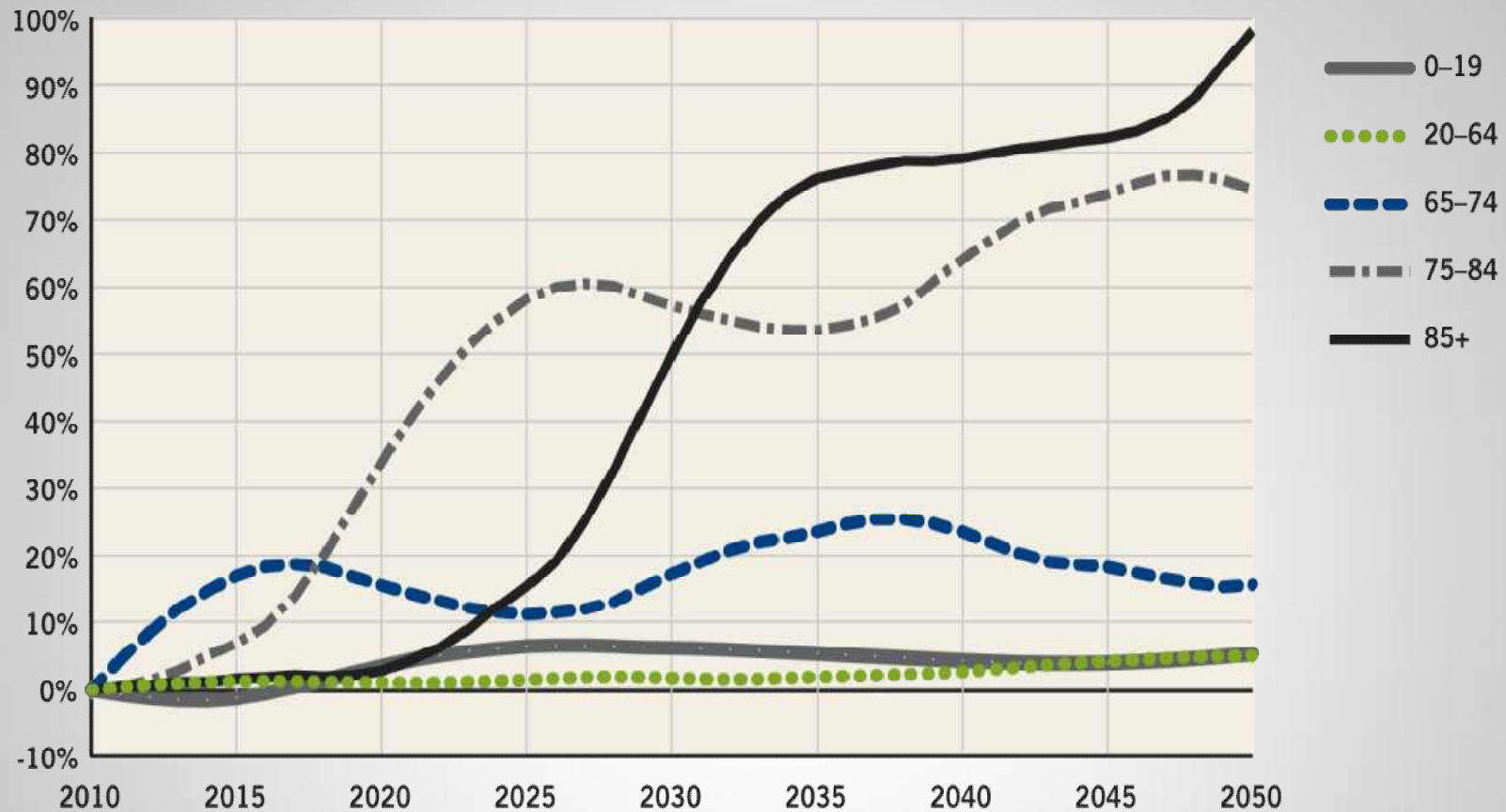
The image features a close-up of the Swedish flag, which consists of a blue field with a golden-yellow Scandinavian cross. The flag is centered on a solid green background. The text "Sweden's Characteristics" is overlaid on the cross.

# Sweden's Characteristics

# Demographic facts 2013

- Total population in Sweden is 9.6 million
- Percentage above 65 years

1900	8%
2013	19%
2030	23%
2050	25%

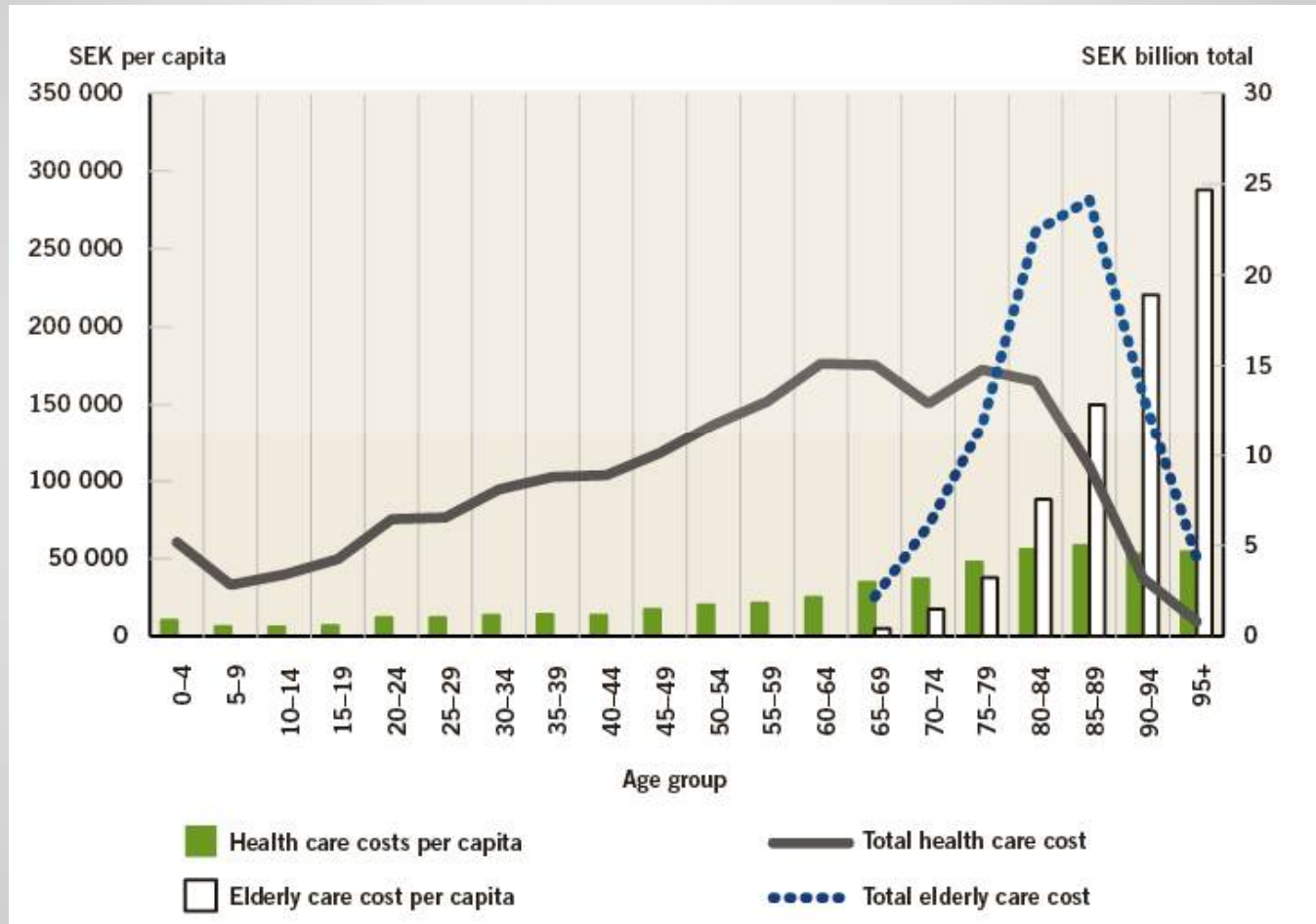


Sweden: Percentage change in number of people per age group 2010–2050 as compared with level in 2010

Source: Statistics Sweden 2010.

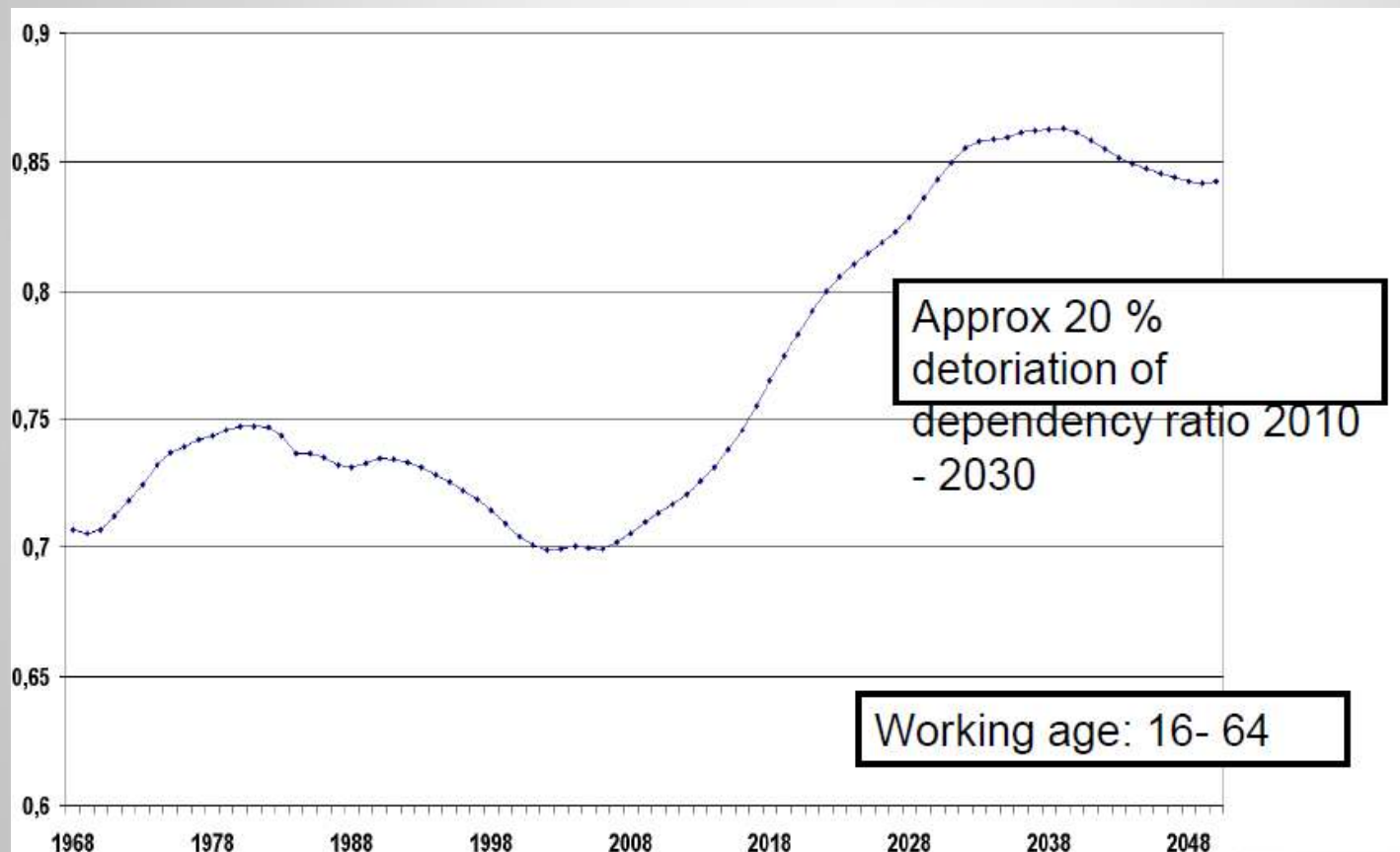
# Cost of Health and Elderly Care

total cost and cost per capita divided by age group in 2006



# Demographic dependency ratio

”How many people –apart from himself –every person in working age must support”



Ministry of Social Affairs initiative:  
<http://www.government.se/futureneedforcare>

# Result of analysis

→ By 2050 cost are expected to:

- increase by 70% for elderly care
- Increase by 30% for health care
- Increased ambition/technology level 80%

→ Health and elderly care share of GDP

- Increases from 13% to 16% (=13 billion Euro in current valuation)
- Cost today is 38 billion Euro

Financing models / Cost cuts  
OR  
Improving Efficiency / Innovation

# Crossroads

Ministry of Social Affairs initiative:  
<http://www.government.se/futureneedforcare>



Bild 13



# The new health and elderly care

- Physically active older people feel better; give greater physical activity opportunities
- Lifestyle and wellbeing focus
- Routine care is automated
- Doctors only meet patients with interesting diseases
- Personal contact with health care is through the personal mentor who is supported by AI
- Home diagnostics
- Contacts are initiated automatically or by a mentor for deviating lab results/habits
- Expanded screening allows disease detected in Stage 0 -> Health care instead of treating disease
- **Treat risk and not primarily diseases**



Ministry of Social Affairs initiative:  
<http://www.government.se/futureneedforcare>

## National level

### Parliament and Government

- Policy goals
- Legislation, Supervision, Financial control measures



## Regional level

### County Councils

- Providing health and medical care

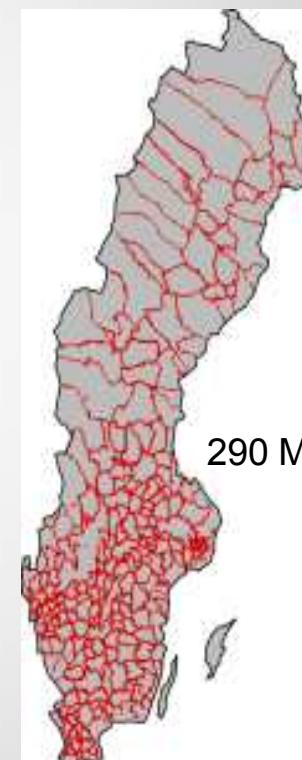


20 County Councils  
& Regions

## Local Authorities

### Municipalities

- Social services, housing and home-based elderly care



290 Municipalities

# Decision making levels

# Innovation in a political environment

– increasing the pressure for delivering value!



A stronger EU dimension in healthcare provides new possibilities – and challenges!

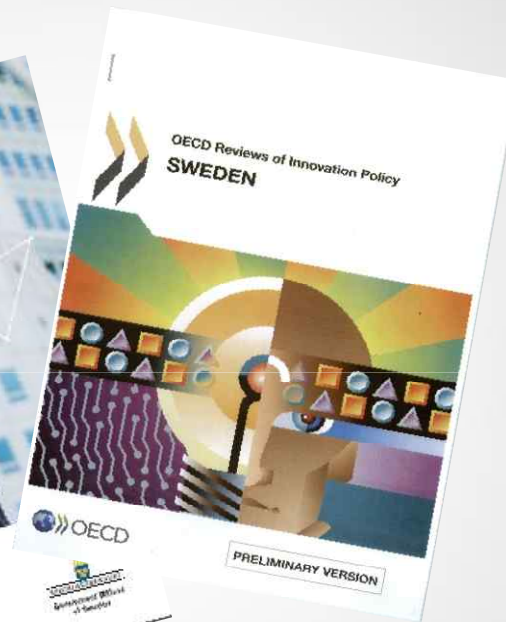
Key words for Swedish healthcare policy:

- Patient Empowerment!
- Patient Safety!
- Quality Assurance!

Focus for health innovations:

- Stimulate broad deployment!
- User driven innovation!
- Deliver measurable benefits!

Main challenge – build **public, political and clinical** support for innovation and change!



# Swedish Research and Innovation Policy

# What do we do?

- Funding R&D partnerships
  - Industry & Academia & Public sector
  - 3 months -> 10 years
- Policy development
  - Analysis
  - Proposals
- EU R&D framework
  - Swedish contact node



# Re-designing Public Services for Inclusion and Participation

## My Care Pathways

### → Increase patient commitment:

- Individualized patient information
- Inviting new actors to the market
- Facilitating co-production
- Encourage new services

### → Increase patient empowerment:

- Improved transparency in healthcare processes
- Let patients administer, own and manage their own processes

### → Broad collaboration:

- Care providers, national authorities, vendors and universities
- Open Data and Open Source for developers of health applications.



My Care Pathways – providing a new interactive approach in healthcare!

# IT-support for advanced home-care for cancer patients

To create a comprehensive set-up supporting home treatment by:

- IT support for video communication,
- remote communication with medical devices,
- integration with existing infrastructure, mobile
- communication with medical teams etc.



Challenge driven innovation

# VINNOVA is supporting the whole process – from idea to reality!



- Capture ideas from individuals and companies!
- Promote creativity!
- User-driven innovation!
- Creating projects!

**Innovation centers**

**Testbeds**

- Does it work?
- Does it provide value?
- Validate and demonstrate!
- Create generic implementation models!



- Identify innovation needs!
- Challenge the industry!
- Respond to the needs of your organization!
- Create new markets!

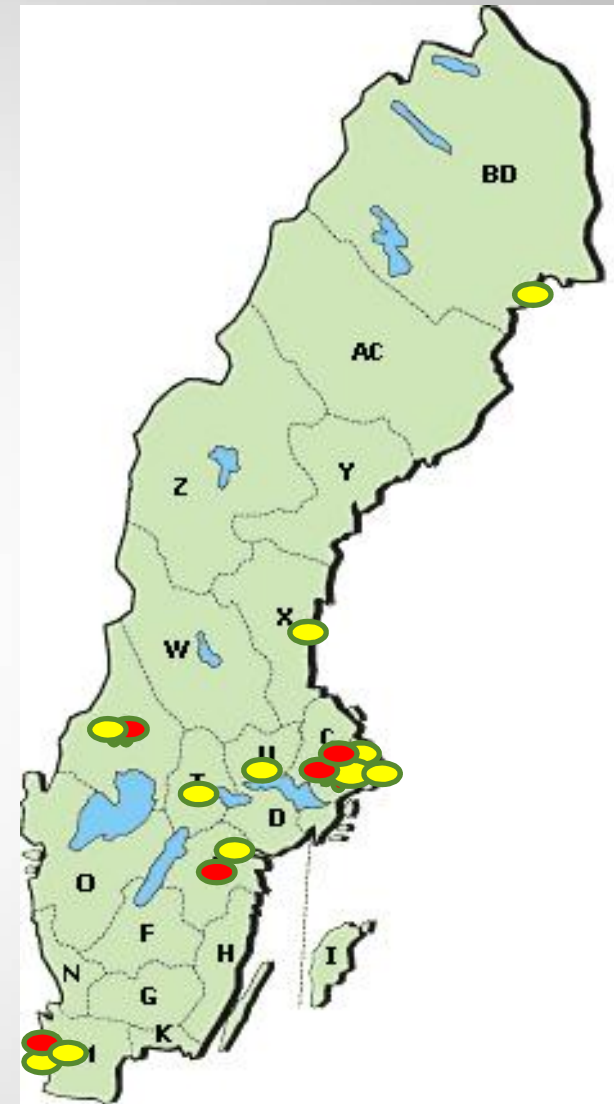
**Innovative Procurement**

# Ongoing projects

5 test beds 2012 

11 test beds 2013 

- Medical Technology
- eHealth
- Elderly care
- Individual-centered care
- Service innovation
- Telemedicine
- Radiation therapy
- Dental care



# Thank you!

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