## **Clusters and Cluster Policy in Europe**

### Professor Örjan Sölvell



### **1.EU and Cluster Policy**

### **2.Science – Innovation – Clusters**

### **3.The European Cluster Observatory**

Gateway to the European Union

#### WHAT THE EUROPEAN UNION DOES BY SUBJECT

CUMENTS

- Agriculture
- Audiovisual and Media
- Budget

Luropa

- Competition
- Consumers
- Culture
- Customs
- Development
- Economic and Monetary Affairs
- Education, Training, Youth
- Employment and Social Affairs
- Energy
- Enlargement
- Enterprise
- Environment
- External Relations

External Trade

SERVICES

- Fight against fraud
- Fisheries and Maritime Affairs
- Food Safety
- Foreign and Security Policy
- Humanitarian aid
- Human rights
- Information Society
- Institutional affairs
- Internal Market
- Justice, freedom and security
- Public Health
- Regional Policy
- Research and Innovation
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- Transport

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### **The Lisbon Strategy**

"The most dynamic and competitive knowledge-

based economy in the world capable of

sustainable economic growth with more and

better jobs and greater social cohesion, and

respect for the environment by 2010"

### **EU and Clusters – Three Policy Areas**





DG Internal Market Microeconomic Framework Conditions = Policies for Clusters



### **EU and Lisbon Strategy**



**Critical Parts of the Lisbon Strategy:** 

Research (ERA, 3% of GDP 2010, FP 7, European Research Council)
Intellectual Property (EU Patent)
Competition (Internal market)
Public-private cooperation (European Technology Platforms)
Innovation (EIT, Lead market, CIP)
Supporting SMEs



### EU and Clusters – A Careful Start



First meeting by DG Enterprise in Luxembourg in 2003 – Focus on clusters

Several studies around the time of accession of EU-10 countries: Phase I = map clusters of Eastern Europe, 2004/2005

### Innovation Strategy – 2006 Innovation + Clusters = True

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS



#### The Aho Report

# Putting knowledge into practice: A broad-based innovation strategy for the EU

2.4. Promoting cooperation between stakeholders Being part of a cluster is an important competitive strength for business. Clusters help to close the gap between business, research and resources, thereby bringing knowledge faster to the market. Successful clusters promote intense competition along with co-operation. They enhance productivity, attract investment, promote research, strengthen the industrial base, and develop specific products or services and become a focus for developing skills. World-class clusters attract brilliant minds that sustain innovation – Silicon Valley is the best-known example.

### EU and Clusters 2008 Central to Lisbon Strategy

Database part of Europe INNOVA/PRO INNO/Cluster Alliance: Phase II = European Cluster Observatory, 2007

Need for better informed policies – number of cluster programs and cluster initiatives growing rapidly - European Cluster Memorandum 4x5 Principles, 2008

#### THI EUROPEAN CLUSTER

Promoting European Innovation through Clusters

> Prepared by The High Level Advisory Group on Clusters, chaired by Senator Pierre Laffitte.

> > This work is conditioned by the Centre for Stategy and Competitionwest, Disclosies School of Economics and performed and at the Competition Statemets of the Descene Commission

New call in 2009-2012 under CIP: Phase III

#### THE EUROPEAN CLUSTER MEMORANDUM

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• Now we need an innovation and cluster strategy!

- We need better and deeper information through the Cluster Observatory!
- And we need a European highlevel Advisory and Monitoring Group for Innovation and Clusters!

### Milestones 2008 – Cluster Policy

Stockholm January 2008 (Chair: Slovenia/Sweden) EU Ministers of Industry/Enterprise

Lyon October 2008 (INNOVA)

Sophia Antipolis November 2008 (Chair: France) EU Ministers of Industry/Enterprise



### **Future: DG Enterprise and Clusters**



**Cluster policy group** 

-Around 20 people Policy, industry, experts -Secretariat

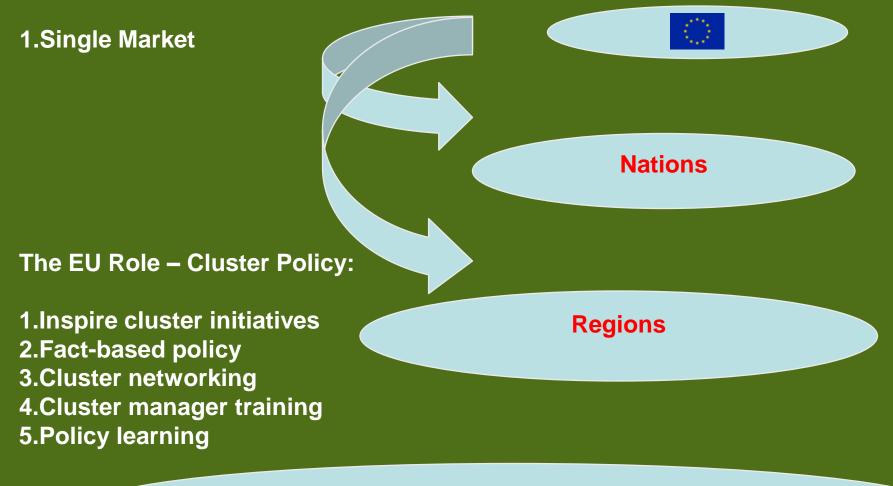


	European Cluster Alliance -INNO-Net -Think tank -Policy learning -Continue to promote the Memorandum				
European Cluster Observator -New data and analysis -Platform for SMEs	Cluster Academ -Training of clus managers				

-Certification

### **EU and Clusters**

The EU Role – Policy for Clusters:



**Local Communities** 

### **Cluster Initiatives**

#### **Public-Private-Academic Organized Efforts:**

- 1. Human Resources
- 2. Cluster expansion
- 3. Commercial cooperation
- 4. Internationalization
- 5. Innovation & technology
- 6. Business environment

Intelligent Vehicle Safety Systems – IVSS:

Saab Volvo Volvo Cars Scania Vägverket Scandinavian Automotive Suppliers Invest in Sweden Agency Vinnova



Automotive Crash Research – SAFER:

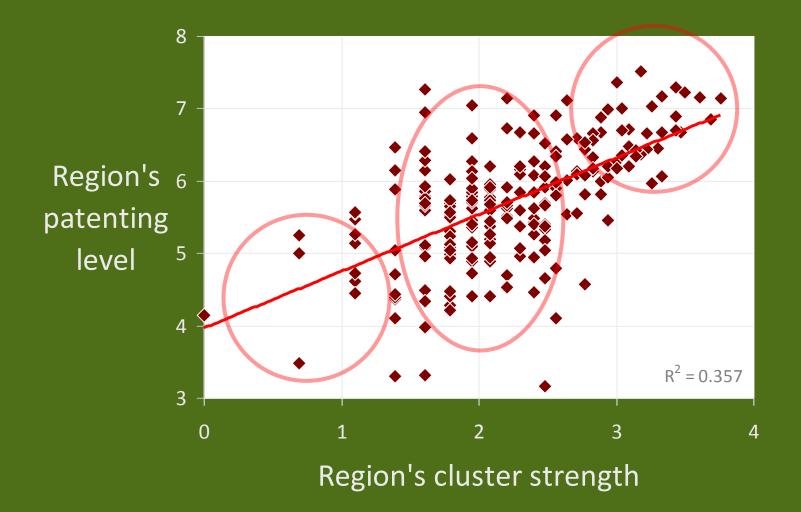
Chalmers University Vinnova Automotive firms

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### Clusters = Innovation



Each region's number of cluster stars (log) vs its number of patents (log), adjusting for country-level differences other than cluster strength. Source: The European Cluster Observatory

### Clusters



### **CERN** and Geneva

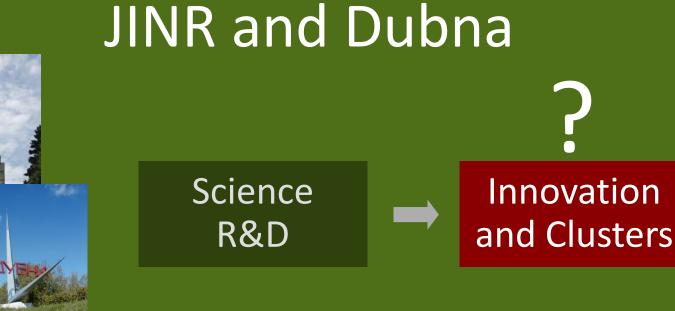


R&D

### SLAC and Silicon Valley



R&D + Innovation & Clusters





Joint Institute for Nuclear Research (JINR):

18 members (Armenia, Azerbaijan, Belarus, Bulgaria, China, Cuba, Czech Republic, Georgia, Kazakhstan, Moldova, Mongolia, North Korea, Poland, Romania, Russia, Slovakia, Ukraine, Uzbekistan, Vietnam)

Founded 1956

8 laboratories and university centers

5,500 staff + 1,200 researchers (>1,000 PhDs)

#### **Free Economic Zone:**

Registered 2,000 start-ups in 2 years – no international success so far New state corporation for nano-technology (5.5 billion USD)



Europe needs to shift focus from R&D and Science to Innovation and Clusters

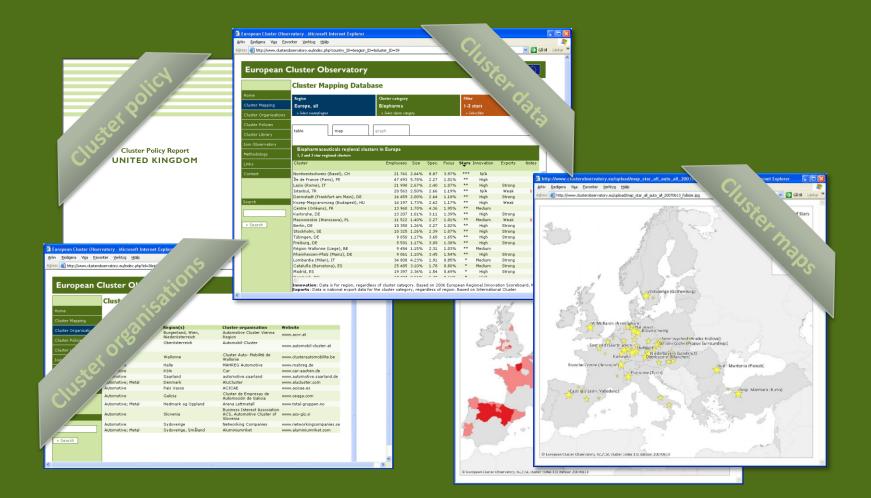


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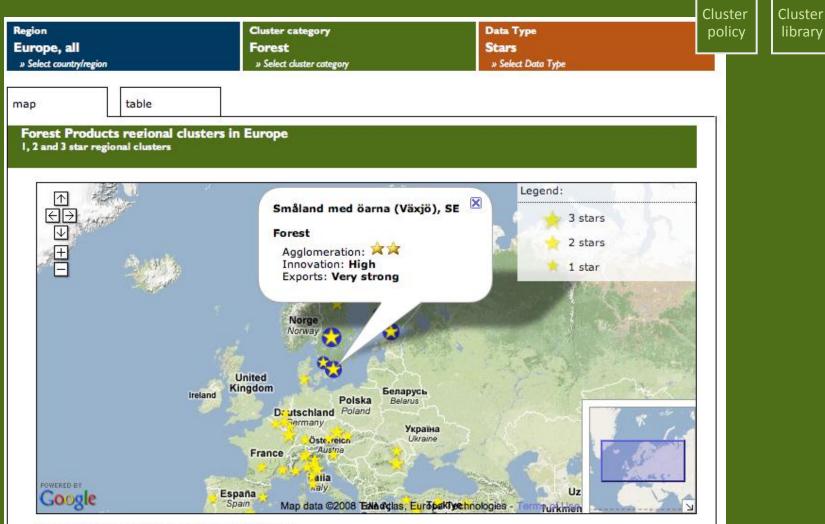
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### European Cluster Observatory www.clusterobservatory.eu



### Statistical Cluster Mapping Star Map

Cluster C mapping

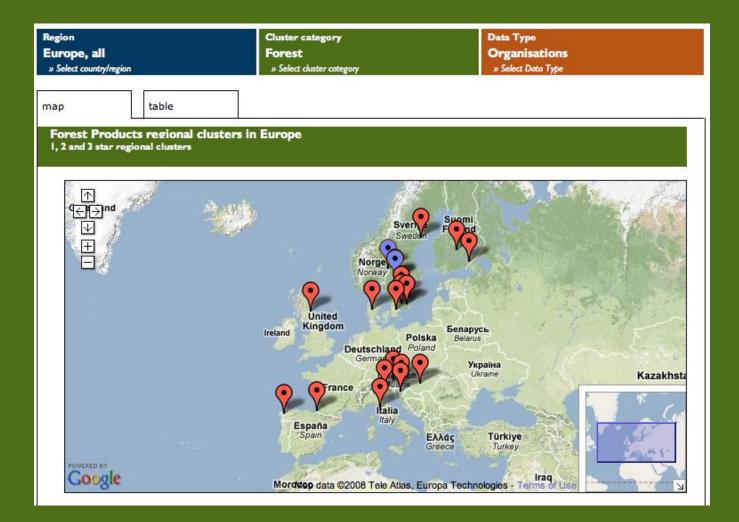


Please click on a region to see more information.

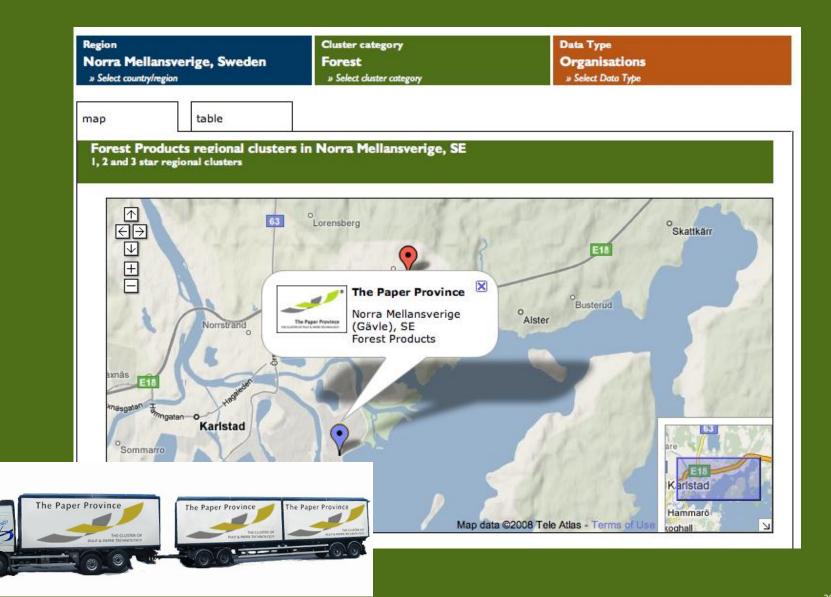
• - blue background indicates that the cluster is situated in a region with high innovation performance and that the country has very strong exports in the given cluster category.

# **Cluster Organisation Map**

Cluster mapping Cluster policy Cluster library



## Karlstad – Pulp and Paper



# **Cluster Organisation Table**

Region Europe, all » Select country/region		Cluster category Forest » Select cluster category		Data Type Organisa » Select Do	ations		
map	table						
Forest Products regional clusters in Europe I, 2 and 3 star regional clusters							
Logo	Organisations	Req	ion Clus	sters	Website		
The Paper Province In Clarific or And Science Cart	The Paper Provin	ce	Norra Mellansverige (Gävle), SE	Forest Products	www.paperprovince.com		
	T Tretorget AS		Hedmark og Oppland (Lillehammer), NO	Forest Products	www.tretorget.no		
	Basque Paper Clu	uster	País Vasco (Bilbao), ES	Forest Products	www.clusterpapel.com/ingles		
	Central-Transdar Furniture Industr		Kozep-Dunantul (Székesfehérvár), HU	Forest Products	www.kdrfu.hu		
	Cooperation and	Innovation Award	Galicia (A Coruña), ES	Forest Products	www.clustermadera.com		
	Distretto Cartario	- Paper Cluster	Toscana (Florence), IT	Forest Products	www.distrettocartario.it		
	Holzcluster Salzb	urg	Salzburg, AT	Forest Products	www.holzcluster.at		
	Holzcluster Steie	rmark	Steiermark (Graz), AT	Forest Products	www.holzcluster- steiermark.at		
			Småland med öarna	Forest			

#### Cluster Cluster Adding New Members.... mapping orgs Cluster Cluster policy library R **The Paper Province** THE CLUSTER OF PULP & PAPER TECHNOLOGY XX Zea CLUSTER 2520-CONSTRUCTION MECHATRONIK BIOVALLEY MES **RLD STYRIA** The Life Sciences Network Pôle de compétitivité Nutrition Santé Longévité uskadi CLUSTER GARRAIO-LOGISTIKA CLUSTER TRANSPORTE Y LOGÍSTICA

# Thank you!

www.clusterobservatory.eu