



**Commercializing scientific research and developments (CSRD)**

**MINSK BELARUS 06-07 February 2012**

*organised by the*

**E.U. D.G. Enlargement - Institution Building Unit**

**Technical Assistance Information Exchange Instrument of the European Commission**

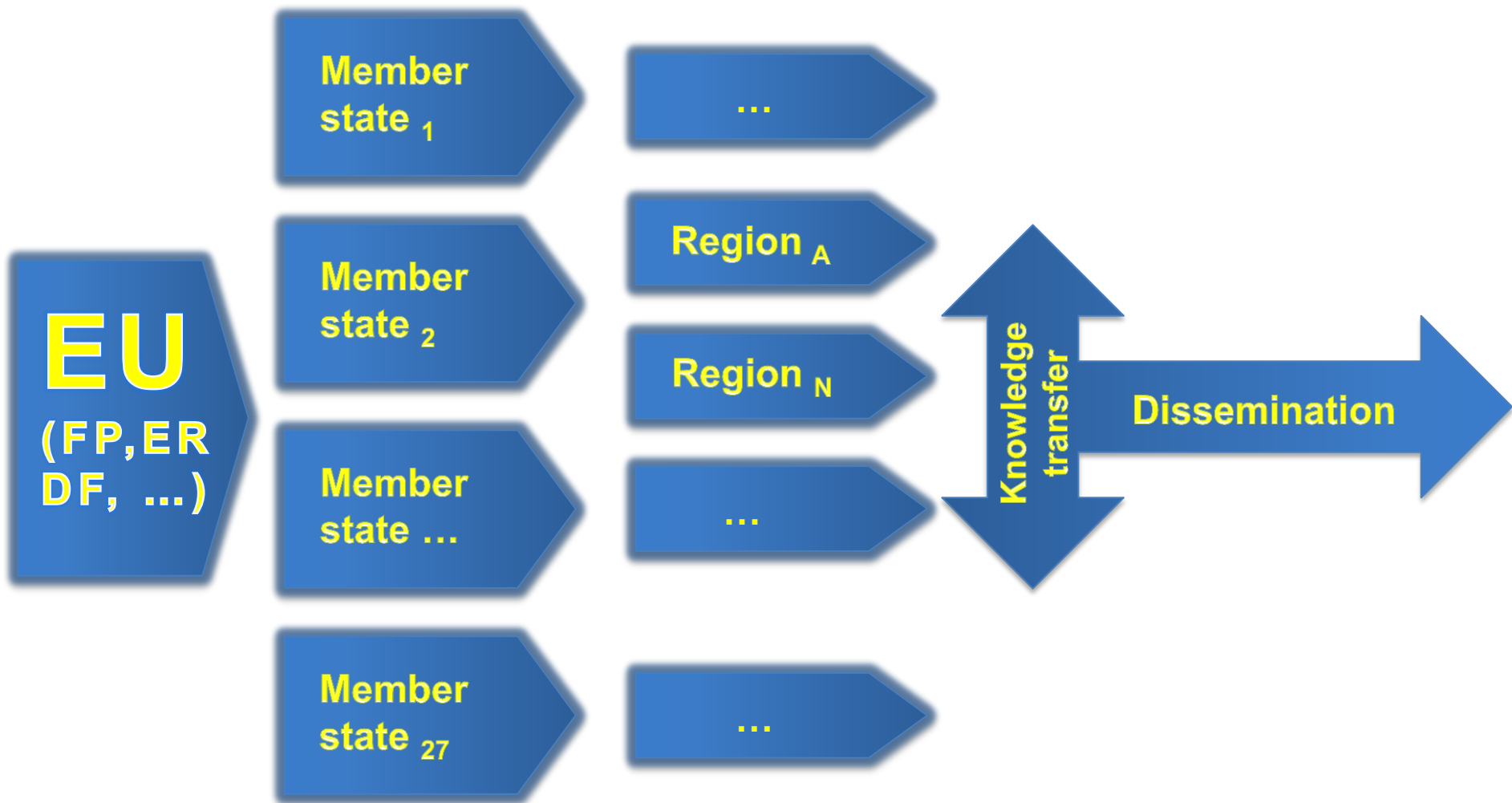
*in co-operation with*

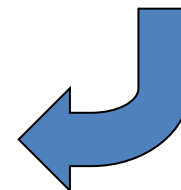
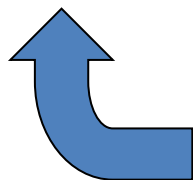
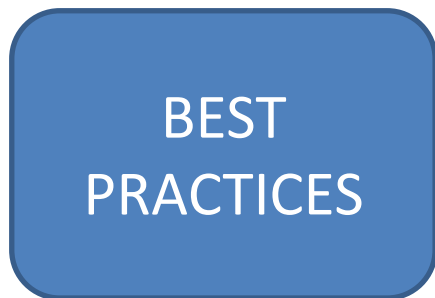
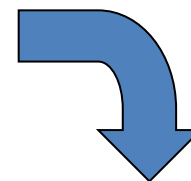
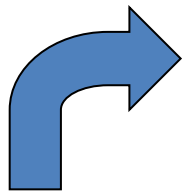
**State Committee on Science and Technologies, Belarus**

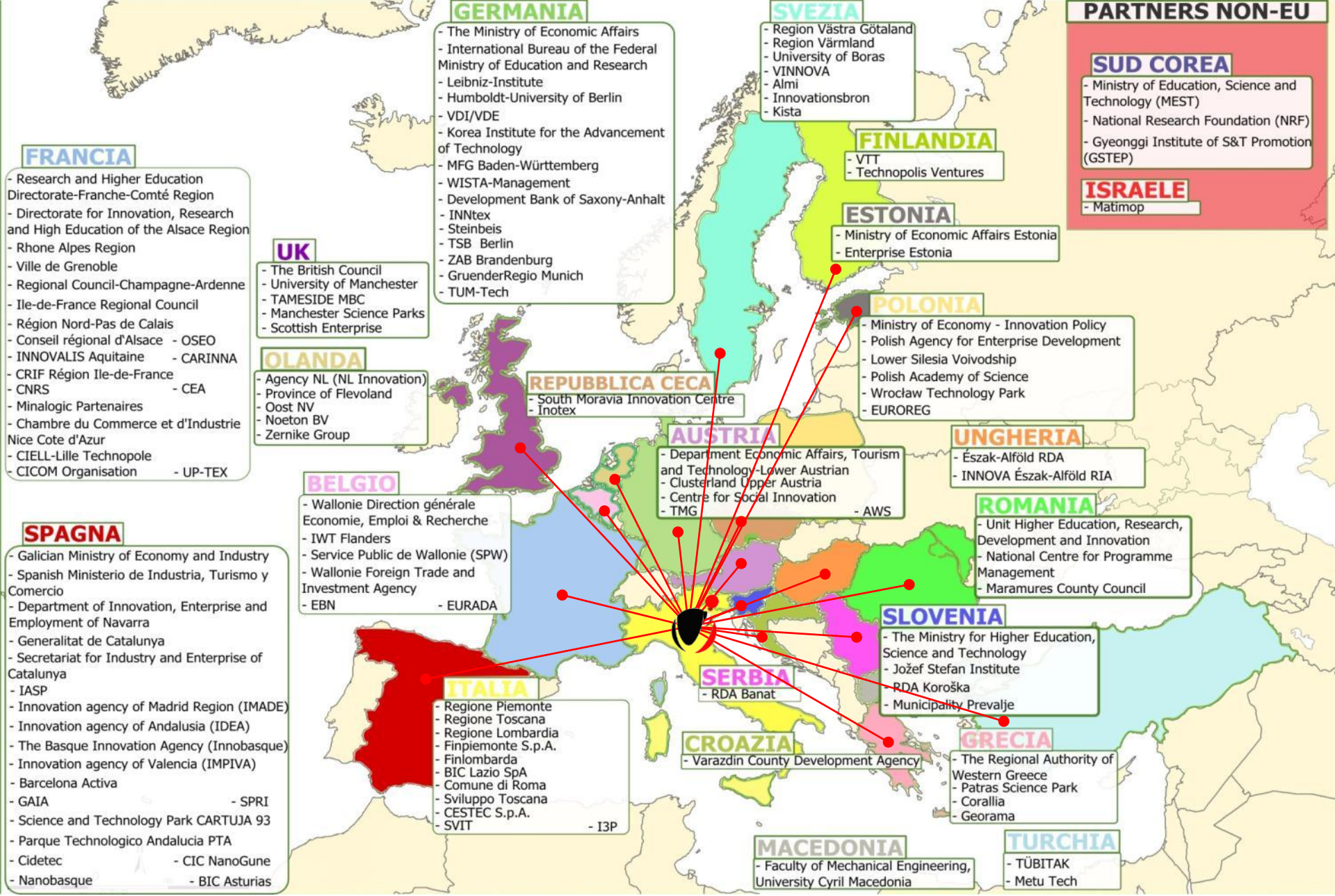
**Veneto Innovazione:**

**Best practice in regional innovation strategies and using research based clusters to stimulate economic development**

**Prof. Giorgio Simonetto C.E.O. Veneto Innovazione SpA**







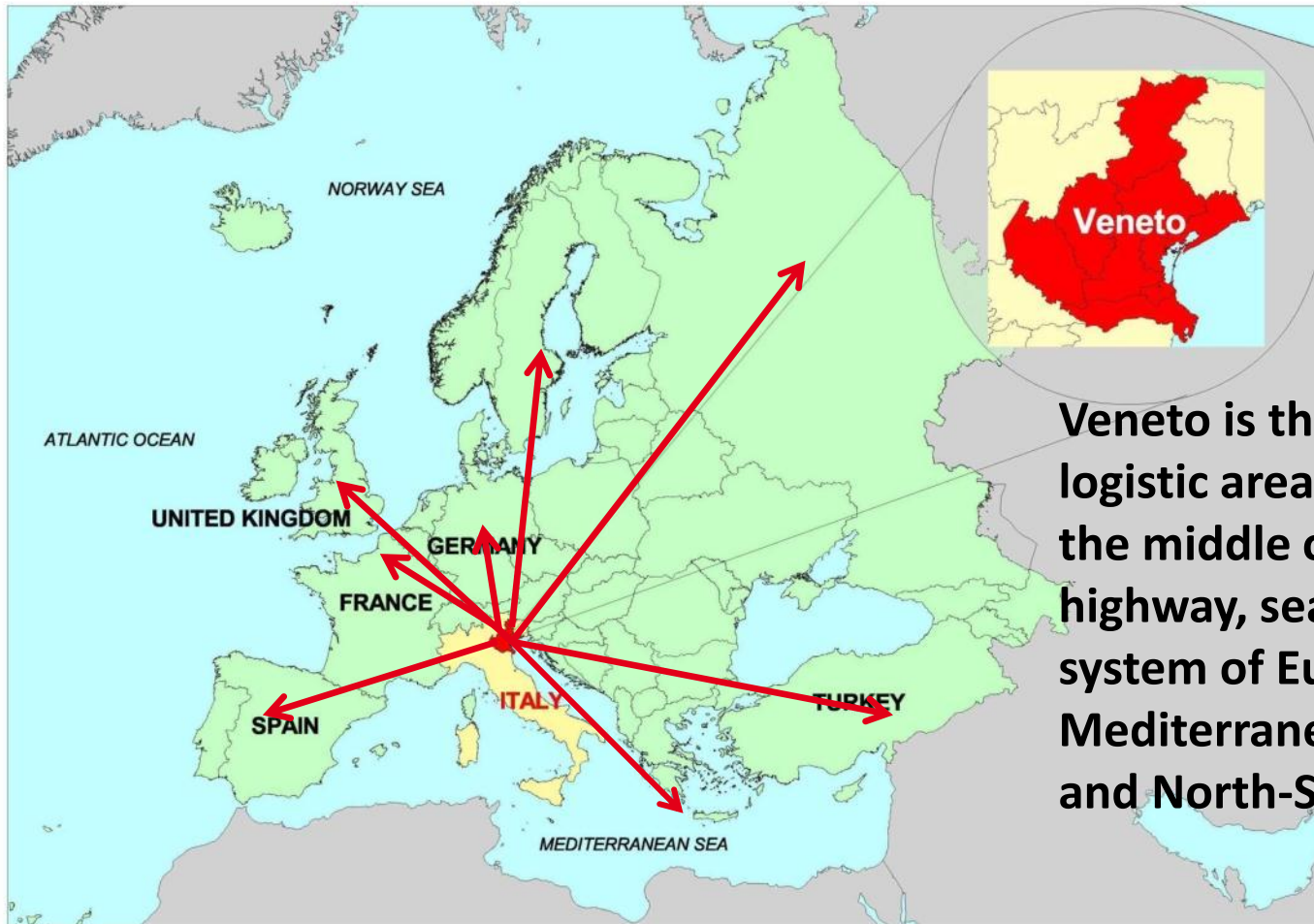


## *Veneto region*

**Systemic characteristics [i.e. institutions (as role of the play), national bank Law, clusters (regional law), social and cultural strong differentiation among regions, urban development, infrastructures, etc.] that affect the conceivable policies and strategies**



# *Veneto region*



**Veneto is the second main logistic area of Europe, in the middle of main railroad, highway, sea-highway system of Europe and Mediterranean [East-West and North-South]**



## Veneto region at a glance

POPULATION	<b>4.912.507 (8,1% on total Italy)</b>
EMPLOYEES	<b>2.342.000</b>
EMPLOYMENT RATE	<b>64,6% (Italy : 57,5%)</b>
UNEMPLOYMENT RATE	<b>4,8% (Italy: 7,8%)</b>
WOMEN EMPLOYMENT RATE	<b>54% (Italy: 46%)</b>
GDP	<b>141,5 billion Euro (9,3% on Italy)</b>
NUMBER OF BUSINESSES	<b>458.352 (8,3% of Italy)</b>
EXPORT CAPACITY	<b>39,3 billion Euro (13,5% on Italy)</b>



Provinces, Veneto, Italy year : 2011 (III <sup>o</sup> quarter) K€	Export							Total Veneto year : 2011 (III <sup>o</sup> quarter) K€	Total Italy
	Belluno	Padova	Rovigo	Treviso	Venezia	Vicenza	Verona		
<b>TOTALS</b>	2.059.000	6.165.000	982.000	8.107.000	2.868.000	10.785.000	6.565.000	<b>37.531.000</b>	279.739.000

Source: Veneto Region Statistic, 2011

I personally don't like gambling, that I don't give credence to bookmakers, like Standard & Poor's or Moody's or whatever, I eat blood over every coin I gain and I am still waiting for an explanation about the "A" rating given to Lehman Brother's till the day of bankruptcy, but please turn your eyes below.

<b>Greece per year K€</b>	<b>Total</b>	<b>3.323.435</b>
---------------------------	--------------	------------------

Source: Greece Foreign Ministry





## *Veneto Companies in international market*

- In Veneto there are 972 IMN, that is, Veneto companies holding stakes in at least one foreign company.
- Foreign companies held by them are 3.168; they employ 140.998 people abroad, with a turnover of 24.173 million euro.
- Controlling stakes amount to 85,9% of subsidiary companies, providing work for 87,9% of employees abroad and 91,4% of turnover.
- Veneto multinational companies represent 15,1% of Italian multinational companies, 13,9% of foreign subsidiary companies, 10,4% of employees and 5,2% of turnover.
- Regarding controlling stakes, Veneto confirms its 14,7% of national total referring to the number of investors, still it gets higher to 15,3% of foreign subsidiary companies. Their number of employees amounts to 12,3% and their turnover to 6%.



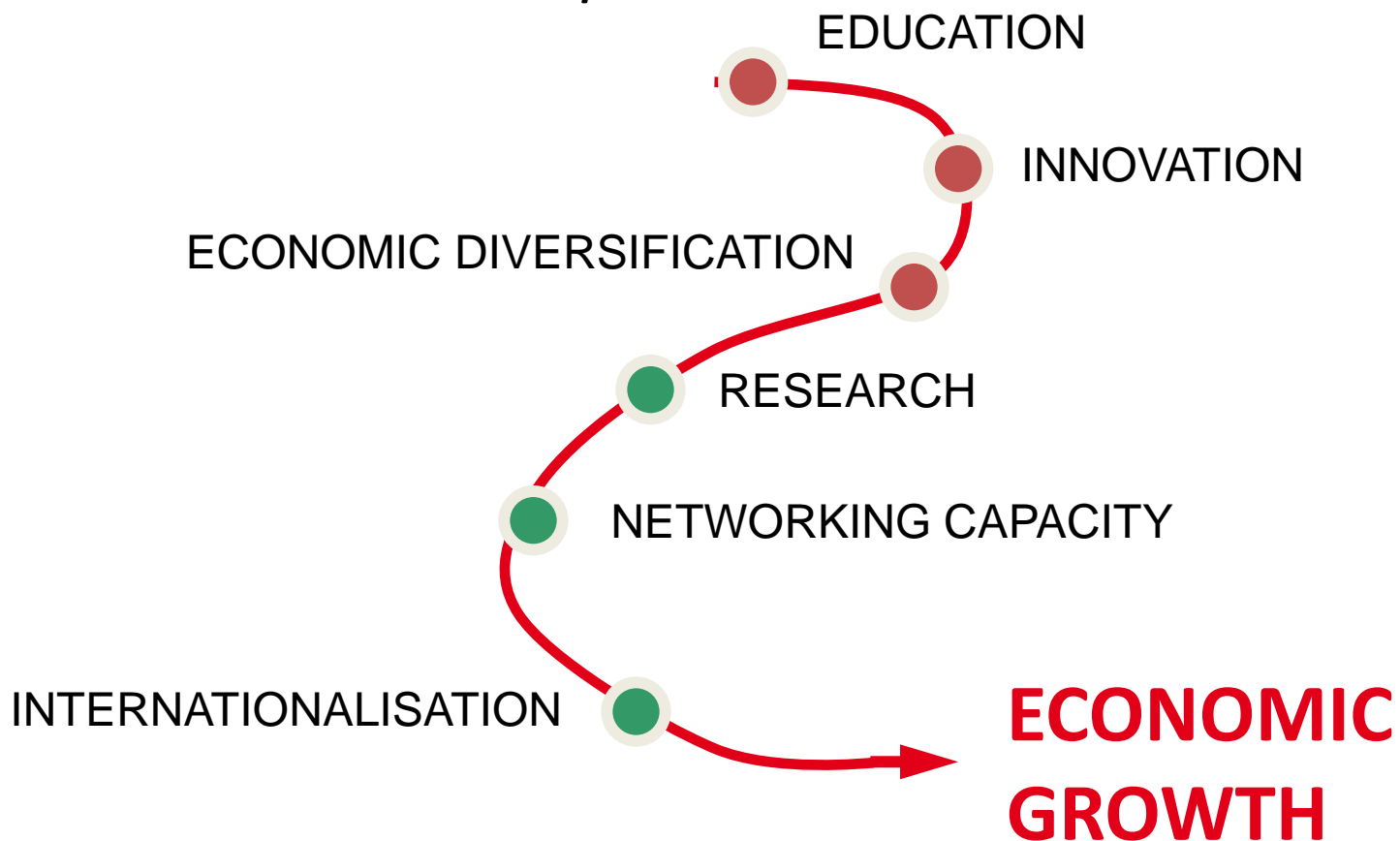
## *Foreign companies based in Veneto region*

- In Veneto there are 460 IMN, that is, foreign companies holding stakes in at least one company based in the region.
- Participated companies held by them are 584; they employ 48.986 people, with a turnover of 24.484 million euro.
- Controlled companies amount to 88,2% of participated companies, providing work for 86,0% of the employees and 90,1% of turnover.
- Multinational companies based in Veneto represent 11,0% of multinational companies based in Italy, 7,7% of participated companies, 5,3% of employees and 4,9% of turnover.
- The main businesses managed in Veneto by them are manufacturing activities (42,5%) and wholesale trade (38%).
- The most important source countries are: 64,4% EU15, 16,8% US and Canada, 8,2% Asia (half are from Japan) and 7,4% from other EU countries



## *The model*

### *Veneto pillars*





# Education

108000 STUDENTS  
(2010/2011)

**4 UNIVERSITIES**

**24 FACULTIES**

**11 Departments**

**11 INTER-UNIVERSITY  
CONSORTIA**

20.434 GRADUATED  
(2010/2011)



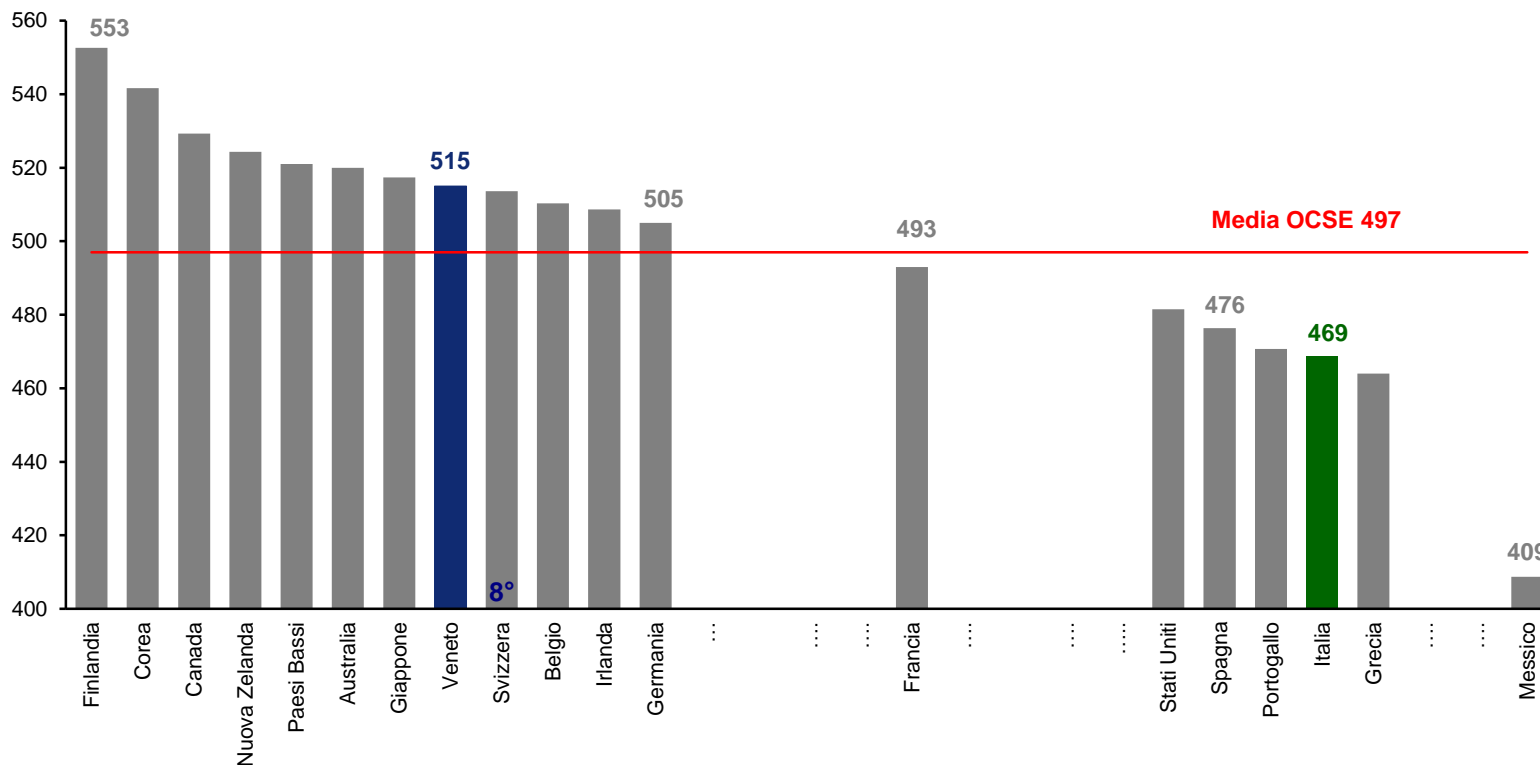
new materials, nanotechnology,  
engineering, etc

Biotech, chemistry, life  
sciences, architecture,  
hydrogen, cultural  
heritage, economics ,  
etc.



# Education

International ranking of competences and skills acquired about sciences and mathematic by high school students in the Veneto Region (Italy)





# *Innovation*

## **REGIONAL INNOVATION ACT**

**(18 may 2007)**

PROMOTION AND COORDINATION OF  
SCIENTIFIC RESEARCH, ECONOMIC  
DEVELOPMENT AND INNOVATION IN THE  
REGIONAL PRODUCTIVE SYSTEM





# Research

## THE PUBLIC RESEARCH SYSTEM

NATIONAL RESEARCH COUNCIL	Non-oil energy, Nuclear Physics, Materials Physics, Maritime Science
3	Science Parks
5	Business Incubators
26	Innovation Centres
110	Industrial Research Facilities
1	REGIONAL INNOVATION AGENCY

**More than 5000 Researchers**





# Aims and contents of policies for supporting clusters

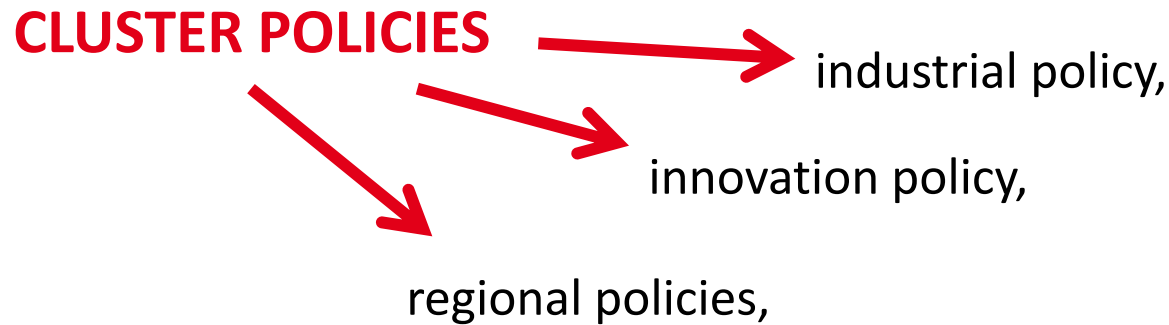
- Policies to support clusters and networks of enterprises have the aim to:
  - stimulate **critical review** and promote concrete cases of evolution of enterprise organizational schemes towards **models of strategic collaboration**, thus filling the gaps in business culture and organizational capacity that hinder the described processes of **spontaneous evolution**;
  - contribute to determining **market opportunities** for facilitating the diffusion of clustering experiences and stabilization over time of their success conditions, thus establishing this model as **a new organizational paradigm for enterprise networks**.





# Aims and contents of policies for supporting clusters

- It is necessary to promote **stable market conditions that create or reinforce:**
  1. the cultural base
  2. the system of expediencies
  3. the processes of interaction and continuous learning between the local players, that can assure durable mechanisms for the diffusion of the advanced clustering model.




This means that countries lacking official “cluster policies” may have action programmes that have a positive impact on the growth and development of the clusters.

In general, cluster policies can be divided into two types:


1. Those supporting the growth of regional clusters that already exist or are at an embryonic stage.
2. Those stimulating knowledge-based industrial development.



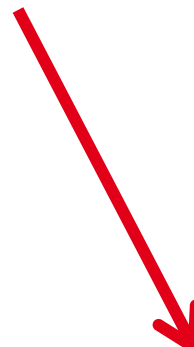
## POLICIES TO **SUPPORT** CLUSTERS



involve a change in perspective from individual enterprises to local or regional systems of enterprises, for the development of a high value-added environment for entrepreneurial activity.



serve the interests of local aggregations of SMEs rather than being linked to large enterprises.



favour processes of indigenous growth that may conflict with the efforts made to attract foreign investments.



Developing bottom-up type policy actions characterized by the involvement of local authorities, industry and key professionals.



## REGIONAL CLUSTERS



Developing a clear role for public authorities as facilitators or brokers amongst enterprises



Encouraging interaction based on mutual trust to increase the flow of knowledge between local



- **The policies to facilitate clusters can be defined as:**

“initiatives capable of promoting linkages within the entrepreneurial environment through dialogue between the public and private spheres, defining the needs and requests common to the research project and fostering common and parallel development of relationships upstream and downstream of the production chain” (Boekholt, Thuriaux, 1999).



The **Cluster Policy White book** divides cluster support policies into 5 types:

1. **Networking policies**: to facilitate and increase the value of dialogue and collaboration.
  - Creation of linkages between enterprises through the creation of spaces for dialogue;
  - Measures to bring together research and enterprise;
  - Support for linkages that foster the valorization of knowledge through the development of public-private partnerships;
  - Identification of measurement indexes and data collection suitable for measuring the level of development of a cluster.



2. **Demand-side policies**: openness to new ideas and innovative solutions.
3. **Training**: acquisition of essential skills for the development of clustering processes.
4. **Promotion of transnational linkages**: extending the traditional tools of industrial policy by lengthening the value chain outside national borders.
5. **Context policies**: developing an overall market environment in which there are consistent ground rules that facilitate transactions between the players present



## *Policies for clusters in Europe*

- European programmes and networks, such as the pilot scheme **PAXIS**, which the networks **IRE** (Innovating Regions of Europe) and **ERIK**, the network of Regions that develop Regional Programmes for Innovative Actions.
- **PRO INNO Europe** is an initiative of Directorate General Enterprise and Industry which aims to become the **focal point for innovation policy analysis and policy cooperation in Europe**, with a view to learn from the best and contribute to the development of new and better innovation policies in Europe.





## *Policies for clusters in Europe*

- The **European Cluster Alliance** was founded in 2006 by the partners involved in 4 cluster policy projects funded under the PRO INNO Europe initiative of the EC, with the aim to
  - **share the experience and** develop new and better cluster policies in the future;
  - **go beyond the identification of good cluster policies**
  - **become the single place at EU level** for improving cluster policies
  - **raise the level of excellence and efficiency of cluster policies** in Europe.



## *TACTIS project*

- **TACTIS**, project launched under the Directorate General Enterprise and Industry of the European Commission
  - to boost the activities of the **European Cluster Alliance** in the context of the **Pro Inno Europe** initiative, aims at contributing to the development of **better cluster policies** and **practical tools** in Europe.
- **Veneto Innovazione**, in charge of the marketing and branding task force, will set up an handbook which will **identify the best practices** in this field and the recommendations for policy makers.



## *Policies in Italy*

- National Laws

- Law 317/91
- Law 140/99



### **Main national objectives:**

**- to decentralize to a regional level the decisions regarding action to support industrial districts**

**- to recognize the territorial specificity of the districts and the need to delineate industrial policies capable of meeting specific local requirements**



# Clusters Model in Veneto



**High quality products and a strong relational intensity among customers and suppliers.**

**Economic system structured on spontaneous networks of businesses**

The sustainability of this model is based on:

- The **physical/ geographical contiguity**
- The **productive specialization**
- The **social capital**: the workforce's high specialization and competence
- The **plurality of actors playing as coordinators** of domestic activity and promotion to the outside.



## *The policies of the Veneto Regional Government*

**Law 4 April 2003 n. 8 (modified with law no. 5/2006)**

- Promote the development of the regional production system
- Define the main identification criteria
- Establish the identification procedures which define clusters and any other kind of production chain aggregation
- Define how to support the local development
- Activate strategic aggregation mechanisms,
- Facilitate bottom-up collaboration between local development promoters
- Foster the mobilization and concentration of resources on common development projects.



## *The policies of the Veneto Regional Government*

Law 8/2003 served as **an important innovation laboratory** for regional policies with the aim to plan or to direct:

- The **spontaneous concentration** in a given area of a specific type of production which establishes a community that is founded on personal relations.
- An integrated business system made up of Enterprises which share the same difficulties, itineraries, solutions, **enhancing know-how and developing innovation.**
- The grouping of businesses that could develop a **common identity** that manifests itself through their production.



## *Innovative Features*

- Not limited by local territorial constraints;
- Freely established and not imposed by the authorities;
- No direct funding to single enterprises, but support to shared projects;
- Instrument launched with the full participation of all the regional representative bodies.



## *The policies of the Veneto Regional Government*

### **Industrial cluster examples of financed activities:**

- Industrial research and pre-competitive development, knowledge exchange
- Research, innovation and technology transfer
- Reconversion of the work cycle and energy-saving interventions
- Taking part in European projects





# *Venetian Clusters & Meta-clusters*

**CLUSTER:** HORIZONTAL AND VERTICAL DIMENSIONS

**META-CLUSTER:** HORIZONTAL, VERTICAL, NONTERRITORIAL DIMENSIONS

**37 CLUSTERS & META-CLUSTERS**

**8.523 ENTREPRISES**

**270.579 WORKERS**

**290 BILLIONS OF EURO TURNOVER**



- Galileo Science and Technology Park
- Vega Science and Technology Park
- Star Science Park
- Certottica
- Fondazione La Fornace
- Venetonatotech NanoFab
- Politecnico Calzaturiero
- Promomarghera
- Ritex (evolving)
- SpinLab (evolving)
- Tecnologia & Design
- Thetis
- DIMAPLA (INNOVATION COMMITTEE)



# *Veneto Innovazione*

## *About us:*

- Veneto Innovazione was founded as a mixed joint-stock company public-private asset (520.000,00€);
- Regional Act N.45/1988 to support innovation and applied research in Veneto;
- In July 2009 the Veneto Region acquires private stocks
- On July the 30<sup>th</sup> 2009 the assembly votes the new statute and Veneto Innovazione is turned into an “in house” company.



## *Mission*

- **Innovation promotion**
- **Build the regional Innovation and Research system**
- **Systematic offer of a growing International network**
- **Technology Transfer**
- **EU best practices**
- **Foster the Excellence**





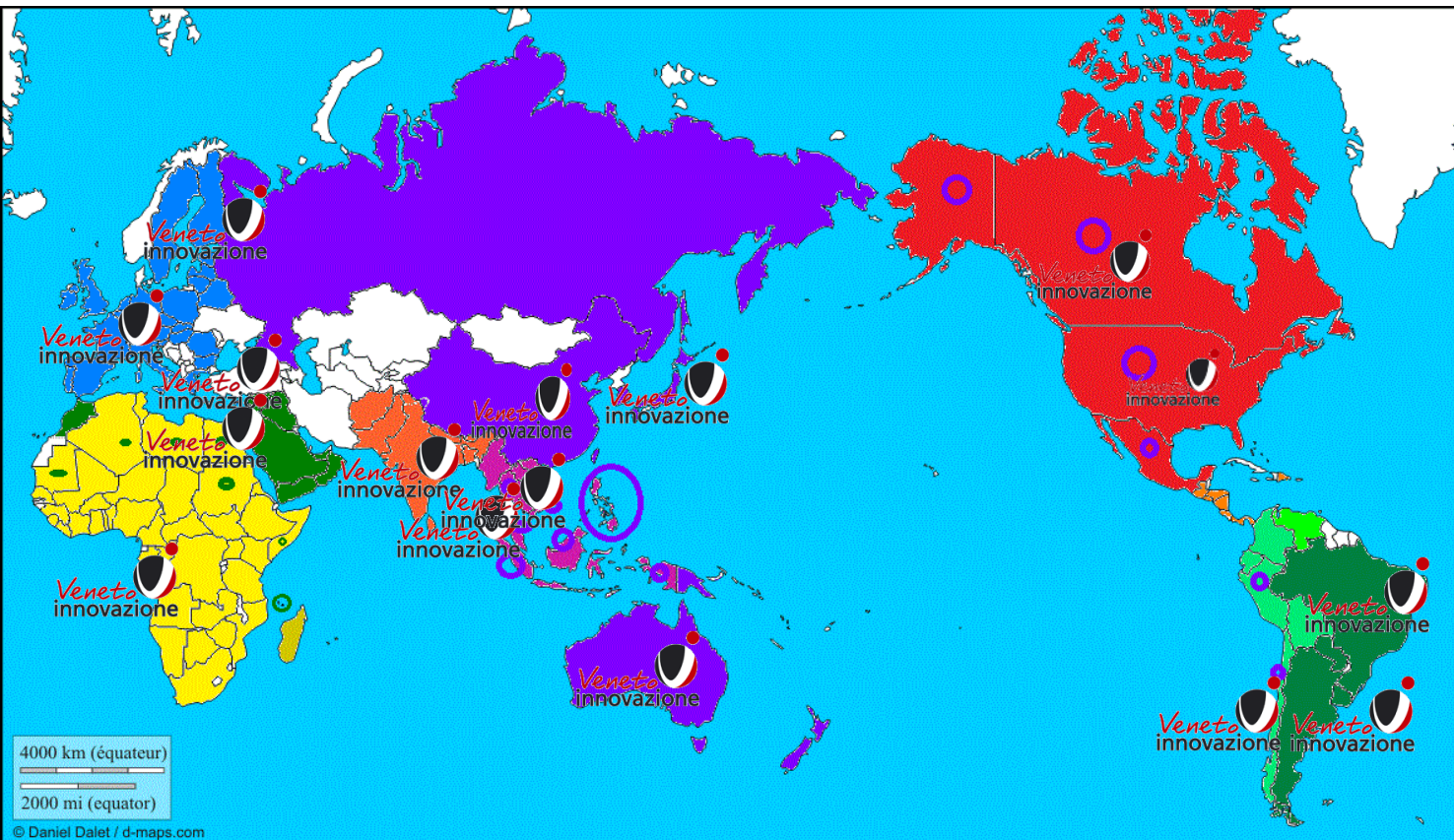
## EU Projects

- **T**RASNATIONAL INNOVATION POLICIES
- **S**ERVICES FOR INNOVATION
- **G**OOD PRACTICE EXCHANGE
- **I**NTERNATIONAL NETWORKING





Veneto Innovazione's international strategy became a best practice and now we will train other agencies, the map below is to be kept in mind.

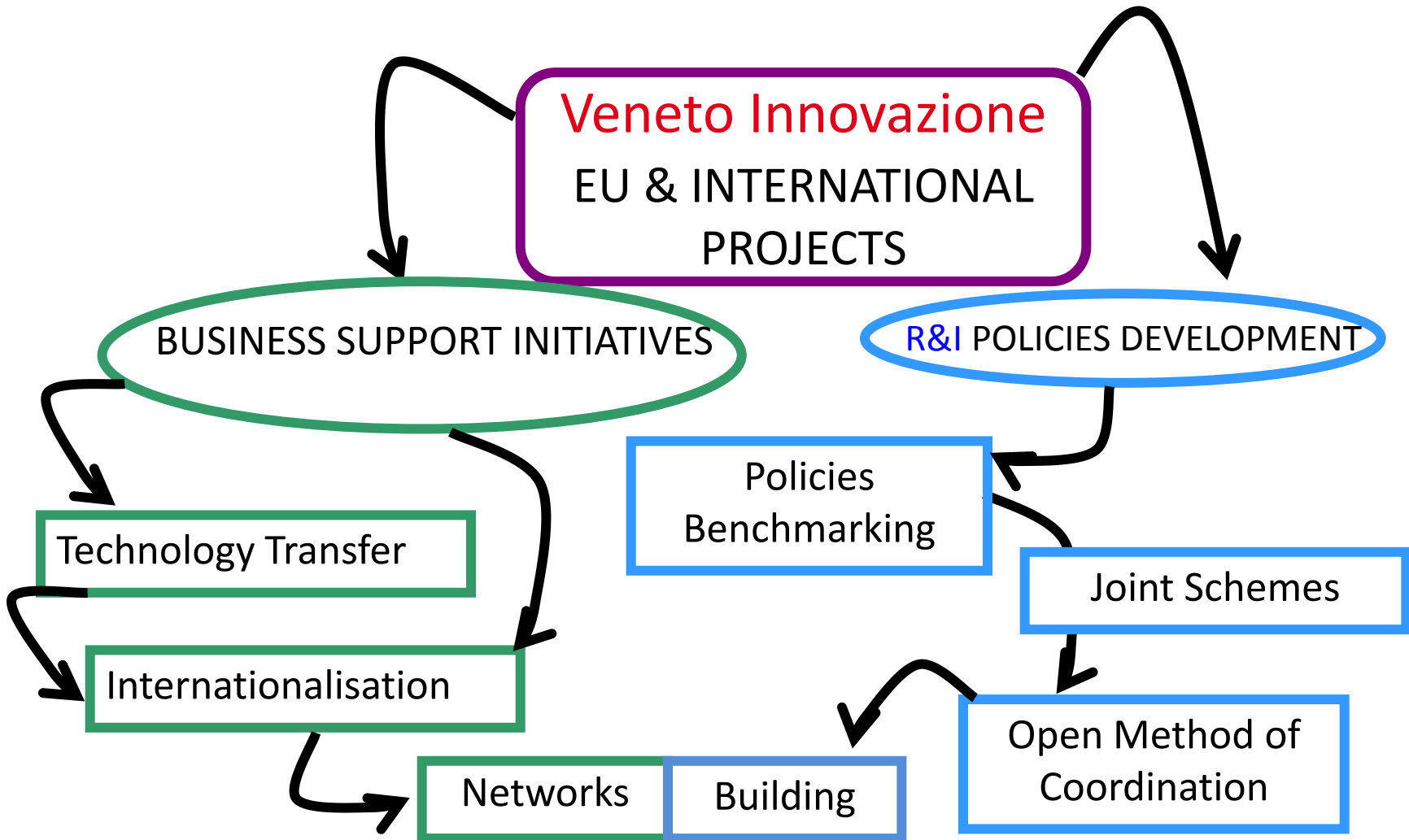


These are only some of the economic-political blocks and international net works that “cover” the world, some are very aggressive



## *Our involvement in international Clusters*

- Veneto Innovazione SpA takes part in the process making of EU regulations and institutions, adopted by EU, through the elaboration of plenty of so called “**best practices**” devoted to create the EU cluster system including R&D activities (private and public ones)
- Veneto Innovazione SpA has been lead or chosen partner in a number of EU projects to support the creation of clusters in economically critical areas and to design the future evolution of European clusters
- Veneto Innovazione SpA is involved in an UNIDO program called “SME Cluster Development Project” in Vietnam, taking part in a training workshop with local stakeholders in November 2011







## *Some international agreements*

- Scientific and technical collaboration agreement with the **Canadian Research Institute** INRS (Institut National de la Recherche Scientifique) with the opening of an office in the NAFTA area in Montreal
- Agreement for **bilateral exchange of researchers with Australia**, started on the following areas: cultural heritage, Food Quality and Safety, Nanotechnology and ICT.
- Agreement with the **Brandenburg Economic Development Board** in the sectors of economy, industrial research, innovation and technology transfer.



# Technology Transfer

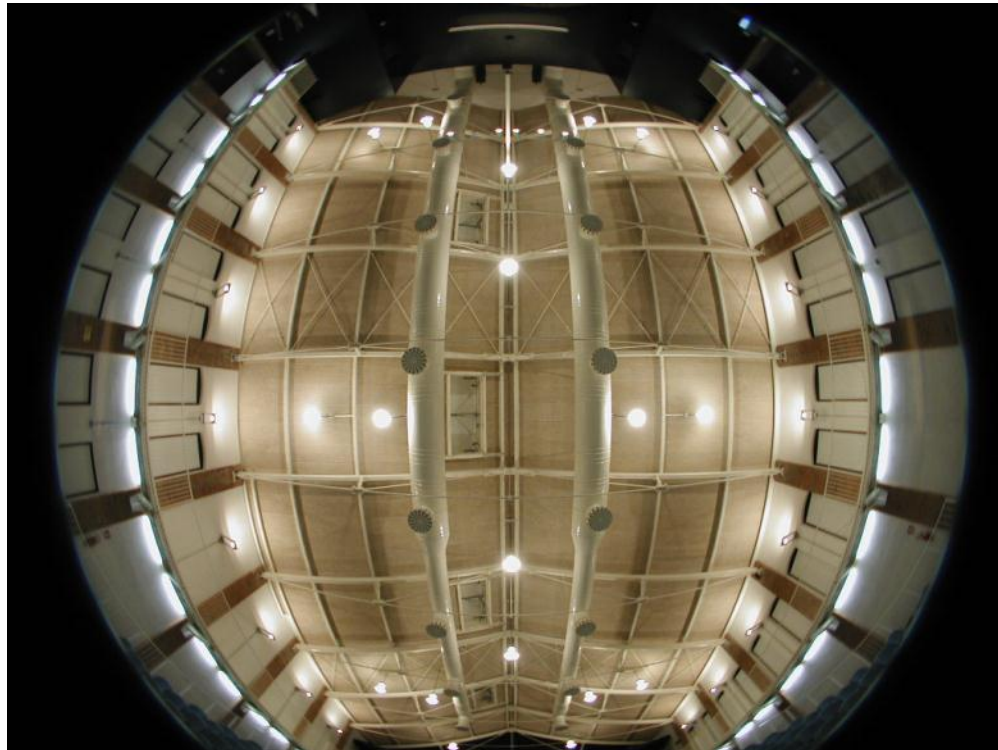
- The **Enterprise Europe Network** is a key instrument in the EU's strategy to boost growth and jobs.
- EEN is composed of more than **600** business support organisations from **48 countries**, promoting innovation and competitiveness.
- **Veneto Innovazione** is the reference of the entire Network for the technology transfer activities in Veneto region.
- As established by Canadian Foreign Ministry, Veneto Innovazione SpA, a small regional Agency is now mentoring Canada in joining EEN network





# *A strong networking mentality*

**9 out of 10  
Veneto citizens  
dream to be an  
entrepreneur.  
We strongly  
support them  
even  
internationally  
and our  
international  
partners are  
involved with  
**full reciprocity.****



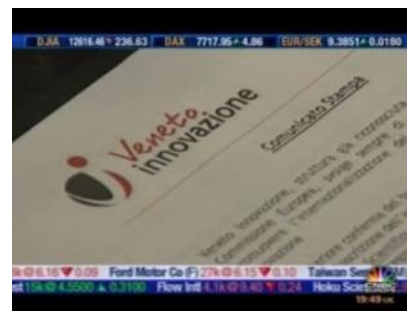


## *New partners*

We are currently looking for new partners in some strategic sectors:

- **Energy from renewable resources**
- **Hydrogen**
- **Biotechnology (medical)**
- **Nanotechnology (medical)**
- **Environmental technology**
- **Logistic**
- **ICT Information and Communication Technology**
- **Tourism**
- **Agri-food**







**KEEN** Regions

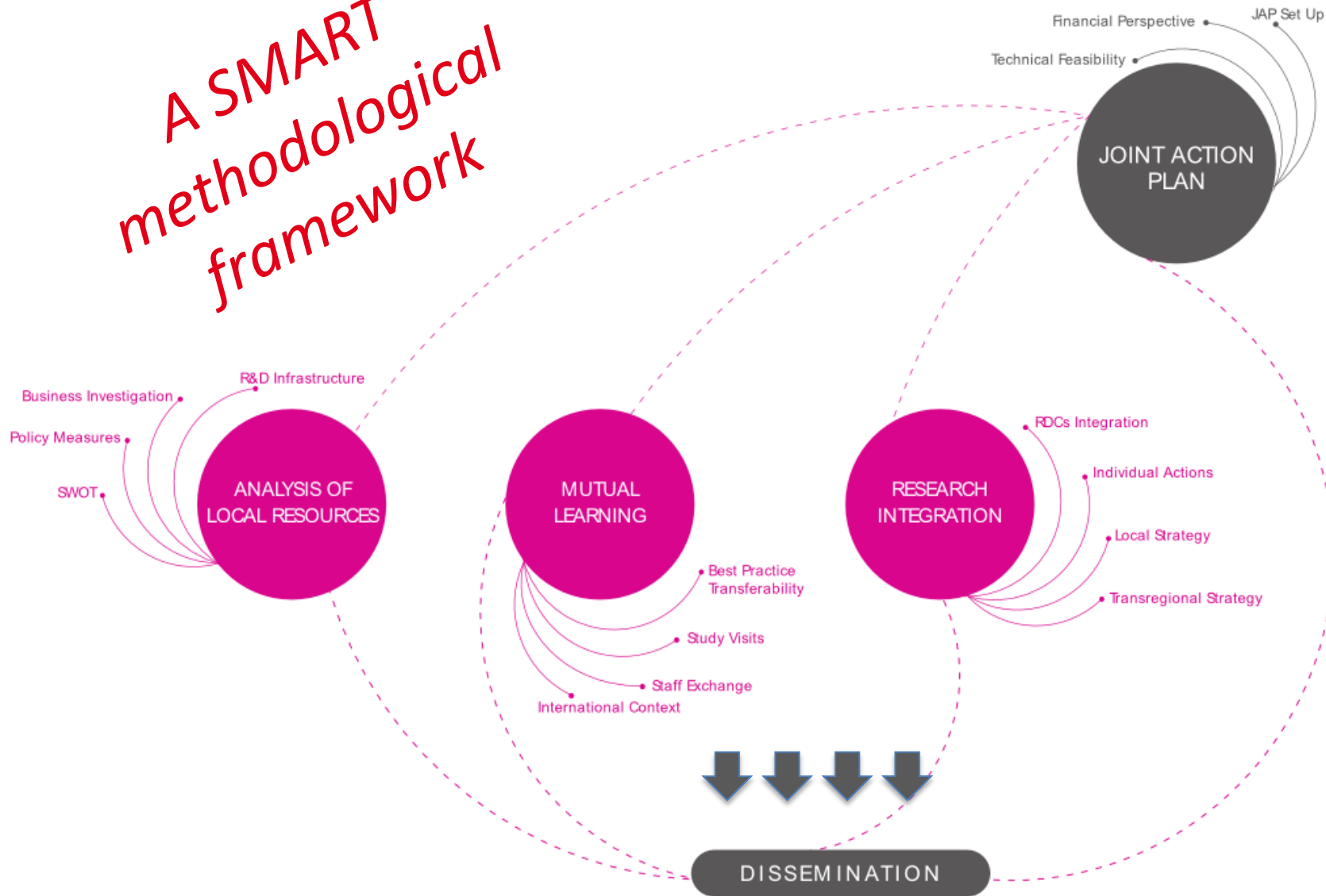


## *How to use research driven cluster to develop regional innovation strategies: the KEEN-Regions case*

- KEEN-Regions ([keen-regions.eu](http://keen-regions.eu)) is a **Region of Knowledge** project
- It is focalised on a specific sector: **nanotechnology**
- Includes as partners 3 Research Driven Clusters (**Veneto, Rhone Alps and Basque Country**)
- The RDCs includes the triple helix actors (public, business, research)



# A SMART methodological framework





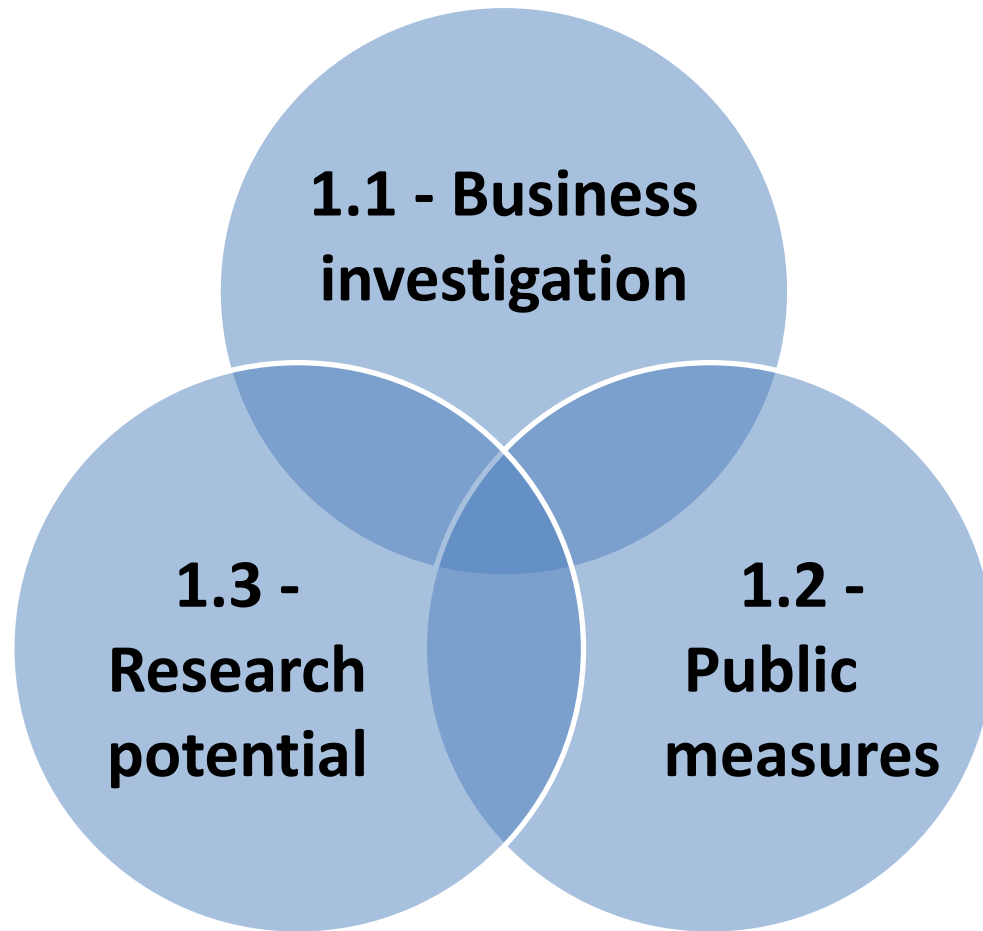


## *The goal: setting up of a Joint Action Plan*

- **The JAP translates local shortages and inter-regional synergy potentials into concrete proposals for actions**
- The JAP includes:
  1. a set of actions at local level considered by each cluster as the most beneficial for the economic development of their local area, and
  2. a set of actions at trans-regional level considered the most promising for economic growth of the KEEN area and the definition of the process to reach the stated goals.

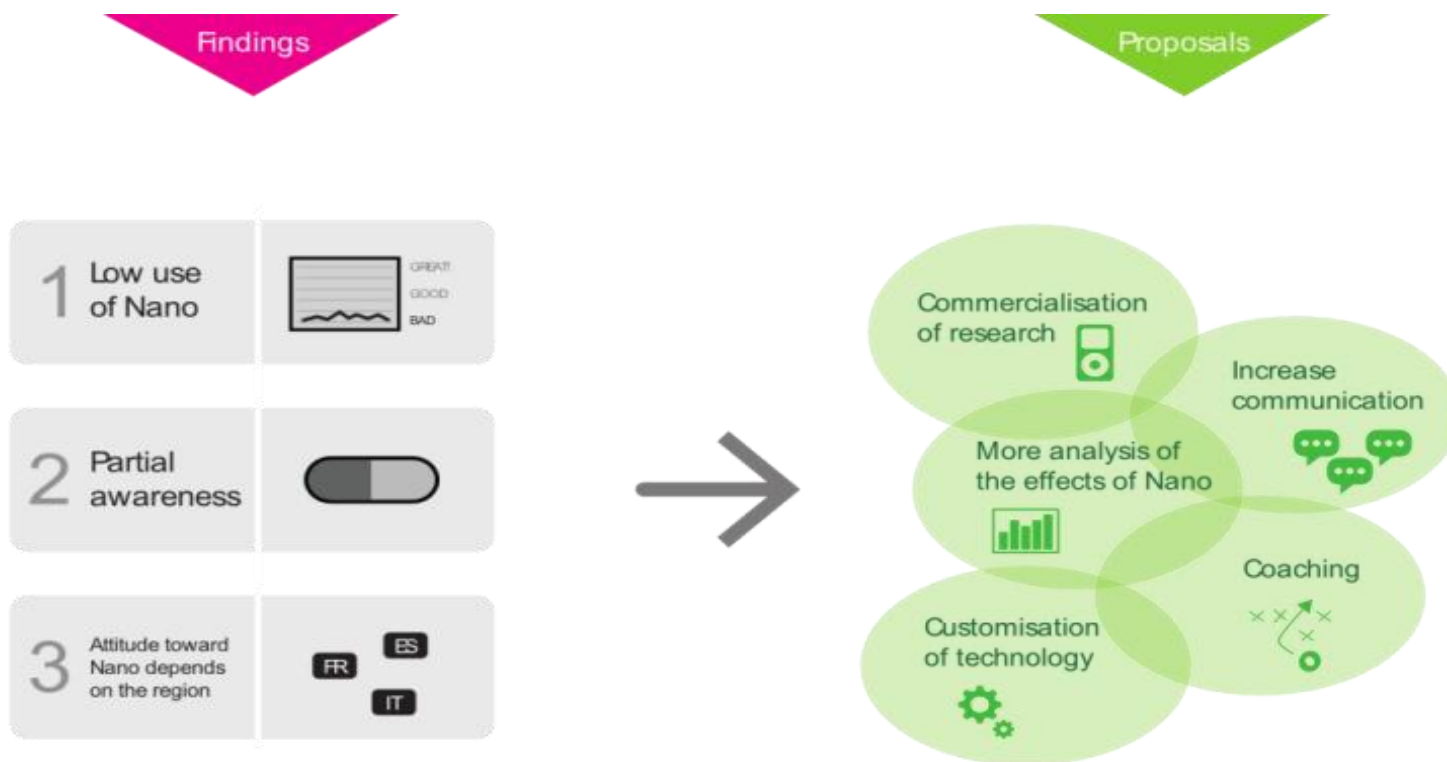


# *1 - Collect information and benchmark with others*



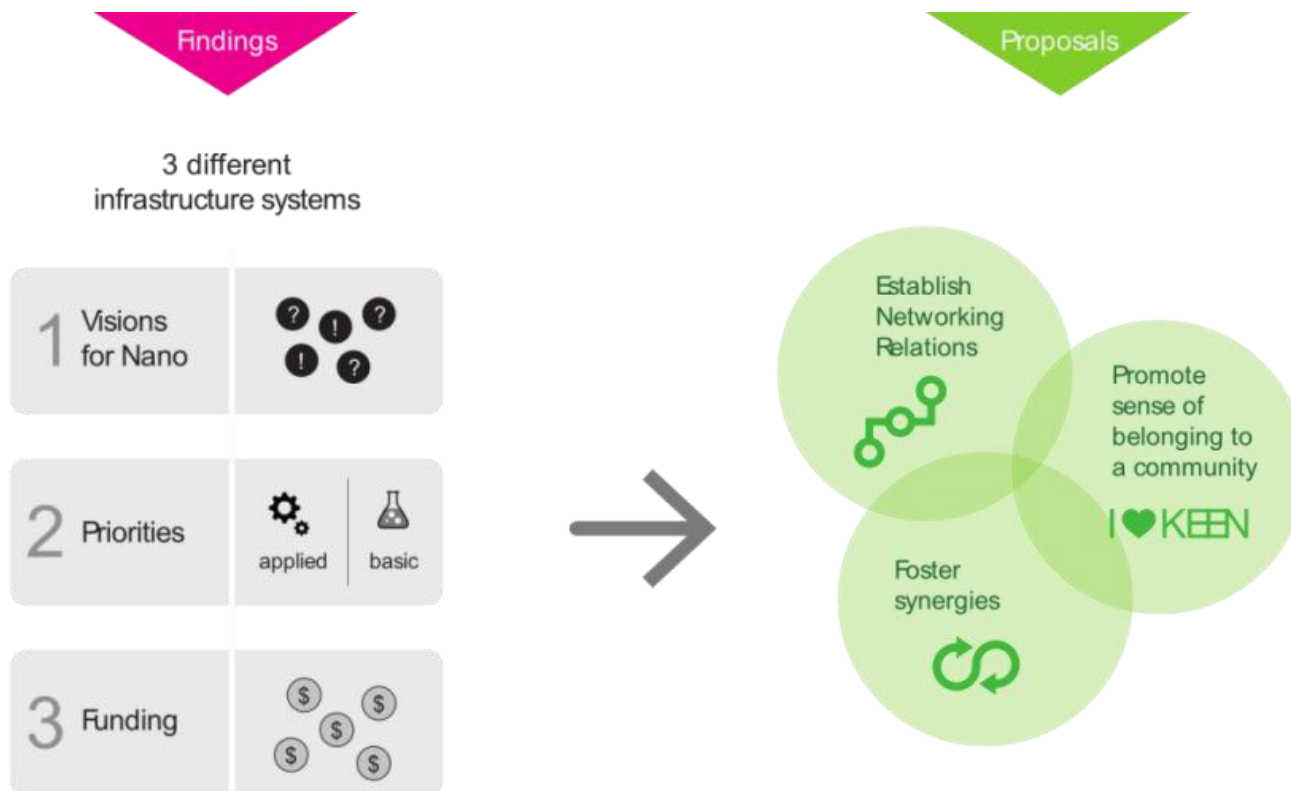


## 1.1 – Business Investigation



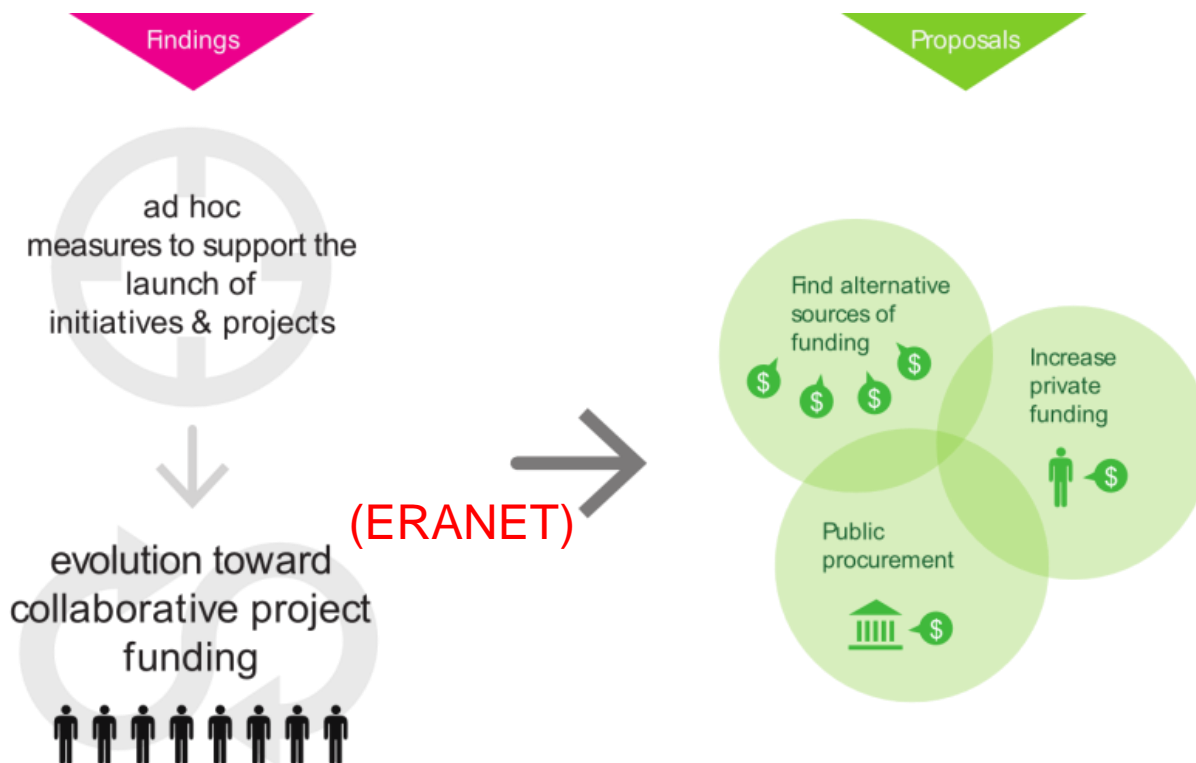


## 1.2 – Research potential





## 1.3 – Public Measures





## *2-Exchange GPs and launch Pilots*

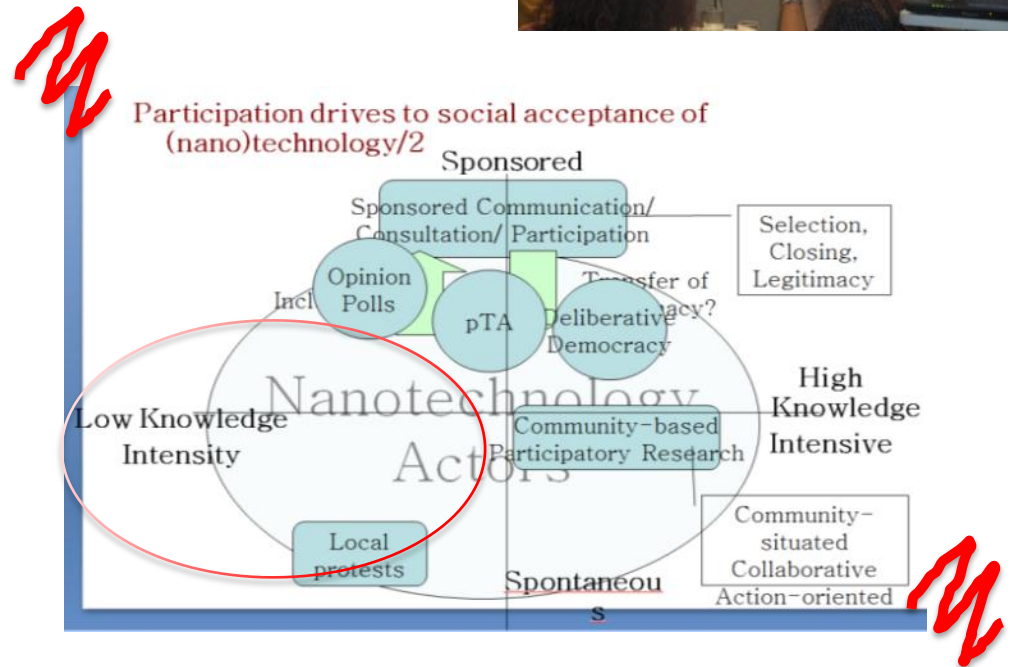
In the KEEN-Regions case **3 main topics**:

- **Foster and improve** the cooperation among research and business;
- **Stimulate** the generation process of new ideas;
- **Support** the development of an instrument for the international mobility of researchers.



## 3 - Look to the feasibility and include the public opinion

- Foresight exercises and scenarios sessions
- Workshop and involvement of relevant stakeholders

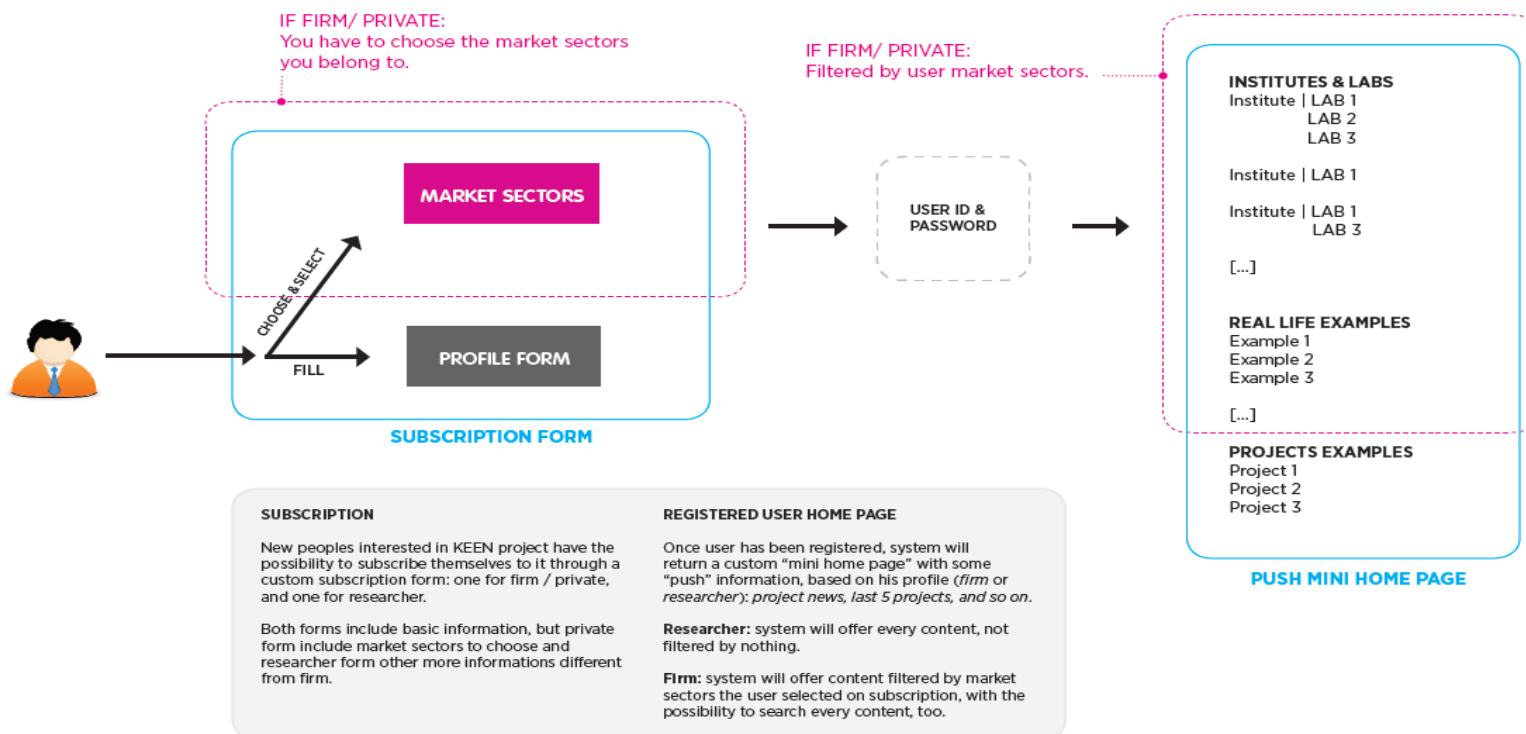




# 4 - Back up the process with communication



## subscription & profile logic

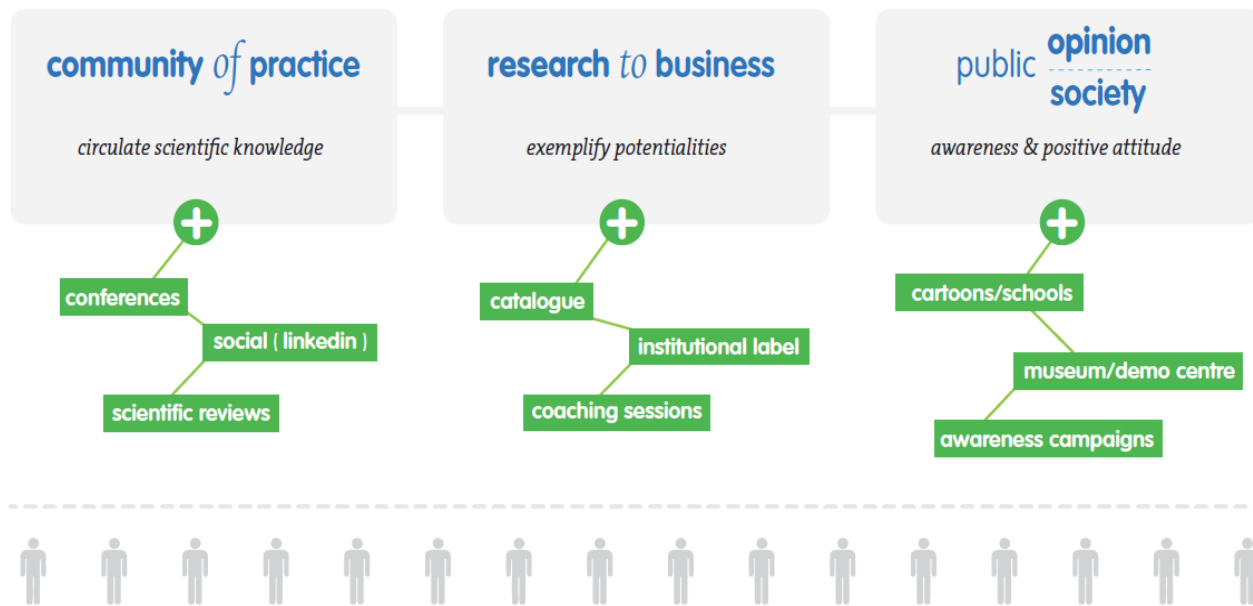






## 4 - Back up the process with communication

← **communication is a transversal issue** →





## *5 - Develop a feasible action plan*

- Actions feasible and specific at local level
- Actions that can be synchronized at transnational level
- Identification of financial resources (public and private funding)
- Timeplan to implement the actions



# KVoucher





## *An example with European Policy: Kvoucher Project*

- Financed within the OMC-NET scheme of the 7<sup>o</sup> FP
- The project had the aim to **promote and improve of trans-European knowledge transfer** from knowledge providers to SMEs through the implementation of a cross-border Knowledge Voucher system
- 9 Partners (3 EEN host organisations - Veneto Innovazione, IWT and IMPIVA) in 7 EU Regions



## *KVoucher Project*

- Voucher systems represent a very useful and easy tool for effectively supporting innovation processes of SMEs, guaranteeing a **first flexible access to finance**
- Voucher systems exist in some European regions and can be valorized at transnational level, avoiding them to become a regional “limit” for the European SMEs and the creation of overlapping dedicated transnational voucher schemes.



## *KVoucher Project*

- KVoucher decided to work from the existing local voucher programmes and adapt them to transregional exchange:
  - A study of the current local **voucher programmes** and success factors
  - Analysis of tools for going transregional: **brokers, database, networking with KIs and SMEs**
  - Planning and evaluation of real-world pilots
  - A real-world experience where SMEs from one region use their local voucher to pay Knowledge Providers from another region



## *Kvoucher: Brokerage Pilot phase*

- 20 SMEs involved, some successes, others ongoing,
- Veneto Innovazione, IWT and IMPIVA, proposed to adopt the methodology of Enterprise Europe Network for supporting matchmaking process between SMEs and Knowledge Providers.
- Technology transfer areas of the organizations were involved for the brokerage pilot phase.



**R4F**

regions **for** research





## *Regions for Research (R4R)*

### *“Research policy in the European regions”*

- R4R was a FP6 project financed by the EC, DG Research, under the RTD-OMC-NET call of the Programme "Strengthening the Foundations of the European Research Area".
- The R4R project wanted to propose a mechanism for the identification of **best practices** in **research management policies** in European regions and to improve the link between the public research base and the industry.
- The project ran 2007-2008 and involved 9 partners from 8 European regions (Sweden, Slovenia, Spain, Netherlands, Italy, Poland, Belgium, Bulgaria) .
- R4R contributed to **policy developments** both on the European, national and regional level.



## Objectives

- Develop a solid methodology for the identification, modeling, adaptation and **transfer of best practices in Knowledge transfer**
- Allow the creation of a co-operation platform among European regions likely to provide concrete **input to research policies management** at regional level in the years to come
- Contribute to the enhancement of the competences of local, regional and national administrations in developing **innovation policies** having in mind the national characteristics



## *R4R work plan*

- The project started with the analysis of case studies in 8 regions and the identification of best practices; that is **knowledge transfer models** that are likely to be **transferred to other contexts**.
- The best practices were selected and analyzed to identify their **critical success factors** and to define which **pre-conditions** or other factors must occur to determine their success.
- Models were defined to be used for the elaboration of **concrete transferability scenarios**.



## *R4R Letter of intent*

- **Jožef Stefan Institute**, project partner, Veneto Innovazione and Nanotech signed an **agreement to promote common initiatives and collaboration in nanotechnology**.
- Veneto Innovazione promoted and supported **information exchange** between the stakeholders, deepened solutions, key factors for transferability of the best practice.
- The agreement has the aim to **support** education, training, new entrepreneurship and research and pre-development projects, developing facilities and foster technology transfer.



Thank you for your attention  
and greetings from Veneto Innovazione!!!



*Veneto has all its ducks in a row!*



Giorgio Simonetto C.E.O.

[Giorgio.Simonetto@venetoinnovazione.it](mailto:Giorgio.Simonetto@venetoinnovazione.it)

[www.venetoinnovazione.it](http://www.venetoinnovazione.it)