Puglia Region: The path towards a RIS3 strategy







Bari, 26 September 2012 Pasquale Orlando Adriana Agrimi

Introduction of Puglia Region



Main regional data:

•Surface: 19.363 KM²

•Inhabitants: 4.090.402 = 7% Italy pop.

- •GDP = 4.5% of Italy GDP
- •Average GDP growth rate 2000-2007 = 0,7% (Italy = 1,1%)
- •GDP/capita = 66,0% of Italy (2012 forecast)
- •Regional exports = 2,2% of Italy exports (2011) = 8.159 mln €
- •Regional exports variation rate 2010-2011= 17,9%

Our RIS



The main actors:

5 Universities

More than **30** Public and Private Research Centers

- **6** Interregional Centres of Competence
- **3** Enterprise Incubators
- 7 Industrial Liaison Offices
- **21** Public Research Infrastructures
- **6** Technological Districts
- **17**Productive Districts

Economy Structure



Which are the historical specializations?

Agriculture/ Agro – food industry

Export leader in olive oil, wheat, tomatos

Manifacturing

Strong presence of traditional "made in Italy" sectors (furniture, textile, shoes...)



Economy Structure



Current developments

Manifacturing

automotive sector, high value-added sectors (energy, ICT, aerospace)

Agriculture

Research- driven agro-food cluster DARE

Services: Tourism 8% of regional PIL (2011) only 3% in 2006



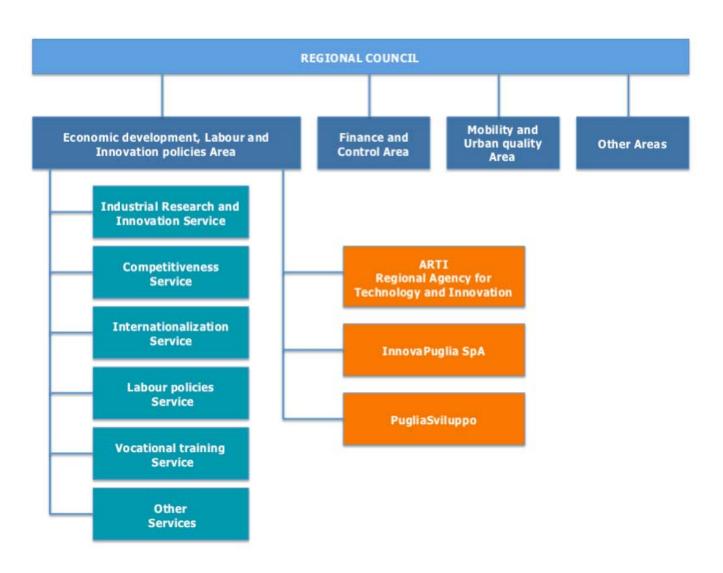
RIS S&W



STRENGHTS	WEAKNESSES
 Presence of technological excellence poles Development of original R&I sectors Presence of services providers Growth of informatics and research industry Good propensity to process innovation 	 Weak link between universities and enterprises Low demand for real services High specialization in traditional industry Low propensity to technological transfer towards the final product
 Growing interest and demand for informatics and networks among young people Growing demand for innovative services in the field of cultural and environment resources 	 Families low propensity to innovative services consumption (culture, leisure) Moderate presence of young people with mediumhigh level education
 Regional propulsive role in realizing policies for innovation development Elaboration of the regional strategy for scientific research Local administrations growing need for networking 	 Public Administration inadequate instrumental endowment Reduced R&D expense, with the aim of pursuing an important economic growth

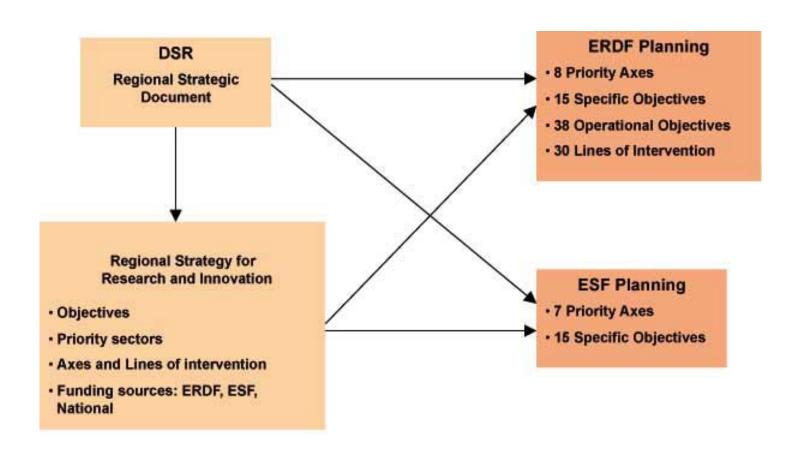
The Regional Governance structure





Regional Innovation Policies





1st RIS Puglia (late '90s)



The action plan was based on **three broad lines** of action:

- To qualify and specialize the regional innovation infrastructure;
- To support the Demand / Supply match of Innovation services;
- To support North South and Euro-Mediterranean partnerships.

2nd RIS Puglia (2000-2006)



- The First Regional R&D strategy (2001)
- Regional R&D strategy Realization Plan (2003)
- ROP Puglia 2000-2006, measures 3.12 e 3.13
- The Scientific Research Framework Programme Agreement, signed by Puglia Region, the MIUR and the Ministry of Economy (2005)

The regional agency ARTI

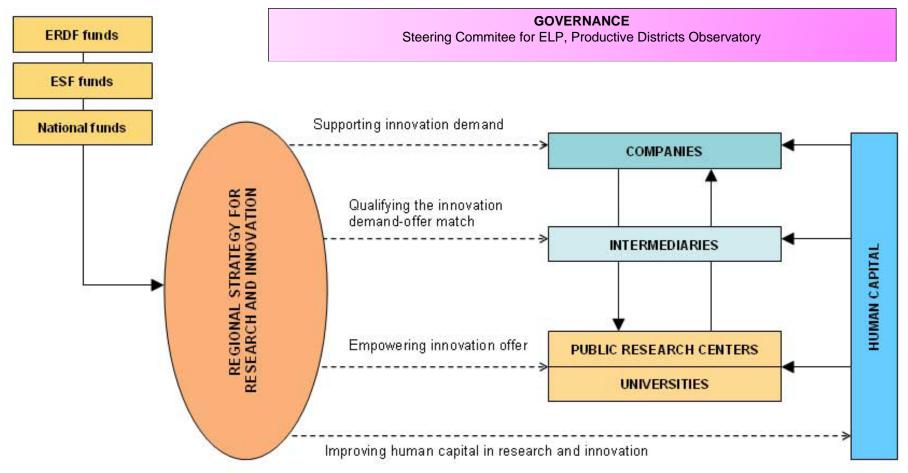


ARTI (Regional Agency for Technology and Innovation) is a public body created by the Puglia Regional Government in 2004 for:

- promoting the integration and strengthening of the regional system of innovation;
- supporting the regional government in programming, managing and evaluating the regional policies for knowledge transfer
- facilitating the international networking of all the regional research and innovation actors;
- fostering the dialogue between industry and science and between science and the society.

Regional R&I strategy (2009)





INSTITUTIONAL CAPACITY

Coordination of policies (education, employment, r&I and development)
ARTI, InnovaPuglia, PugliaSviluppo, <u>www.sistema.puglia.it</u>

3° RIS Puglia (2007-2013)



AXE 1 - Supporting the innovation demand of regional companies		
Line 1.1 - Diffusing entrepreneurship and innovation culture		
Line 1.2 - Supporting industrial research		
Line 1.3 - Integrated innovation projects		
AXE 2 - Empowering the technological offer of the regional public research system		
Line 2.1 - Empowering the strategic scientific-technological areas		
Line 2.2 – Strengthening the scientific research centres		
AXE 3 – Qualifying the innovation demand-offer match		
Line 3.1 – High technology Districts		
Line 3.2 - Public-private laboratories networks		
Line 3.3 – Regional network of Industrial Liaison Offices		
Line 3.4 – Innovation Poles		
Line 3.5 – North-South exchange initiatives		
AXE 4 – Improving human capital in research and innovation		
Line 4.1 - Qualifying human resources		

Thematic priorities for R&I



The Regional R&I Strategy has identified in 2009 the following thematic priorities:

- o- Aerospace;
- o- Agro industry;
- o- Cultural heritage;
- o- Biotechnology and life science;
- o- Energy and Environment;
- o- Logistics and Production technology;
- o- Mechanics and Mechatronics;
- o- New materials and nanotechnology;
- o- Information and Communication technology.

Entrepreneurial dynamics



- Productive Districts promotion and monitoring
- Technological Districts
- •Evolution from the **Regional Industrial Liaison Offices network** (ILOs), including the 5 Universities in the region, ENEA and CNR to **Alliances for Innovation**

Large Companies in Puglia



AERO	SPACE	ICT	MECHANICS	CHEMICALS
Alenia Aereonautica (sede Grottaglie) *GSE - Ground Support Equipment SrI	CONSORZIO SHIRA Mer Mec S.p.A. Mel System S.r.I. Planetek Italia S.r.I. Sitael Aerospace S.r.I. VVN S.r.I.	EXPRIVIA S.p.A. * FINLOGIC s.r.l. * SINCON s.r.l. * Sud Sistemi s.r.l. * Itel Telecomunicazioni s.r.l.	GETRAG S.p.A.	Chemtex Italia SPA
Alenia Aereonautica (sede Foggia) *S.C.S.I. s.a.s.	SISTEMI SOFTWARE INTEGRATI S.p.A(2).	Network Contacts s.r.l. *WIND TEL. S.p.A. (2)	MER MEC *MEL SYSTEM	
AVIO S.p.A. * Processi Speciali s.r.l.		Objectway S.p.A. * P&P Consulting s.r.l.	NUOVO PIGNONE S.p.A.	
AGUSTA S.p.A. * Giannuzzi S.r.I			Riunite OSRAM Edison Clerici S.p.A.	

Productive Districts (RL 23/2007) SMART SPECIALISATION PLATFORM

Characteristics of a productive district:

- ➤ A high concentration of enterprises especially of small and medium size, each integrated into a production system with relevant expertise and active support to local economy
- ➤ Presence of social and institutional stakeholders with capacities for supporting the local economy

Policy objectives:

- 1. increase the competitiveness and innovative capacity in order to expand their presence in foreign markets;
- 2. enhance the creation and development of new enterprises particularly in activities with high technological content;
- 3. intensify the processes of size growth.

Apulian Clusters dynamic



Tourism
Agro-food
Fishing and aquaculture
Flower gardening

Sustainable Building
New energy
Environment and recycling

Creative industry

Logistics Nautical Mechanics

Aerospace



Fashion
Wood and furniture
Stone quarrying
Communication & publishing



Technological districts



- Technological districts are territorial aggregations included to network and linked to the international environment, able to support local industrial growth based on innovation and research
- ➤ Generally the creation of a technological district tends to accelerate scientific and technological cooperation between leading companies and public actors in positions of excellence in a particular technology area.

The 6 Apulian TD's

DHITECH - Nanotech

DARe - Technologies for Agrofood

MEDIS – Mechatronics

DiTNE – Renewable Energies

HBio - Human health

DAP – Aerospace

INNOVAAL – Ambient Assisted Living







National Technological Clusters



Apulian Technological District & PPA	National Technological Clusters
MEDIS – Mechatronics DHITECH - Nanotech	Intelligent factory
DHITECH - Nanotech	Technologies for smart communities
DARe - Technologies for Agrofood	Agrifood
DiTNE – Renewable Energies	Energy
HBio – Human health	Life sciences
DAP – Aerospace	Aerospace
INNOVAL – Ambient Assisted Living	Technologies for the living environment
PPA	Green chemistry
	Equipment and systems for the mobility of surface land and sea

Connecting Puglia to EU and global dimension



CORAL network

AAL 2011 forum in Puglia

ROK proposal with

ICT PSP Thematic network on AHA

EIP Active and Healthy Ageing

European creative cluster labs project

ERRIN network

Internationalization of PUGLIA CREATIVA

European Creative Industry Alliance

NEREUS network

7PQ, CIP, ESA



Progetto INDUSTRIAL LIAISON



Festivaldell'Innovazione





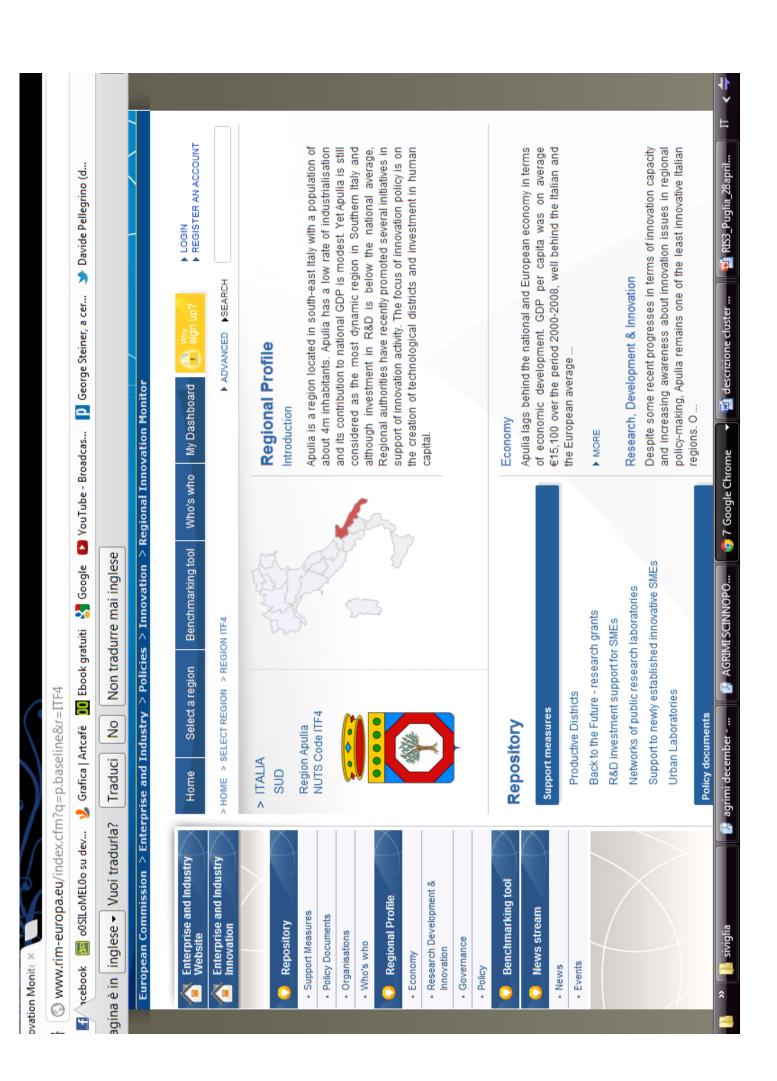
Principi attilli

Innovation Union Flagship Self assessment tool: Features of well performing national and regional research and innovation systems (October 2010)



- 1. Promoting research and innovation is considered as a key policy instrument to enhance competitiveness and job creation, address major societal challenges and improve quality of life and is communicated as such to the public.
- 2. Design and implementation of research and innovation policies is steered at the highest political level and based on a multi-annual strategy. Policies and instruments are targeted at exploiting current or emerging national/regional strengths within an EU context ("smart specialisation")
- 3. Innovation policy is pursued in a broad sense going beyond technological research and its applications.
- 4. There is adequate and predictable public investment in research and innovation focused in particular on stimulating private investment.
- 5. Excellence is a key criterion for research and education policy
- 6. Education and training systems provide the right mix of skills
- 7. Partnerships between higher education institutes, research centres and business, at regional, national and international level, are actively promoted
- 8. Framework conditions promote business investment in R&D, entrepreneurship and innovation
- 9. Public support to research and innovation in businesses is simple, easy to access, and high quality
- 10. The public sector itself is a driver of innovation

"La Puglia - Gli assi prioritari - Ricerca e Innovazione" – Giuliana Trisoriso Liuzzi , Adriana Agrimi 2011 – Edizione Guida



RIM Annual Report 2010 SMART SPECIALISATION PLATFORM

Example of Strategic use of structural Funds: Networks of Public Research Laboratories (Puglia)

[...]The measure can be viewed as strategic for at least two reasons.

It aims at increasing the critical mass of regional research institutions and

has an objective of maximising the impact on the regional productive system

through the collaboration in the strategic areas [...]

(cf. Regional Innovation Repository; Puglia; http://www.rim-europa.eu).

Revisiting the R&I policies



- Part of the policy reviewing action was carried out within the project of technical assistance entitled "Sostegno alle Politiche di Ricerca e Innovazione delle Regioni", funded in 2010-2012 by the Department for Development and Economic Cohesion at the Ministry of Economic Development, the Central Administration responsible for Regional Policy in Italy, and by the Agency for the Promotion of Innovation Technologies in Public Administration, seated at the Presidency of the Council of Ministers.
- The **SCINNOPOLI project** (funded by Interreg VI C and joined by Puglia region trough ARTI) has represented the occasion for building and transferring to the ROP Managing Authorities a more comprehensive and flexible policy evaluation tool box.

A new generation of policies



- •A huge effort for coordinating the various regional policies towards the common goal of promoting employment through innovation and human capital development is on the way with the Extraordinary Employment Plan 2011
- •Several regional policies have addressed the potential of young people to create entrepreneurship through **creativity**
- •After the Europe 2020 strategy a new set of policies has been set up: regional innovation partnership, innovation services, living labs, pre commercial procurement.
- •With the help of its agencies and technical bodies, the regional government is implementing a more effective monitoring system and is moving towards a policy impact assessment

Our strategic vision for the future





Innovation and creativity for better life and jobs!

Regional Innovation Partnership



- About 200 SMEs in partnership with 13 research bodies all over the region.
- New business emerging activities (smart specialization)
- 388 young researchers (less than 35 years old)
- Reduced time to market

20 % ICT

14% Energy

12% Agrofood

8% Nanotech

7% Mechaytonics

4% Aerospace

4% New materials

4% Cultural heritage





□ Procure R&D in steps (solutions, prototypes, test series) to reduce risk and give SMEs a chance □ Grow size of tasks gradually, make bridge from ideas to first test product, procurer = SME first customer reference

Regional needs:

- safety and security
- •wellbeing and health
- social inclusion
- assistance & communication

Toolbox for building the regional strategy



Innovation oriented analysis of the knowledge and value chains methodology

Monitoring of the activities and evaluation of the performance of the technological and industrial production districts

Set up of information to perform the **ex-post and impact evaluation**

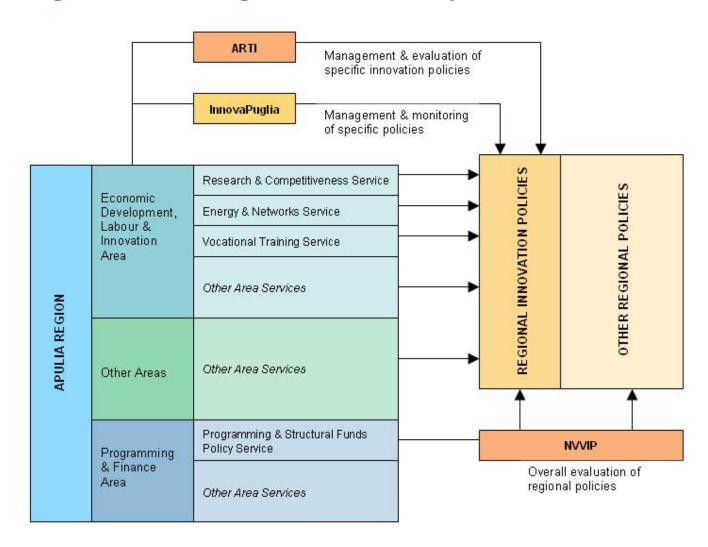
Apulian ICT Living Labs and related maps of social needs and catalog of partners (InnovaPuglia)

Foresight exercise in Innovation for employability (ARTI)

Measuring the progress



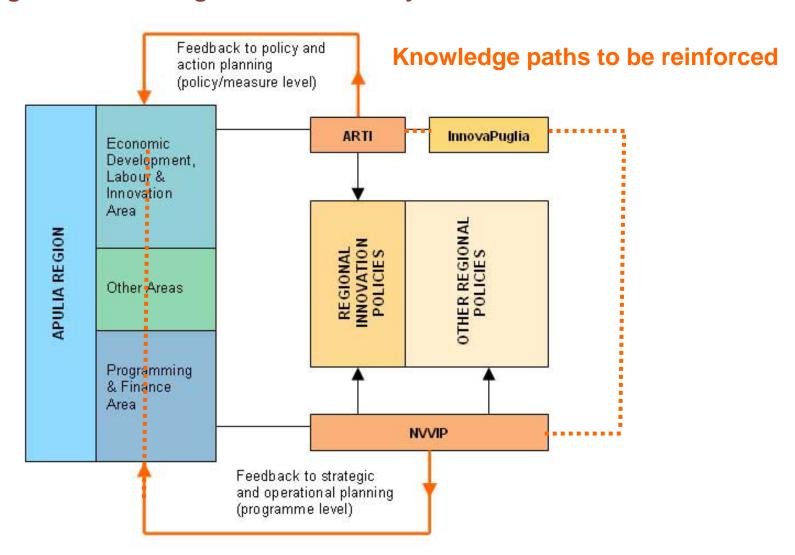
The Regional Monitoring and Evaluation system



Measuring the progress



The Regional Monitoring and Evaluation system



Governance



Setting up the RIS3 governance system (DGR 1468/2012):

- •The manager of Economic development, Labour and Innovation policies

 Department assures the coordination with the other regional areas and with
 the regional council; Programme Implementation and Industrial Research
 and Innovation Services manage the process
- •The **implementing bodies** provide assistance and specific contributions (ARTI, InnovaPuglia, PugliaSviluppo)
- •The regional **stakeholders** are involved through their associated expressions and a specific **steering committee** will be set up
- •An **Open Scenario Builing Process** will be launched and managed on webbased platform in order to debate and collect feedbacks (**e-partecipation** project under the Capacity Sud Programme - Formez)
- •A first set of **Open Data** will be provided for supporting the process of eparticipation

Looking beyond Your Region's boundaries



Puglia RIS3 in the international context:

- Regional Internationalization plan (SPRINT)
- •Strategic Development Plans of Technological and Regional Industrial Production Districts
- "Back to the future" initiative
- •An active presence in territorial cooperation programs (Interreg IVC, MED, IPA-Adriatic,...)
- •Specific benchmarking and best practices exchange projects (VIFP lasmine, Interreg IVC Scinnopoli)
- Participation to the European Creative Industries Alliance

European projects contribute to circulation of ideas and introduction of new practices at policy and territorial level

Our Expectations from the Peer-Review Workshop - 1

- ✓ Confronting
- ✓ Benchmarking
- √ Gearing up
- ✓ European and global positioning

Our Results from the Peer-Review Workshop - 2



- ✓ Process
- ✓ Methodology
- ✓ Priorities
- ✓ Time
- ✓ Participation

Looking ahead



•Stronger and wider links with other EU regions shall be promoted

•A better integration between Horizon 2020 and the new cycle of Structural Funds is essential!



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