Puglia Region: The path towards a RIS3 strategy

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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, tomatoes

**Manufacturing**
Strong presence of traditional “made in Italy” sectors (furniture, textile, shoes…)}
Economy Structure

Current developments

Manufacturing
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
## STRENGTHS

- 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
- Growing interest and demand for informatics and networks among young people
- Growing demand for innovative services in the field of cultural and environment resources
- Regional propulsive role in realizing policies for innovation development
- Elaboration of the regional strategy for scientific research
- Local administrations growing need for networking

## WEAKNESSES

- 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
- Families low propensity to innovative services consumption (culture, leisure)
- Moderate presence of young people with medium-high level education
- 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

DSR
Regional Strategic Document

Regional Strategy for Research and Innovation
- Objectives
- Priority sectors
- Axes and Lines of intervention
- Funding sources: ERDF, ESF, National

ERDF Planning
- 8 Priority Axes
- 15 Specific Objectives
- 38 Operational Objectives
- 30 Lines of Intervention

ESF Planning
- 7 Priority Axes
- 15 Specific Objectives
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.
2\textsuperscript{nd} 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)
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)

GOVERNANCE
Steering Committee for ELP, Productive Districts Observatory

INSTITUTIONAL CAPACITY
Coordination of policies (education, employment, r&I and development)
ARTI, InnovaPuglia, PugliaSviluppo, www.sistema.puglia.it
### 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
The Regional R&I Strategy has identified in 2009 the following thematic priorities:

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

<table>
<thead>
<tr>
<th>AEROSPACE</th>
<th>ICT</th>
<th>MECHANICS</th>
<th>CHEMICALS</th>
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</table>
| Alenia Aereonautica (sede Grottaglie)  
*GSE - Ground Support Equipment Srl | CONSORZIO SHIRA  
Mer Mec S.p.A.  
Mel System S.r.l.  
Planetel Italia S.r.l.  
Sitael Aerospace S.r.l.  
VVN S.r.l. | 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.l | | Riunite OSRAM  
Edison Clerici S.p.A. |
Productive Districts (RL 23/2007)

**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
ICT & AAL
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
- DARè - Technologies for Agrofood
- MEDIS – Mechatronics
- DiTNE – Renewable Energies
- HBio – Human health
- DAP – Aerospace

INNOVAAL – Ambient Assisted Living
### National Technological Clusters

<table>
<thead>
<tr>
<th>Apulian Technological District &amp; PPA</th>
<th>National Technological Clusters</th>
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<tbody>
<tr>
<td>MEDIS – Mechatronics</td>
<td>Intelligent factory</td>
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<tr>
<td>DHITECH - Nanotech</td>
<td>Technologies for smart communities</td>
</tr>
<tr>
<td>DHITECH - Nanotech</td>
<td></td>
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<tr>
<td>DARe - Technologies for Agrofood</td>
<td>Agrifood</td>
</tr>
<tr>
<td>DiTNE – Renewable Energies</td>
<td>Energy</td>
</tr>
<tr>
<td>HBio – Human health</td>
<td>Life sciences</td>
</tr>
<tr>
<td>DAP – Aerospace</td>
<td>Aerospace</td>
</tr>
<tr>
<td>INNOVAL – Ambient Assisted Living</td>
<td>Technologies for the living environment</td>
</tr>
<tr>
<td>PPA</td>
<td>Green chemistry</td>
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<tr>
<td></td>
<td>Equipment and systems for the mobility of surface land and sea</td>
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Connecting Puglia to EU and global dimension

- CORAL network
- AAL 2011 forum in Puglia
- ROK proposal with
- ICT PSP Thematic network on AHA

- European creative cluster labs project
- ERRIN network
- Internationalization of PUGLIA CREATIVA

- NEREUS network

- EIP Active and Healthy Ageing
- European Creative Industry Alliance
- 7PQ, CIP, ESA
Festival dell’Innovazione

Start Cup

National Winner 2011 James Dyson Award

principi attivi
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

Regional Profile

Introduction

Apulia is a region located in south-east Italy with a population of about 4m inhabitants. Apulia has a low rate of industrialisation and its contribution to national GDP is modest. Yet Apulia is still considered as the most dynamic region in Southern Italy and although investment in R&D is below the national average, Regional authorities have recently promoted several initiatives in support of innovation activity. The focus of innovation policy is on the creation of technological districts and investment in human capital.

Repository

Support measures

- Productive Districts
- Back to the Future - research grants
- R&D investment support for SMEs
- Networks of public research laboratories
- Support to newly established innovative SMEs
- Urban Laboratories

Economy

Apulia lags behind the national and European economy in terms of economic development. GDP per capita was an average €15,100 over the period 2000-2008, well behind the Italian and the European average...

Research, Development & Innovation

Despite some recent progresses in terms of innovation capacity and increasing awareness about innovation issues in regional policy-making, Apulia remains one of the least innovative Italian regions. O...
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% Mechatronics
4% Aerospace
4% New materials
4% Cultural heritage
Dal Laboratorio ai Cittadini.
L’innovazione diventa Partecipazione.

Ambiente, Sicurezza e Tutela Territoriale

Beni Culturali e Turismo

Energia

Governo elettronico per la PA

Inclusione Sociale e Invecchiamento attivo e in salute

Istruzione ed Educazione

Industria Creativa

Trasporti e Mobilità

Energia
Pre Commercial Procurement

- 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

- ARTI: Management & evaluation of specific innovation policies
- InnovaPuglia: Management & monitoring of specific policies

APULIA REGION:
- Economic Development, Labour & Innovation Area:
  - Research & Competitiveness Service
  - Energy & Networks Service
  - Vocational Training Service
  - Other Area Services
- Other Areas:
  - Other Area Services
- Programming & Finance Area:
  - Programming & Structural Funds Policy Service
  - Other Area Services

REGIONAL INNOVATION POLICIES

NVVIP: Overall evaluation of regional policies

SMART SPECIALISATION PLATFORM
Measuring the progress
The Regional Monitoring and Evaluation system

Feedback to policy and action planning (policy/measure level)

Knowledge paths to be reinforced
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 Building Process will be launched and managed on web-based 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 e-participation.
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 Iasmine, 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!
Mr Pasquale Orlando
AdG PO FESR Puglia 2007-2013
p.orlando@regione.puglia.it

Mrs Adriana Agrimi
Head of Industrial Research & Innovation Department
a.agrimi@regione.puglia.it