The Italian Observatory on policies for research and innovation was created in 2007 by the permanent board of Regional and autonomous provinces Governors and is also composed of most representative Union organizations (Cgil, Cisl, Uil) and Italian Industrial Confederation (Confindustria).

Main goal of the Observatory is to increase the efficacy of National and regional policies on research and innovation. In this sense the Observatory promotes the analysis and the confrontation of tools issued by regions and provinces in order to foster the integration and complementarity of interventions on various institutional levels.

For more information on the Observatory activity see [http://cap.regione.marche.it/osservatorio](http://cap.regione.marche.it/osservatorio).

**Foreword**

“Europe 2020” guidelines and the path for their achievement, “Innovation Union” flagship Initiative included, not only confirm the centrality of the issue of research-innovation chain, but also identify the weaknesses and the actions to be taken since the chance of the first document can be implemented in the second one. For this reason, it is necessary to encourage a step forward in UE policies, in order to have more efficient interventions in research and development, and a coherent action among the plurality of subjects and instruments (and interests), and the common goal to be reached. This goal, nowadays, is made more inescapable by the consequences of the financial crisis that is worsening the competitiveness and productivity of Europe, compared to the economically most dynamic areas of the world.

For this reason, the European Commission offered a new common approach that aims to integrate, in a Unique Common Strategic Framework, the current Research Framework Programme (7°FP), the Framework Program for Competitiveness and Innovation (CIP) and European Institute of Innovation and Technology (EIT).

The sharable goal is to create a coherent set of funding over the “whole chain of innovation”, from research to the market of innovative products and services, considering also the opportunity to personalize and customize the eventual different steps following not only a sole abstract model, but also supporting “soft innovation”, as the one involved for example in design and marketing.

This approach faces correctly one of the weaknesses of European system that, if on the one hand keeps producing excellences in research, on the other hand it seems not improving in the exploitation

---

1 COM (2011) 48
of results in research supporting competitiveness and development of enterprises; in other terms, to benefit from new organizational methods under the open innovation paradigm, that promotes the ability to associate the subjects and the contents of potential innovation that are present and diffused in Europe.

For this reason the next Framework Program, more than what the VII can do today, will have to represent a tool to achieve together, research and innovation goals, and match different levels of Community, National and Regional interventions, public and private funds.

As such, the current situation with the presence of several financial tools, some of them developed at community level and others at National and regional level, must change towards a common strategic framework that promotes a specific European policy of research and is a lever to start wider levels of involvement and raising awareness from all stakeholders, starting from Member States to Regions, enterprises, Universities and finance.

**Critical aspects**

Thanks to the “Green Paper”, the European Commission, besides providing a useful orientation for the current important public consultation, confirms and summarizes, the obstacles for the development of an efficient system of research, offering a new approach that can represent an opportunity for the Italian system.

Through the new model of economic development (social economy), suggested in the Green Paper, the European Union aims to face important challenges, as climate changes, cultural heritage safeguard, energy and food safety, health and ageing; as such social challenges, become the driver of development for a smart, sustainable and inclusive growth.

The next Framework Program has to enhance the innovative potential of the Union, focusing on these great challenges with “system approach”.

In particular, this Framework will have to consider the needs of competitiveness of the system and not of single actors or sectors or countries, promoting and speeding up the transition of the products of research towards the market, i.e. translating them in innovation (playing on the real motivations that start the processes and not on mere economic advantages in the short term); enforcing the system relevance of the Research European programs (taking care of relapse and effects not only on the direct beneficiaries) and improving the whole chain of the innovation (research, development, demonstration, diffusion).

To this end, it will be useful to assure a wide and direct involvement of all the relevant actors in the decision making processes.

Main critical aspects that slow down the development and the competitiveness of the system are summarized hereafter (not in a hierarchic order):
- Law awareness of the essential role of research and innovation, as tool to promote competitiveness, new employment, social development and life quality; at Member State level too, the need of a multi-year strategy and of a perspective of middle-long period that can give the assurance of sources and interventions;

- Public investments for research and innovation are still inadequate and private self-funding are not favored since adequate tools for SMEs needs are still missing and procedures and bureaucracy complexity act as in many cases as a barrier;

- Research and Training Policies do not give adequate added value to the excellences and the abilities of scientific Institutions, and do not promote enough the professional qualification of human resources, through an international comparable system of employment procedures and also of legal and economic treatment of researchers;

- Partnerships among Scientific/Training Institutions and enterprises are not still positively encouraged, supported or promoted; the scarce mobility of researchers, the differences of economic and legal status are the first demonstration of the inadequacy of planning and operative synergies, in particular among the three research networks (University, Public Research entities and enterprises);

- Rules and procedures of management do not consider different legal-administrative contexts. It is necessary to harmonize different fiscal laws in order to promote the development of a positive context for private investments for enterprises of all Member States.

- The complexity of Public system doesn’t encourage innovation and it is not innovative itself as for example, in the insufficient application of innovative instruments (as pre-commercial procurement).

- The system is not ready to act a synergic strategy for innovation, in particular in the sector of services, to be considered, as a “total quality” strategy (or rather, a quality based research that is based not only on technology but also on the organization choices that invest all the moments of the productive process and of the service).
Themes and Proposals

Within the themes identified by the European Commission and reported in the Green Paper, the following goals, are particularly important for regional territories:

1. **Improvement of the GOVERNANCE;**
2. **Improvement of ACCESSIBILITY to European funds;**
3. **More INTEGRATION between European, national and regional funds and between actors operating in the research field;**
4. **Strengthening of territories COMPETITIVENESS;**
5. **Strengthening of competitiveness and of specific initiatives SUPPORTING SMEs ROLE in research and innovation processes.**
6. **Highlighting processes and results of the PARTICIPATION into European initiatives**

1. **Improvement of the GOVERNANCE**

   According to European Policy, it’s essential to proceed to a deep review of the Governance, in order to redefine the coordination methods among different levels of intervention, their responsibilities and peculiarities.

   A multilevel strategy – European, National and Regional – that doesn’t deny the specificities and the useful distinction of tasks and privileges of each level, is needed.

   To this aim, a better awareness and integration of what is being done today, is necessary in order to promote initiatives and avoid duplications or inefficiencies that sometimes depend on a failed implementation of actions, instruments and/or required qualifications.

   Thus, to improve the governance of the policies for the research and innovation it’s useful avoiding the fragmentation and the interventions’ overlaps, improving the coordination between the institutional levels and promoting synergy of interventions.

   The Commission choice to lead all the initiatives towards a unique design, and to arrive, through negotiation process, to orient the ones that grow up autonomously (at national, regional and stakeholders level) has a great strategic and operative implications and it requires, at national level, a strong ability of harmonizing different levels of government.

   The Italian Regions believe that this new phase of planning can represent an important opportunity to consider the role and the contribution that regional governments could give at national and European level, not only for a subsidiary use of cohesion funds, but also, and above all, as active actors that are able to feed ideas, methods and issues to design and renew the policies for research and innovation (planning and management of policies, cooperation among regions, grouping of initiatives and competences).

   It would be appropriate that the Commission accompanies these new orientations through methods that aim to ease and increase the involvement of the regions in consultation processes and set of new initiatives (for example the Joint Programming Initiatives and the European Innovation Partnership) that would extend, in this way, the impact on the territory.
2. Improvement of the ACCESSIBILITY to European funds

The Italian participation to the calls of FP7, is quite high besides the low level of success. This is due in particular to the presentation of proposals without a European dimension, or rather with low connections to the needs of the country. As such, on the one hand, it is important to increase the capacity of Italy to participate to the drafting process of the calls for proposal and improve the project drafting capacity and the accessibility to European funds, on the other hand, it should be overcome the set of rules and procedures that make hard and expensive the management and the involvement in programs, and above all consider rules according to clear and well definite goals.

It is proposed, in particular, to:

- improve the quality of information trough e-alert systems and yearly plans for calls for proposals to promote a better planning of the participation of the interested subjects, avoiding the problems of too short times for the formulation of the proposals;
- realize an easy system of research of opportunities, aims and contents oriented. The system should allow SMEs to look for the best opportunities of funding introducing few key-words of research, as type of activity to be funded (industrial research, pre-competitive development, innovation, demonstration, training …); the technological sector, etc. The system should include opportunities of EU, national and regional funding that could be developed bottom up thanks to Regions contribute;
- implement, according coherent, homogeneous, comparable and streamlined terms, organized methods of data exchange between informative systems that were adopted in territories, working on different programs of the research-innovation weaving factory (structural funds programs, framework program, etc. …) that grant results traceability and the sharing of these data (through a streamlined and common format) in different levels (regional, national and European);
- Work for a real administrative simplification. This could bring to a real change of the administrative culture, leaving the merely administrative approach, reducing the overlap of different methods of audit and limiting waste of funds allocated to research activities. The Commission should adopt a general and easy system of rules, specifying, in percentage, the maximum value of management cost of projects and the maximum value for audit procedures.
- Increase the use of two steps procedure for project presentation and evaluation, to reduce the costs of proposal drafting in particular for SMEs.
- Structure innovative mechanisms of evaluation, mostly focused on the analysis of results and project impact. A mechanism, in synthesis, that foresees also an ex-post evaluation phase of the undertaken actions. For this evaluation activity it is also important to use evaluators with economic-financial and multidisciplinary capabilities, preferring indicators that consider occupational relapse, innovation needs to be satisfied and the saving of natural sources in manufacturing process and services. In addition, in order to enforce the project impact on citizens and civil society, the ex-post evaluation phase should be addressed to analyze the effective grade of application of the dissemination strategies foreseen in research project;
• Develop an univocal system of European indicators aimed to evaluate SMEs and research institutes at different levels (European, national and regional) as well as concerning the different R&D funded programmes. In terms of definition of the new indicator for innovation, its use should not be limited in the ex-post phase but it should mainly be extended in the ex-ante evaluation of single initiatives;

• Identify, for the different funded programmes, univocal definition of the typology of subjects admitted to apply, aimed also to correctly interpret and implement the State Aid system in all European funded programs (VII Framework Programme, Programme for the Competitiveness and Innovation, Programmes of territorial cooperation, etc);

• Simplify the management and reporting of the activities going on in the simplification process already started, as indicated in COM (2010) 187 of 29/04/2010 “Simplify the implementation of the research framework programmes”. This can be achieved by: adopting on a wider scale the system of forfeit reimbursement foresee in some measures extending them to SMEs, which usually show deep difficulties to enforce administrative reporting rules; granting a wide flexibility to calculate the average costs of personnel applied by beneficiaries; increasing the possibilities, ways and intensity of co-funding in nature.

3. More INTEGRATION between European, national and regional funds and between actors operating in the research field

In order to guarantee the integration of policies and funds for research and innovation, firstly it is necessary a better coordination between the different DG of European Commission (Research and Innovation, Enterprises, Health, Transports...) and following to assure a full coherence between European policies as well as national and regional. 

At the same time, at national level, it is convenient to improve the coordination and synergy between different policies, in order to share objectives and priorities, participating in an active and unitary way to the definition of European policies.

It is necessary to integrate the EU dimension with regional development, the policies for research and innovation together with the cohesion, EU direct funds and structural funds. In order to make this auspice in concrete initiatives, it could be useful, from one hand, to foresee mechanisms that ease in automatic way, without following decisions, the use of resources belonging to different European funds, (such as Structural Funds and BEI funds) and national and regional funds coming from the next Common Strategic Program and, on the other hand, to establish some mechanisms able to give concrete visibility to integration processes.

It is important to strengthen the complementarily and synergy between the different lines of funds: UE funds for research and innovation should increase the level of scientific and technologic knowledge according to international standard, while regional funds should assure (on the same strategic areas and/or intelligent specialization), from one hand, the implementation of the stakeholders in the territory, the stock of necessary human resources skills and, on the other hand, offer tools for the valorization of new awareness in terms of development of new technologic solutions, introduction of innovations of product/process and their launch to the markets.
In this sense, the integration between structural funds co-financed programs and research and innovation framework program has to be very strong and should not just be focused on a dividing issue. There should be openness to regional programs of industrial research and technologic transfer aimed to enforce specific cluster in the regions, promoting also efficient and not wasteful forms of interregional cooperation. For this reason, it is foreseen a mechanism of integration between cohesion policy and research policy funds, in order to give a strong and wide impulse to the evolution of Italian and European manufacture.

In particular, to assure more integration, it is proposed to:

- Foreseeing “Integrated Package of Facilitations” that allow to join in just one financing request more aspects and phases of investment in research and innovation. In this way, the proposer subjects can articulate an integrated development plan, with a right time schedule between the different phases, accessing different programs during different phases (ex. PQ, CIP, structural and regional funds);
- Getting involved to support a composite financial architecture as well as to develop new financing mechanisms, also by promoting the combination of automatic fiscal instruments to promote investments in R&D which meet the needs of all enterprises through selective instruments (such as call or negotiation) to achieve R&S strategic objectives;
- Developing ways to mobilize adequate risk capital to support PMI, through the elaboration of integration financial paths between European, national and regional aids and the introduction of limits of contribution adequate to the beneficiaries characteristics, in order to support the delicate passage from research to production, which especially the smallest enterprises cannot make due to lack of internal financial resources;
- Giving priority to R&I in the implementation of structural funds co-financed programs;
- Reviewing the framework of State Aid for R&I to support public expenditure for research and innovation at national and regional level;
- Boosting, in a systematic way, the human resource training on the regional territory in order to create professional figures able to support enterprises willing to apply to European programs (ex. project drafting or project management), to create evaluators and experts that are able to participate and represent the territory in PTE. In particular, this action of training could be promoted by FSE;
- Foreseeing, in UE calls, list flow procedures concerning projects which passed the eligibility criteria concerning priority themes within regional policies (such as People and Ideas of the 7FP). In particular, it could be foreseen the possibility that Regions act to co-finance with their own resources or with structural funds resources. This could allow to start projects (where there is a regional partner) even if the availability Framework Program funds is not enough to finance all selected proposals. This procedure could allow Regions to quickly finance initiatives that passed European selection and are interesting also on a regional base, making easy the internal administrative procedures of project selection;
- Establishing a guarantee fund or a regional loan that is valid to obtain the community pre-financing also exploiting the availability of FESR funds. Involved Regions could assign a part
of FESR (even little) to a revolving fund which SMEs could quickly accede while waiting for the pre-financing;

- Foresee that Regions, within Joint Technical Initiative and where member State does not have funds, can support initiatives where is involved a regional partner for the amount of grant required (or, at least, for part of it).

4. Strengthening of territorial competitiveness

As highlighted by the European Council, “Regional Policy can unlock the growth potential of the EU by promoting innovation in all regions, while ensuring completeness between EU, national and regional support for innovation, R&D, entrepreneurship and ICT. Indeed, Regional Policy is a key means of turning the priorities of the Innovation Union into practical action on the ground”.

In detail, regional policies can activate system actions in order to improve the competitive environment and break down barriers hindering SMEs participation or use of research and innovation outputs at the European stage.

Indeed, the regional dimension is the most effective in order to create a research and innovation friendly context, to set-up clusters and foster cooperation among enterprises as well as synergies between public research centers, universities and enterprises, in order to promote talents and highlight territorial cooperation networks able to compete on the international stage.

Moreover, the regional dimension is the most adequate to develop smart specialization strategies aiming to highlight territorial technological and production vocations, concentrating resources on a limited number of priorities.

Integration of the regional dimension into the design and implementation of several national and European important goals is required in order to strengthen territorial competitiveness. This leads therefore to the following priorities:

- developing forward looking actions, in order to identify excellence fields and domains able to represent economic development drivers for the territories; an in-depth knowledge of production systems, along with the ability to foresee and anticipate future trends, all this can drive the design of the programs and the implementation of research and innovation aids towards key European development sectors, while developing, at the same time, regional initiatives programming and coordinating ability at the regional level;

- establishing few ambitious strategic objectives, orienting private and public investments in research and innovation towards them, taking into account the great social challenges, driving towards such objectives initiatives autonomously undertaken at a regional level, therefore contributing to their better design and to a better highlighting of results achieved;
• giving priority to the support of knowledge and economies development processes, able to maximize efficiency in resources and energy use, with a view to ensure an increased sustainability and a lasting territorial development;

• highlighting and strengthening research infrastructures, developing a European strategy promoting a free access to most advanced research infrastructure and concretely contributing by that mean to realize the European research space. Support to the realization of new and more developed infrastructures, as foreseen by the ESFRI network, could be implemented making structural funds available in order to support such outputs and could involve Regions in relation to localization aspects as well as to highlight local results;

• regarding human resources involved in research, we underline the importance of broadening the range of eligibility for actions and programs boosting and promoting mobility of innovation researchers and managers. In such context the Marie Curie program plays a very important role that should be further strengthened as EU financial instrument serving European Commission strategies aimed at highlighting human capital and at the development of competences making Europe more competitive on the global stage (multidisciplinary, intersectoriality, mobility and international dimension). To this end, an increased coordination between DG Research and DG Education and Culture (EAC), with Regions playing an active role in identifying practices and issues to be supported through mobility is fundamental; here again a financial subsidiary intervention by the regions might be envisaged in order to finance – in the framework of Marie Curie action “Initial Training Networks” – proposals judged deserving which eventually couldn’t be financed due to a lack of budget resources;

• promoting introduction of the pre-commercial procurement, as a tool for research financing, also through the implementation of pilot experiences highlighting regional ability to activate virtuous processes based on the identification of real market-driven research needs contemplating a risk sharing between public and private. Indeed, the pre-commercial procurement looks like the most appropriate instrument in order to drive research and innovation towards the fulfillment of a “new” need lacking in the market adequate goods and services to fulfill it. A first step encouraging administrations to use this instrument might be represented by the preparing and spreading of guidelines proposing procedure management schemes. Furthermore, innovative procurements might stimulate SMEs and startups participation, through principles and clauses establishing the obligation for big enterprises to form groupings including SMEs.

As for the local level, priority must be given to:

• recovering research, development and innovation competitiveness, through territorial partnership allowing continuous and complementary interaction between enterprises, universities and government institutions, such as technological Districts. As a matter of fact, districts provide laboratories and technological platforms making them available for all centers and enterprises of the territory, thus encouraging intra-regional coordinated cooperation and avoiding useless duplication of investments in state-of-the-art equipments and instrumentation in single institutions. So districts can act as promoters of strategic sites for the construction of pan-European or even global research infrastructures. In order to overcome localism, technological districts should therefore be part of national and international networks, thus becoming territorial nodes allowing to strengthen their competitiveness on a larger scale, promoting enterprises internationalization
processes, implementing synergies in the same technological environment between different industrial sectors;

- ensuring full participation of the Country as a whole to programs and joint initiatives carried out in Europe (such as, for instance: JTI and JPI), also ensuring adequate and secure financing as well as rapid procedures. In particular, such initiatives should be developed through a close synergy between the European, national and regional level to identify most adequate procedures in order to allow wide participation and effects of planned actions;

- ensuring, with reference to new European innovation partnerships, the involvement of all research and innovation stakeholders in the selection and development of future partnerships, and designing a clear governance model providing for the participation of the Regions, also in the testing phase.

5. Strengthening competitiveness and specific initiatives SUPPORTING SMEs ROLE in research and innovation processes

Involving SMEs to a larger extent is an issue to be tackled at each new programming phase of European research funds. Despite efforts made and measures taken in the 7th FP (15% of the “Cooperation” budget devoted to SMEs, specific measures within the “Capacities” program), the program is still not user-friendly enough for SMEs, even for those provided with endogenous research capacities, who must struggle to find their place in it due to technical-scientific contents and to execution modalities.

It is to be hoped that the next program foresees initiatives aiming at:

- increasing the participation of high knowledge intensity SMEs, identifying research topics close to needs and skills of the production system and bottom-up measures;

- broadening the range of actions to support innovation in SMEs (so far basically limited to pre-competitive research projects within the 7th FP) through measures aiming to ease industrial application of research outputs in order to give the opportunity to prove the goodness of a finding in terms of future applications, or demonstration actions, results take-up;

- redesigning the approach of the program for SMEs “Research for the benefit of SMEs”, in order to provide a share of financing to SMEs, provided they are directly involved in conducting the research program (currently community financing only covers expenditures of researchers working on behalf of SMEs);

- supporting the establishment of enterprises networks and their participation in research projects – namely in the big ones – in order to take advantage of economies of scale and of a greater representativeness, identifying suitable tools and economic incentives;

- improving and facilitating SMEs access to the process of protection of intellectual property, highlighting the single EU patent and modernizing the copyright and trademarks framework, taking into account specificities and characteristics of SMEs; ensuring the full utilization of research and innovation outputs by SMEs involved in the projects. To this end, the model implemented for the first time in the Research for SMEs program looks appropriate;
• promoting a greater knowledge and awareness of sharing and intellectual property management processes created within research consortia also through the activation of services/experts for SMEs;
• supporting micro-enterprises role, even of those coming from the so called traditional sectors, developing participation tools fine tuned to their dimensions and capacities, highlighting chains and partnerships with the knowledge system; indeed, degree of awareness, engagement and investment in research and innovation is growing even in “mature” sectors, depending on their level of experience, specialization and business dimension;
• supporting enterprises growth processes as well as those leading to their productive diversification, when they are linked and validated through targeted interventions in the field of innovation, particularly within networks, parks, clusters or technological districts.

6. Highlighting processes and results of the PARTICIPATION into European initiatives

Recent experience has shown how participating into European financing paths (monitoring opportunities, application, building the partnership, assessment, implementation, reporting, highlighting outputs and collaborations, management of following phases) represents a very important training in scientific and economic and, in some cases, administration actors qualification processes. At the same time, selection processes, and in many cases the reduced availability of resources, have created a disproportion between efforts, expected results and results actually achieved, that resulted in concrete disaffection risks or in delegations towards less involving modalities. One of the fundamental results to be achieved in the new coordinated framework of initiatives should be the broadening of the beneficiaries range. Regions can play a fundamental role, as intermediary, coordinating and promoting best practices dissemination processes.

In this scheme are included, for instance the opportunity to use and exploit on a territorial scale:

• positive evaluation outcomes which could not eventually be financed;
• know how contained in project directories, prepared with a view to participate in community calls for proposals;
• accreditation paths, established through permanent collaborations built over the years, contemplating the participation of different actors on scientific or economic issues;
• thematic clusters activated or supported by community initiatives;
• follow ups of interventions sponsored (for implementation) by the structural funds but lacking operating resources;
• integration among investments and human capital for its operation.