

# THE LOMBARDY REGION'S POSITION ON THE FUTURE EUROPEAN RESEARCH AND INNOVATION PROGRAMME (COMMON STRATEGIC FRAMEWORK – CSF)



# **Contents**

1.	INT	RODUCTION	3	
2.	POL	ITICAL OBJECTIVES	3	
	2.1.	The European Union at the centre of global scenarios	3	
	2.2.	The role of Regions in research and innovation policies	4	
	2.3.	Research policies and cohesion policies	6	
	2.4.	Alliance networks and European global foresight	7	
3.	PRIC	ORITIES	8	
	3.1.	Objectives	8	
	3.2.	A change in continuity	8	
	3.3.	Simplification	9	
	3.4.	Joint Programming Initiatives	. 10	
	3.5.	Research Driver Innovation	. 10	
	3.6.	The role of basic (curiosity driven) research	. 12	
	3.7.	Business involvement: the role of SMEs.	. 12	
	3.8.	International cooperation	. 14	
4.	TOC	DLS	. 15	
	4.1.	Public-private partnerships	. 15	
	4.2.	Venture capital	. 16	
	4.3.	Research vouchers	. 16	
	4.4.	State aid	. 17	
5.	Eva	luation	. 18	
6.	PRC	PROGRAMME FLEXIBILITY		
7 POLICY COHESION AT EUROPEAN LEVEL		ICY COHESION AT FUROPEAN LEVEL	20	



### 1. INTRODUCTION

The strategy and objectives outlined by Europe 2020 and the "Common Strategic Framework for EU Research and Innovation funding" (CSF) put forward by the Commission in the recent Green Paper open a major debate on the future of European research and innovation. The objective, which is shared by the Lombardy Region, is to pursue a sustainable growth of the European system through the creation of a **consistent set of support tools along the whole "innovation chain"**, from basic research to the launch of innovative products and services on the market.

In this context the entire architecture of the future strategic framework needs to be revised in order to facilitate a **simplified**, **coordinated and harmonised multi-disciplinary approach**, which is able to identify, tackle and possibly solve in a positive and effective way the social and economic challenges faced by growth, and at the same time, capable of adapting to changes and unforeseen events that inevitably interfere with planned choices.

Today, Research and Innovation are yet to be perceived as an economic value for citizens, businesses and competitive development within the territory, capable of creating wealth and prosperity for the community. This perception should be counteracted also through the new CSF (*Common Strategic Framework*).

Translating these general principles into actual choices, making them consistent with the many stakeholders and possible different interests and expectations, is in turn a challenge that should **see the Regions as a preferred interlocutor** suited to identifying objectives, generating favourable context conditions, activating forms of cooperation, mobilising resources and taking part in their own right to the establishment of networks and clusters capable of promoting excellence and sustaining complementarity both on a domestic and European scale.

### 2. POLITICAL OBJECTIVES

# 2.1. The European Union at the centre of global scenarios

Today the European Union is facing, perhaps for the first time, a global context where the **socio-economic balances are redesigned** to a significant extent. The global financial crisis has highlighted the limitations of a development model based on a solely economy-centred view of the world situation, revealing, at the same time, the consolidation of a competitive scenario featuring major players such as China, Brazil and India.



However, the development of these large economies has been thus far considered as an opportunity to supply cheap labour, and then as the opening of new markets of great interest to the business systems of the more advanced countries. Today, such countries, if on the one hand continue to face the issue of a structural development shortfall on the other, -have realised that **the key to ensuring real growth to their systems lies in the ability to innovate**. These are large countries that are aiming with increasing determination to develop their excellence, invest in human capital and support research networks.

The Green Paper points out that "Public research and innovation funding in Europe is primarily organised at the national level" and moreover that "despite some progress, national and regional governments still largely work according to their separate strategies".

Against this clear and shareable analysis one can identify, however, the need to highlight with greater determination the importance of the role of national and regional governments so that **Europe** may finally evolve towards the role it is called upon to play: **to be to an increasingly greater extent a major integrated entity** that can negotiate and compete with the US on the one hand, and with the new large emerging entities such as the BRIC countries on the other.

The CSF is, from this viewpoint, the preferred tool for strengthening this integration. Therefore, the programme will need to set as a true political objective the creation of a European research and innovation system capable of developing real synergies within itself, by stimulating a genuine ability to create stable excellence networks. The structuring of the European research system may therefore be the essential factor for the actual integration of national systems and for enhancing the capacity of attracting talents and investments to the European Union.

In order to reach this goal, an essential requirement will be the **in-depth and flexible understanding of those priorities** towards which the European system's innovation efforts should be directed, both in terms of thematic areas and as a method of dialogue and project integration.

# 2.2. The role of Regions in research and innovation policies

The need for greater involvement and more effective interactions between the different levels of intervention operating on a different scale (European, national and regional) is an assumption that has progressively changed the "traditional" role of Regions, considered in a hierarchical form as the final and sequential stage of



decisions undertaken at higher levels. The Lombardy Region believes that this new phase of programming, in taking into account the changes under way, may be an important opportunity to review the role and the contribution that regional governments can bring to the establishment of a European system capable of sustaining global competition.

Indeed, if it is true that it is essential that the integration of the European system be strengthened, it is just as clear that **competition at global level is occurring to an increasingly greater extent between major regional systems**. Industrial and research districts and clusters operate at regional level and compete with similar systems in other parts of the world.

Regions have always been a great wealth for Europe, as they represent the many vocations and traditions, at times more than the country themselves. Regions have proved, both within their own economic systems and through the action of their Governments, that they can interact among themselves to build networks of excellence. The acknowledgement of this role inside the CSF is an essential condition for effectively promoting an integrated effort among the various stakeholders in the areas of research and innovation, according to the subisidiarity principle. From this perspective, the endorsement of research projects by regional governments is an added value that will need to be taken into account when assessing such projects.

The motivation for the Regions to stress the opportunity of a specific role stems not only from their exercising distinctive competencies, but also from their ability to identify research and innovation needs and implement initiatives on a territorial basis through a privileged relationship with the various stakeholders. From this viewpoint, the Regions are not the terminals of European research policies, but rather the engine capable of driving ideas, topics and methods for developing and renewing research and innovation policies in our continent.

After all, the Green Paper itself acknowledges that the Member States research policies often "fail to take proper account of the trans-national nature of research and innovation, leaving synergies with the programmes of other Member States of the EU largely unexploited".

From a practical viewpoint, there is a need to identify preferred and permanent communication channels through which they can build and reshape on an ongoing basis an effective and up-to-date definition process for funding policies and programmes, such as:

· developing strategies and tools that allow a more incisive participation by the Regions in the consultation



and building processes for the future programme also for the purpose of continuously reshaping an effective and up-to-date process of definition of the funding policies and programmes;

- supporting a **strategic and complementary use of cohesion funds** removing as far as possible the administrative and financial obstacles that today make this process difficult,
- Increasing regional authorities knowledge and awareness vis-à-vis synergy options and opportunities between research funds and cohesion funds through dedicated initiatives,
- grabbing the opportunity of new elements such as, for example, the European Innovation Partnership, for a greater involvement of the regional system, for the purpose of both improving the presence of specific territorial competencies and maximising the measures' impact and, at the same time, projecting local excellence and the involvement of the entire value chain in a European dimension,
- stimulating, also through reward-based logics, a greater focus on research and innovation topics thus creating a coordinated framework also covering a **"regional smart specialisation"** that, according to the Commission, should guide regional policies.

# 2.3. Research policies and cohesion policies

Cohesion policies within Europe are undoubtedly a priority on the political agenda not only of the EU Institutions but also of national and regional Governments. A genuine cohesion policy cannot be designed and pursued on a lowest common denominator basis. This would entail a progressive and inevitable loss of competitiveness on the part of the European system. Only by rewarding and growing excellence is it possible to improve the situation of entities affected by development shortfalls.

All this is clearly identified in the Green Paper as a primary requirement in terms of *leveraging* capacity, and the envisaged **integration between research funds** and **innovation funds** that have historically been present within structural funds is definitely a positive factor. However, the CSF will need to pursue the explicit goal of rewarding projects incorporating a real and effective integration between territories and systems featuring different development levels and between funds allocated to research and funds for cohesion policies.

To this end the contribution of regional governments appears to be essential, not only with reference to the design of cohesion policies (as specifically quoted in the Green Paper), but also by acknowledging regions key



role within the research CSF as representatives of the optimum institutional level per enhancing the territories' specific assets.

### 2.4. Alliance networks and European global foresight

In order to implement the political objectives, the CSF will need to facilitate the creation and consolidation of strategic alliance networks among the European leading players and partnerships between territories featuring different development levels. The establishment of these networks will need to take into account the political-planning priorities of the Member Countries, the Regions and the overall European Union. This, for the purpose of supporting the implementation of major trans-European clusters identified on the basis of territorial vocations and their excellences.

For the purpose of optimising choices, the opportunity of implementing a socio-economic, geo-political and technological foresight at European level initiative will need to be assessed in order to identify the areas to which research and innovation related choices will have to be addressed on a priority basis. This tool, which has already been successfully trialled over past years in identifying priorities in the area of research by the Lombardy Regional Government, will have to be cross-referenced with the priorities of the political agendas of the different governments and with the ongoing evolution of the global socio-economic scenarios. A tool of this kind may be an essential aid both for the European Union and the Member Countries and Regions in orientating the choices in the areas of research, innovation as well as training and human capital development support policies.

The European Commission's *Joint Research Centre* (JRC) which provides a scientific and technical contribution to the EU policies and with which the Lombardy Region is already cooperating on the various research and innovation topics, could be the reference and coordination entity for the insight initiatives. In order to ensure the effectiveness of the foresight activities, an essential factor will be the active involvement of national and regional governments for the purpose of determining **precise guidelines that set priorities, methods** (alliances) and criteria that are also consistent with the assessment processes for project to be submitted. Furthermore, it is deemed appropriate that the JPIs (*Joint Programming Initiatives*) be reviewed based on the global foresight results with a view to ensuring consistency in the objectives.



### 3. PRIORITIES

The Lombardy Region believes it is essential that some **strategic priorities** concerning the development of the future European research and innovation programme and the challenges it will be called upon to face be duly stressed.

# 3.1. Objectives

Responding to the great **social and economic challenges** (climate change, energy and food security, population ageing, health, etc.) that Europe is facing today is certainly the starting point that must set high and at the same time measurable objectives for the coming years, with such objectives being also able to be incorporated in precise action plans. The Lombardy Region has been trialling for quite some time an effective working method to define the innovation needs identified in its territory through an intense **dialogue** with the main stakeholders (businesses, universities, hospitals, associations, public authorities, company clusters...) and a consequent clear planning of dedicated programmes and initiatives to support well identified research and innovation needs and a **spontaneous** aggregation of excellence and competencies implemented in scientific research projects leading to tangible results.

# 3.2. A change in continuity

The overall architecture of the new programme requires **major changes** in order to effectively respond to the new objectives.

The willingness to review the general approach must be matched by a **change in terms of clear objectives and tools, simplification** of participation and accompanying measures to support the transition to the expected changes thus avoiding to add further complexities.

For this reason it is believed that a "change in continuity" approach should be adopted especially with respect to those programmes and tools that have proved to be especially effective also on the basis of the intermediate assessment of the Seventh Framework Programme.

In particular, it is appropriate that those programmes that entail the aggregation of competencies originating from research centres, universities, businesses, albeit supporting greater interdisciplinarity, as well as those covering mobility and circulation of competencies and researchers be maintained.



Furthermore, what transpires is the need to maintain an appropriate balance between curiosity driven research, bottom-up measures provided for in the FP7 (such as FET from ICT and Energy) and more market oriented measures for which the Regions can play an effective role.

# 3.3. Simplification

**Simplifying and improving accessibility to research programmes** must be at the basis of the new planning. The bureaucratic, management and administrative load for the management of the projects financed by the Framework Programmes must be significantly reduced, whilst still ensuring the transparency requirements that the use of public funds rightly demands.

It is suggested to properly consider to strengthening the direct links between the Commission itself and the Regions with the aim to provide effective information to industrial and research organisations in relation to contents, priorities and required procedures but, above all, to involve the Regions themselves in supporting research projects, also through their direct participation in the said projects.

This will also allow the regional systems to highlight the thematic **priorities** of their systems and **strengthen the capacities of inter-regional alliances** between different European entities, taking also into account the existence of bilateral or multilateral agreements between the Regional Governments.

# Working suggestions:

The preparation, management and reporting of a project proposal requires an increasingly greater effort, both in terms of time required and financial and personnel resources. Some suggestions as aimed at reducing the impact of the merely procedural and administrative phases concern:

- a. The breakdown of the **proposal submission into** two stages (as already occurs for some calls) reserving the burden, and the relevant costs, of a detailed proposal only for those who have overcome the first step relating to the project idea and the partnership involved. In this way, the time and resources required would be significantly reduced and the success rate of the projects pre-selected at the first step would increase.
- b. The adoption on a wider scale of the **lump sum reimbursement** system adopted in some People initiatives, in particular extending them to the SMEs which usually have great difficulty in applying administrative reporting



rules.

- c. The shift towards an output-based funding system may represent a major step forward, provided there is a clear and shared choice of result indicators and this does not introduce elements of non programmable uncertainty in the provision of the funds. In particular, what is suggested is a gradual approach that allows a fine-tuning of the system through the beneficiaries' involvement.
- d. The harmonisation of procedures among the different programmes and measures: it is hoped that the integrated approach that is at the base of the future programme leads to a greater consistency of the access and reporting procedures that currently are not always harmonised (at least in terms of their interpretation) within the programmes themselves and to the reduction/rationalisation of the existing tools.

# 3.4. Joint Programming Initiatives

The Lombardy Region stresses the positive nature of an approach aimed at structuring the European Research Space and multiplying the opportunity of converging different resources on shared research objectives. At the same time it expresses its concern that these initiatives may, unless they are appropriately directed and mediated, create asymmetric situations if financial and/or procedural restrictions limit the involvement of researchers and enterprises, thus risking to fragment the scientific community. For this reason it is believed that the JPI should be developed in strict synergy between the European, national and regional levels with a view to identifying the most appropriate methods to allow a wide participation and implementation of the planned actions. The Joint Programming initiatives may also benefit from common actions promoted by the EU and conducted by Member Countries and privates, as part of the European strategic energy technology plan (SET Plan). Consolidating strategic alliances with international networks and partners such as JRC – which play a primary monitoring and coordination role within the SET Plan – would also help determine, manage and assess the outcomes of the projects along the entire innovation chain.

### 3.5. Research Driver Innovation

The Lombardy Region agrees with and appreciates the intention of the Commission to **integrate research and innovation in a single reference and funding framework** and believes that the "open innovation" paradigm gives the Regional Authorities a further task in actually implementing those contextual conditions aimed at



integrating research and innovation and facilitating public-private cooperation according to a new set of principles. To this end, it is also necessary to re-direct the resources and tools to the objectives of a sustainable growth. It is suggested that the appropriateness of including a specific unit specialised in business innovation inside the JRC be assessed.

### Working suggestions:

It is necessary to create the environmental conditions to sustain tighter links between research and innovation, for example:

a. making the existing "research based" tools more flexible and integrating them with new tools which allow the adoption and use of research results, thus widening the measures for proving the results and facilitating the involvement by various stakeholders (SMEs, finance companies, public sector);

b. enhancing the role of public demand as a key to innovation and strengthening the initiatives undertaken on a pre-commercial public procurement. This should be done through a partnership among government organisations (joint procurement) aimed at achieving a significant critical mass in order to attract the best competencies in response to strategic needs shared by the government organisations;

c. providing for greater flexibility in the management of projects with a view to allowing the possible entry, even during the implementation of the project, of new entities better suited to exploit the knowledge (stemming from the project), even if they were not part of the initial partnership;

d. covering the gap that exists between pre-competitive research and the stage when the industrial and/or financial system is prepared to invest, i.e. the stage that allows the testing of the feasibility of the new "concepts" resulting from the so-called "Proof of concept funds" also from the point of view of the integration and coordination among the European research funds and the national and regional innovation funds;

d. facilitating initiatives of business training of researchers, of mobility towards companies as well as industrial PHD courses (these measures have already been partly undertaken and should be examined in further detail and incorporated in an organic context) with a view to facilitating the transfer of knowledge from the world of research to businesses by targeting human capital



# 3.6. The role of basic (curiosity driven) research

The fact of setting up the new programme by placing a strong focus on the integration between Research and Innovation, so that the research initiatives are aimed at solving issues and developing new products, **does not mean abandoning investments in basic curiosity driven research**. The greatest changes to the scientific paradigms are linked to green field research, which does not have pre-defined restrictions and is not pushed towards the preventive pursuit of results with strict resource and time related requirements. The Lombardy Region, that boasts on its territory excellent international level research groups operating in both technical-scientific (ICT, life science, new materials...) and humanities areas, intends to stress the essential principle of the **utmost usefulness of allocating significant research resources and initiatives without restrictions of any kind**. This activity may be referred to the EU (and national) government level, rather than the regional level, due both to the huge resources required for this type of research and the global nature that it entails (linking the leading research groups that operate in the various countries).

# 3.7. Business involvement: the role of SMEs.

If on the one hand the European system shows a marked ability to generate excellence in research, despite a growing international competition, on the other it confirms a symmetrically **limited attitude to have the European business system, especially SMEs, benefit from the said excellence**. The greater involvement by SMEs is a recurring theme that accompanies each new programming phase for funding European research. Despite the efforts and measures adopted in the FP7, the programme is still difficult to be accessed by SMEs including *research intensive* SMEs that struggle to find a place of their own inside the system due both to the proposed technical-scientific contents and the implementation procedures. It is believed that the future programme will need to **widen the range of available actions for SMEs** (which, to date, is limited to precompetitive research projects in the FP7) through measures that facilitate the industrial application and take into account the differentiation that exists between the attitudes and the capacity of innovation of the diverse world of SMEs.

Indeed the fabric of SMEs is not only a necessary complement to the activities of large companies, but rather a value in its own right. The flexibility and innovation capacity of the SME system, in an era of strong global competition, has already proven and continues to prove that it can ensure a capacity to rapidly adjust to the changing market conditions and the rapidly growing needs of users and consumers. In many cases, the fabric of



SMEs has also been capable, thanks to the above mentioned flexibility, to react to the recent global financial crisis in a more effective manner compared to large enterprises, despite having to confront very serious problems, linked especially to the difficulty to access credit.

Therefore it is essential that an adequate share of the research budget be reserved for SMEs and that increasingly more favourable condition to access project be introduced for them. However, the availability of reserved funds cannot ensure in its own right that the SMEs be adequately stimulated to win the true impending challenge, through the creation of organised and structured networks and clusters, which is the only way they can be allowed to act not just as individual entities but rather as a system. The CSF, from this perspective, may specifically pursue the objective of pushing for the implementation of such clusters, thus rewarding the presence of the SMEs inside the projects to an extent that is so much greater, greater is the extent to which these are organised according to these principles.

Therefore, what is hoped for is not only a budget allocation, but evaluation c riteria clearly orientated to reward the aggregation capacity among SMEs within the logics of a cluster.

### Working suggestions:

In order to improve accessibility by SMEs to the future Framework programme, the following is proposed:

a. Increase participation by high intensity knowledge (research performing) SMEs through the identification of research topics that are close to the needs and competencies of SMEs. This process has already been partly undertaken as part of the current Cooperation even though the "topics" are defined in too specific and closed a manner, thus making them difficult to identify by SMEs. Moreover this attitude makes it difficult to carry out the interdisciplinary research that will instead be essential in the future programme.

b. Incorporate in the vertical topics (eg. energy, ICT, etc.) demonstrative actions, results take-up to stimulate the results application and increase the innovative potential of the SMEs that lack adequate competencies to directly participate in research projects. Specific measures for creative SMEs that use research results (eg. innovative materials) could be considered.

c. Maintain and extend the bottom-up approach of the current programme dedicated to the SMEs, "Research to the benefit of SMEs"; however, it is appropriate to provide for a funding share also for SMEs (currently the EU funding covers the expenses of the research providers who work on behalf of the SMEs): the lack of direct



funding often deters SMEs from participating.

- d. Provide for a greater frequency in the publication of calls (currently limited to one call per year).
- e. Support the establishment of business networks and their participation in research projects —especially the larger ones with a view to benefiting economies of scale and a greater representation.
- f. Facilitate a greater knowledge and awareness of the sharing and management processes of intellectual property that originate inside research partnerships also through the activation of services/experts dedicated to SMEs.
- g. Review the definition of SMEs in order to take into account the objectives of Europe 2020 and replace the current quantitative criteria with new qualitative criteria based on companies' intensity of investments in research and innovation capacity.

# 3.8. International cooperation

Research and innovation are today strongly globalised, through brain circulation, structured exchange of experiences among universities and multi-centric location of research implemented at global level by large companies.

The CSF will need to take into account the added value of the presence of extra-European entities in project partnerships, where such a presence enables not only a greater effectiveness of the research and innovation projects but also an easier transition to the next pre-industrialisation and industrialisation phase of the research itself.

This is a delicate issue, which should be handled taking also into account the need for **reciprocity** vis-à-vis other extra-European research programmes, favouring the European entities' capacity to **build and strengthen** alliances and networks at a global level.

Also in this case, the **foresight** activities will be an essential support to the identification of topics and strategies towards which the alliance networks between European and extra-European entities should be directed as a matter of priority also with a view to attracting researchers to Europe.



# 4. TOOLS

# 4.1. Public-private partnerships

By now it has been proven that PPPs allow the implementation of virtuous synergies in various sectors, from infrastructure to welfare, from health to training. This is a method that enables, from a complementary viewpoint, the utmost enhancement of the different and inter-related roles of public and private entities in the implementation of public interest initiatives. It is certainly a **favourable** aspect that the Green Paper stresses the concept of PPPs also in relation to CSF projects. This approach, however, appears to refer mainly to PPPs that are developed inside the JTIs (*Joint Technology Initiatives*). In fact, **the stimulus to the partnership should** be further strengthened and extended outside the concept of JTIs which, despite definite results, risks to allocate to few projects a huge amount of resources aimed at favouring only a limited number of large organisations capable of affording significant investments. The tool used by the JTIs should be reconsidered and redesigned also for the purpose of making it consistent with the results that will emerge from a socioeconomic, geo-political and technological global foresight.

The direct participation in projects, according to the principles of complementarity, on the part of institutional organisations, among others, – both as co-promoters and users of the project (eg. Regional governments or Chambers of Commerce), and co-financers (eg. public finance providers) – further strengthens the general and public interest dimension of the project and the latter's sustainability over time.

Therefore, again from this perspective, there is the need to identify precise criteria regarding the presence in the projects of PPP entities to be considered as **reward-based factors** in their assessment phase. These parameters will consider the **qualitative and quantitative level of the participations**, considering, for example, the nature of the public or institutional entities that are part of the project and their level of involvement, including involvement of a financial nature, in the project itself.

Through these mechanisms it will thus be possible to **enhance the growth of a public-private partnership logic in the research and innovation system**, which is essential for creating and strengthening strategic alliances. The role of Governments and institutional entities at regional level will be, from this viewpoint, essential. From the perspective of a full and actual integration between reference policies for the different types of partner organisations (eg. policies originating from Research Funds, the European Social Fund, the European Regional Development Fund, the European Rural Development Fund, the European Globalisation Fund, etc. ) it would be



appropriate to establish a "cross-reward reserve" at European level based on objective quantitative/qualitative parameters aimed at rewarding leading and individual partners that are capable of creating integration.

### 4.2. Venture capital

The Green Paper acknowledges that "the low level of private finance for research and innovation is a major bottleneck in Europe". The European system is indeed penalised, compared to others, by the scarce capacity of the financial world to become involved in research and undertake venture capital initiatives. The decision to participate in start-ups that originate with a view to enhancing the results of research projects through risk capitals provided by financial companies, is a sort of endorsement of the project itself, as the relevant economic and social effects are carefully assessed from a risk profile viewpoint by entities that are deeply involved in the research enhancement process. At the same time, the presence of venture capital funds is proof of a special focus on the entire research-innovation chain up to the industrialisation of the results of the research itself.

These considerations assume that a start-up created for the purpose of enhancing the results of a research project and involving co-funding based on risk capitals has already undergone a sort of pre-screening by the market which can certainly help in the assessment process by the Commission. At the same time, the introduction of reward-based criteria for projects that, after turning into enterprises, entail the participation of venture capital funds, is a strong element through which the CSF may stimulate the growth of this process also in Europe. As it is likely that extra-European venture capital funds may also be part of these companies, this should be carefully taken into account and properly assessed as regards opportunities and risks involved.

### 4.3. Research vouchers

The businesses that undertake technological innovation processes, specially SMEs, often find it hard to meet the need to develop their own innovative intuitions, as they do not necessarily have the required competencies within their structures. Not always are universities or large research centres the entities most suited to satisfy such a need, due both to the complexity of the management of their own projects and the timeframes required.

It could be interesting to include in the CSF a trial based on the accreditation/voucher principle, which has already been successfully trialled by the Lombardy Region. Based on the favourable experience accrued in recent years, the Lombardy Region is working on the definition of "Vouchers for research and innovation services of micro, small and medium Lombardy-based enterprises and contributions aimed at facilitating



patenting processes". This initiative aims at getting businesses to focus on the issues of technological and innovation development, by creating a system where the various entities – businesses, universities, research centres, public institutions – actively participate in the implementation of innovative processes. This is an initiative whose purpose is to open communication channels in order to improve ties, exchanges and generally the cooperation between research and the economy.

Businesses that prove the value of their innovative ideas could be granted **vouchers to be spent at research centres or accredited public and private entities**. In this way, the beneficiaries could obtain an adequate support in the development of their innovative idea up to its implementation. These vouchers would not require to be accounted for by the beneficiaries as their use would be certified by the centres where such vouchers are spent. This would allow a drastic simplification of the procedures involved and an innovative and strongly complementary method for supporting small and innovative organisations. The accreditation of the centres could be carried out on a national or regional basis, with the validation of a European body, such as, for example, the JRC.

### 4.4. State aid

Regulations covering state aid sometimes risk to be in conflict, in certain areas, with the effective implementation of support policies. One of such areas could be the essential research-innovation-industrialisation chain. Indeed, especially in the initial stages (pre-industrialisation and marketing) the need for financial support could fail to comply with the regulations covering the provision of aid. This issue should be dealt with in a specific manner, by clearly defining the application limits of such regulations in this area and any waivers that may be applied in order to facilitate the full success of the projects.

Even though current regulations covering State aid, including research grants, provide for concessions in favour of SMEs, it would be very useful to introduce a further simplification of the approval procedures relating to State aid for research with a view to making effective and concrete the measure in favour of SMEs, who cannot afford high bureaucratic burdens and that for this reason often shy away from R&D grants that otherwise would be within their reach.

The more you come closer to the market, the more the time factor becomes essential for implementing innovation processes by businesses. Therefore, the Commission should introduce **shorter decision timeframes** and create a sort of preferential lane that drastically cuts down the approval times for state aids to research.



Mechanisms such as "silence means consent" and block exemptions are effective solutions in response to this need.

Finally, this preferential lane should be applied to **all companies**, provided they benefit from research-related aid allocated as part of operational programmes of the EU **regional funds**, that in general have **already received EU approval**; indeed, without prejudice to the approval times of the regional operational programme (ROP), a collaborative mechanism for a research aid approval should be introduced forthwith, while the various European Commission's DGs debate such measures through independent approval procedures.

### 5. Evaluation

The project evaluation is a key phase in the participation and selection process, where this process is based on the learning of rules and procedures and the **risks to be queried in light of the changing of the reference context**. As a result, this becomes a critical and important factor to be considered for the next Programme. The whole evaluation process needs to be arranged in a strict, timely and skilful fashion, based on a set of criteria and a public procedure to be determined in detail beforehand.

The assessment criteria should be widened compared to the current ones in order to enable a more complete and transparent assessment of the projects. It is essential that the assessment criteria be **perfectly consistent** with all the priority factors that will be identified through the foresight activities and in the dialogue with the political-institutional stakeholders at Member Country and Region level. It will be essential that an **adequate space for evaluating the novelty factors compared to the past** for the purpose of **avoiding that such novelty factors be limited to statements of principle.** In particular some reward-based factors to be taken into account should be:

- a) capacity of aggregation and planning by different entities/competencies in response to the priorities determined in the socio-economic, geo-political and technological *foresight*;
- b) ability to develop project that integrate research and innovation;
- c) capacity to integrate resources originating from different sources (both public and private, such as, for example, Venture Capital);
- d) ability to develop public-private partnerships along the research-innovation-market chain;



It is further essential that **monitoring** processes be arranged in order to assess the actual effectiveness of the projects and the achievement of intermediate goals.

Finally the importance of an impact assessment needs to be stressed, in order to establish the consistency of such projects, over time, with the objectives (social challenges) and the assessment criteria outlined above.

### 6. PROGRAMME FLEXIBILITY

The evolution of the global scenarios is occurring with increasingly rapid dynamics at all levels, and this applies also to research and innovation. In fact, this very sector is undergoing very fast changes that, in turn, influence the overall market dynamics. An ambitious and significant research programme such as the European programme, which spans over a seven year period, must necessarily take this evolution factor into account, through adequate adjustment mechanisms over time. Indeed essential are the periodic reviews currently provided for, which allow the analysis of the programme usage status and a possible redirection of resources. However, this does not appear to be a factor of sufficient flexibility: indeed it is necessary to include, as part of the whole duration of the programme, the possibility of reviews that affect the very criteria and the programme priorities of the entire CSF. Only an approach of this kind can ensure an ongoing adjustment of the programme depending on the context conditions, thus maximising the effectiveness of the programme in terms of the European system. From this perspective, the CSF may turn into a stimulus factor for the European research system to become increasingly flexible, by not merely reacting to challenges coming from the rest of the world, but becoming itself the real world driver of innovation. Indeed it is unreasonable to think that the European research system may become world leader if the main tool it has available, i.e. the CSF, does not have in its own structure the criterion of flexibility and innovation of strategic criteria and objectives. In this way, the European foresight, previously quoted as an essential orientation factor in the building of alliances and definition of strategic priorities, becomes the tool that, by being continuously reviewed according to the evolution of the global scenarios, allows an ongoing update of the CSF over its implementation period. Then it will be necessary to identify in detail the mechanisms and procedures through which strategic priorities, alliance networks and assessment criteria should be adjusted over time in order to make the CSF really effective in terms of support of the system's competitiveness.



# 7. POLICY COHESION AT EUROPEAN LEVEL

The research support policies of the European Union's national and regional governments are indeed varied. An **example** may be the **tax exemption** for research activities, a measure that may be, to some extent, considered similar to a **sort of "venture capital" participation by the government**: the latter, indeed, risks losing taxation resources should the research project be unsuccessful, but in the event of a successful outcome, it recovers far larger taxation resources in the research output industrialisation phase. A well-directed tax exemption policy would also contribute to encourage companies, especially SMEs **to invest more in research and innovation initiatives and, at the same time, account for such business: this would probably reveal a series of <b>investments that currently are not recorded,** as they do not provide companies with any kind of benefit. In this way, the research and innovation investment capacity indicators could be favourably influenced. A measure of this kind, however, is not applied in a consistent and coherent manner inside the EU.

One can definitely find other examples of support policies that vary between Countries and Regions.

The CSF, with its huge potential, must become an opportunity for stimulating national and regional governments so that effective and consistent research support policies be implemented, for example by highlighting the different effectiveness of the projects when they are supported also by favourable national and regional policies and by rewarding the projects that can prove a strong institutional support in terms of contribution/tax exemption by national and regional governments.

Moreover, the CSF may be the opportunity to **review the European research and innovation indicators** and hopefully make them increasingly more **consistent** with the evolution of the global scenario, **also through flexibility mechanisms**.