

Position paper

Challenges of a European regional policy at the beginning of "Horizon 2020"

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Since the creation of the European fund for regional development in 1973 regional policy has made an important contribution in a growing European Community by way of structural aid with the aim of assimilating living and working conditions in the regions of Europe. For several decades the focus was placed upon the equilibrium objectives of classical regional politics. In the field of the EU-15 convergent developments can be recognised in the states which have received a large portion of structural funding. Nevertheless there are still substantial differences in the income and living conditions, which were reinforced once again most recently by the economic crisis. A process of convergence can also be observed between the European regions, which has however lost momentum. On the whole the disparities in income in Europe have increased substantially through the integration of the accession countries of Eastern and South Eastern Europe. In these countries there are mostly only a few growth regions, of which the macroeconomic convergence contribution is low. Therefore, cohesion and regional equilibrium still represent a central European task.

Based on scientific findings that spatial proximity is a significant catalyst in the exchange of new knowledge and close interactions exist between the knowledge infrastructure of a region and its scientific and technological efficiency, the 'region' advanced to become an object of interest in research, technology and innovation policy. Whereas until the beginning of the 21st century research and innovation policies did in

fact use the region as an action platform, they however did not think in terms of regional policy; these policies and their objectives have formed a closer interaction with regional policy in the following years. On the European level innovation policy (and with a view to the European Research Area also research policy) became an essential element in regional structural funding.

Since the Seventh Framework Programme this new dimension has moved into the political agenda of regional funding. Above all in the competitive and employment regions, however also in the convergence regions noticeable parts of structural funding were coupled to innovation policy objectives. This commitment is even more distinctive in the new programming period 2014-2020 ("Horizon 2020") and is expressed in corresponding ex-ante conditionalities for the fixing of thematic objectives with regard to the implementation of strategies for smart specialisation.

With a regard to the various levels of development in the regions of Europe it is common knowledge that development strategies must be developed and implemented adjusted to the respective starting conditions ('place based approach'). Nevertheless, target conflicts exist among different areas of policies as regional equilibrium is not a result of state actions which are oriented to macroeconomic growth. Thus, the creation of new knowledge for the development of science and technology is bound to basic conditions, which do not exist equally in all of the countries. Urban centres and urban hinterland have an

advantage due to their equipment with infrastructure, by grown networks and their attractiveness as a living and working area. However, there are also differentiations as these regions vary with regard to the reputation of their research institutes and the novelty and dynamic character of their knowledge base. As the repeatedly chosen example of Silicon Valley shows, these conditions cannot be copied and transferred, but must be newly created by individual and specifically adjusted measures unique positioning features. Nevertheless, there is a number of leading regions in Europe which are similar in their basic structures, however feature different specialisations.

The Regional Innovation Scoreboard of the European Commission makes a distinction between four types of regions with regard to their innovation per-

formance: leader, follower, moderate, modest regions. A differentiation is respectively carried out still between various levels within the four types of regions: high, average and low. Between 2007 and 2011 the number of leader regions increased from 34 to 41 whereby this is essentially a result of an increase in the average level (from nine to 17). At the same time, with a respective constant number of all analysed regions, the number of modest regions reduced from 62 to 52. These developments show that transitions between the types of regions are possible and examples do exist how such transitions can succeed. Although the Regional Innovation Scoreboard analyses the aspects of regional competitiveness which are significant in the individual types of regions, it however does not make any statements regarding political measures which contributed to the transitions.



With a view to the next programming period several **questions** are raised against this background in the opinion of Fraunhofer ISI:

1. How can regional policy be coordinated better with research and innovation policy and target conflicts between the policies be reduced?
2. How can follower regions be made into leader regions in order to increase the number of national and European driving forces for growth? Which political tools are suitable for this?
3. Is smart specialisation a suitable strategy for this and are all regions equally suitable for developing and implementing smart specialisation strategies?
4. Which tasks do the modest regions have with respect to their still long development path ahead and of which probably the majority will never play a leading scientific and innovation function in their respective country?
5. Should greater attention be given to functional areas with the promotion of innovation within the framework of the European regional policies, and how can a strategy and implementation process look in this respect?

Our **answers**:

1. Target conflicts between equilibrium- and growth-oriented policies cannot be avoided. Neither can it be expected that convergence processes seen in the medium-term lead to an assimilation of standards on a broad basis. The essential aim is to identify potentials in the individual regions and to use these for prosperity and employment to the best possible extent. Thus, regional policies, which do not just place their bets on the classical set-up of infrastructure and measures for social inclusion, but also pursues an 'innovation policy light', can play a supplementary role. If it is used for promoting basic technologies and for creating a fundamental knowledge infrastructure such as e.g. broadband networks or the adaptation of new technologies into the local/regional companies coupled with corresponding qualification measures for the employees, it can generate impulses for the development and improve competitiveness by changes in demand and income effects.

From the point of view of Fraunhofer ISI, policies which do not achieve convergence by alimention, but by the focussed set-up of modern infrastructures of the knowledge society, are to be emphatically supported.

2. The fact is inherent to the concept of the leader region that it hereby concerns regions with high R&D expenses and thus also a more than average per capita income. On average the provision of these regions with financial means is so high that structural funding makes important funds available, however as a supplement to national and regional measures. To a certain extent this also applies to the follower regions and hereby above all to the corresponding regions with a high level of development. It is therefore less a question of the amount of fund-

ing than rather the ability of the measures to adapt and to stimulate further development processes in these regions. Therefore, the reinforcement of competitiveness by measures in more specialised knowledge, technology and economic areas appears particularly suitable here for achieving the transition from the follower to the leader status.

From the point of view of Fraunhofer ISI an implementation of strategies of smart specialisation in particular for follower and moderate regions with special potentials for development is to be welcomed. Above all such regions can make a contribution to the national and European development and convergence process which are characterised by urban structures and a broad provision with companies and institutions of the knowledge infrastructure.

3. Principally the idea by specialisation to increase the number of possible development alternatives and to create complementary features instead of parallels, is to be welcomed. Specialisation is also a strategy to improve efficiency against the background of limited available public funds. By the RITTS and RIS programmes in the 1990s already regions were required to formulate innovation strategies with a clear economic and technological focus and by including various regional groups of players and to implement these strategies by pilot measures. In addition, experience exists with specialisation strategies in a number of regions so that the basic concept of smart specialisation is not new for many regions. Regions, which do not yet have corresponding experience need support in the development of strategies. This can be provided by the tools of the S3-platform, however should be supported by 'Show Cases' and 'Demonstrator Regions' as well as specific offers of advice from experienced regions. In institutionally less developed moderate and modest regions the question is raised how funding can be used effectively, which are the objects of public promotion and how the processes of the identification of specialisations are to be organised without creating too great possibilities for the individual exertion of influence and lobbying.

Fraunhofer ISI sees with the complexity of the implementation of strategies for smart specialisation in all European regions the necessity that the fixation of specialisations and measures must be carried out understandable and capable of assessment in the operational programmes on the one hand, on the other hand however include leeway so that regions can react flexibly to changes in the economic and scientific-technological environment. This must be connected with a practicable monitoring, which can be adjusted over the period of seven years. In this meaning we understand the concept of smart specialisation as a process, of which the aim is to accompany it not just with the programming, but regularly. Strategic tools such as regional trend analyses, technological foresight, analyses of potentials as well as socio-economic accompaniments are to be envisaged as fixed parts with the implementation.

4. Modest regions are distinguished according to the Regional Innovation Scoreboard by a less than average economic and technological efficiency on a European comparison. It is striking that during the period 2007-2011 the number of modest regions did in fact fall, for the majority of the regions however no significant assimilation took place to the leader regions. Even with the non-consideration of the consequences of the financial and economic crisis there is thus the danger that these regions will be permanently decoupled from the innovative regions of Europe from a structural point of view. The competitive edges of these regions are currently less based on an innovative and knowledge-intensive economic sector than rather on work-intensive low pay industries. The labour potential and the mixture of productivity, qualifications and wage costs are important location factors of these regions. Even if the macroeconomic key figures of many of these regions – in particular with a view to Central and Eastern Europe – have improved substantially in part since the EU enlargement in the years 2004 and 2007, no significant catch-up processes could be observed in the field of research, technology and innovation, with the exception of several capital city regions. Nevertheless, European cohesion policy has laid important foundations in the past programming periods for research, development and innovation, in particular in connection with the build-up and expansion of (technological/innovation-related) infrastructures. With regard to the upcoming challenges of these regions in the context of "Horizon 2020" and the strategies which are to be developed for smart specialisation the question is raised which role the moderate regions may realistically play in the medium- to long-term in Europe. A realistic scenario against the background of the further consolidation of the division of work within Europe could include that the majority of the companies in these regions initially apply individual technologies over a longer period of time in order to further expand productivity advantages and to optimise internal processes. In this scenario the innovative, technology-oriented regions of Europe or their companies would tend to be in the role of suppliers of technologies or innovative solutions.

Against this background Fraunhofer ISI advocates policies which increase the absorption capability of the companies for external technologies and technical solutions and thus grant special significance to the demand side. A regional strategy of smart specialisation should activate both the endogenous technological potentials as well as guarantee the coupling to European and international knowledge flows.

5. Functional areas, which cannot be fixed to political-administrative boundaries, represent in connection with the concept of smart specialisation and the realisation of a European innovation union important platforms from our point of view for the implementation of technology- and innovation political measures. It can concern both national cross-regional functional areas as well as areas which comprise different countries of the EU. Already existing examples show however

that both the initiation of strategy processes as well as the implementation of measures on the level of public authorities face major challenges. These usually increase with the growing number of affected regions.

From the point of view of Fraunhofer ISI the stronger consideration of cross-regional functional areas within a reforming European regional policy would make an important contribution to the achievement of the targets of "Horizon 2020" and in particular the innovation union.

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