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# INNOVATION AND ENTERPRISE The role of socio-economic players

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# 1. EUROPEAN R&D AND INNOVATION PROGRAMMES – RESPONDING TO SOCIAL CHALLENGES

### The issue

Europe and the Member States are grappling with number of key challenges. First of all, there is the economic and financial crisis which has hit prosperity and lost jobs. In addition to the crisis, however, Europe also faces a structural problem — a dearth of new, high-added-value businesses and jobs. The Lisbon strategy was designed to address this issue but has not yet achieved the hoped-for outcome. Change must now come through the EU 2020 strategy which must act as an effective conduit to smart, sustainable and inclusive growth. This change of focus means that a number of major challenges will need to be tackled, including the following:

- > As it stands, economic growth generates high levels of CO2 and thus impacts the climate in ways that are only too familiar; cutting CO2 emissions and finding ways to cope with the impact of climate change are thus two of today's key challenges.
- > Current production techniques are still heavily predicated on the use of fossil fuels from finite energy sources. Europe is also very much dependent on other countries in this regard.
- In 2020, 25% of people living in the EU will be over 65 years of age. Longer lifespans are a good thing and can benefit society in many ways (older people engaging in voluntary work, providing help with childcare, etc). However, an ageing populating also presents its fair share of challenges, not only on the economic front (a sharp fall in the number of people in work and higher pension costs), but also in terms of healthcare (how, for instance, to enable older people to live as independently as possible in their own homes) and social inclusion.
- > Ageing is one thing, but large towns and cities in particular will also have to deal with populations that are becoming ever younger. In the short term, this will, among other things, necessitate the building of a large number of schools, nurseries, sports centres and cultural facilities in densely populated urban areas. That in turn will require innovate solutions to make the best use of available space and to properly develop and fund the projects. Many large towns and cities also face key challenges in logistics and transport, in mobility management for people and goods and in the provision of properly organised services.
- > Innovation and new technologies also often bring their own challenges. The exponential rise in the number of television channels and the advent of the internet have, for instance, done much to improve the spread of information. Yet, these media also involve a degree of risk for children and young people in particular. Excessive exposure to media of this kind can lead to poor concentration, learning difficulties and health problems not to mention the impact of advertising.

These challenges must be addressed across a number of policy areas: education and training, culture, research, economics, the environment, urban planning, land-use management, etc. All these fields are predicated on technological and non-technological innovation. After all, the purpose of innovation is to develop new or improved products, services, techniques and procedures to help arrive at solutions that are acceptable both economically and to society at large. Given that the EU Member States have many challenges in common, European innovation policy clearly has a role to play in this regard.

# Recommendations for Europe

#### MORE RESOURCES FOR INNOVATION TO ADDRESS SOCIAL CHALLENGES

Investments in R&D and innovation are vital elements in any moves to resolve the many challenges facing society. The social partners also fully support the target confirmed in the EU 2020 strategy whereby 3% of the EU's GDP should be invested in R&D. However, businesses and government alike must play an effective part in helping realise this objective by 2020. The situation must therefore be properly monitored so that changes can be made at an early stage if the target is not being met. Europe must also lead by example and the importance of R&D and innovation must be reflected in the structure of the European budget.

In order to ensure the efficient use of resources, it is vital to set the right priorities and to focus on cross-sector targets that affect all Member States. In doing that, attention must not focus solely on current challenges but also on those yet to come. Consideration must therefore be given to ways of identifying the most pressing and most important social challenges of the future. Societal monitoring is certainly a matter best suited for the European level, where it can be underpinned by forward-looking approach that brings together expertise from different Member States in consultation with stakeholders from non-member countries.

In selecting priority social issues, it is vital to involve as wide as possible a range of public and private stakeholders and civil society groups (including trade unions and environment and development bodies). Civil society groups are well able to discern the degree of mainstream society support for any specific innovation.

Many social challenges are shared by all Member States, so it makes sense to pursue the targets involved at European level. That said, there are also some challenges (or elements thereof) that are more regional or national in nature. EU policy must not therefore be exclusive. The EU could potentially add value by raising the profile of different countries' initiatives and thus making it possible for regions facing the same difficulties to work out joint strategies to tackle them.

When selecting priorities, Europe must also take due account of the ways in which existing and new technologies may help address social challenges. It is important to monitor and assess technologies (taking due account, among other things, of the readiness of society to accept innovations). We must continue to support and build on European initiatives in this area. Moreover, the results of this work must be made available to the Member States for use by national and regional policymakers in their own work of monitoring and assessing technology and for inclusion in their own innovation strategies.



#### BETTER COORDINATION OF EUROPEAN, NATIONAL AND REGIONAL POLICIES

Innovation is a complex process involving a range of different players. Promoting it is thus a matter for various tiers of government at regional, Member State and EU level. Ten years after the launch of the Lisbon strategy, it is clear that the strategies being pursued by the various tiers of government have not properly "gelled" and that the response from on-the-ground stakeholders has, in some cases, remained well short of expectations. It is vital to make clear the role of individual stakeholders in the innovation process, in line with their particular needs and capacities, and thus to identify the obstacles that have, in the past, held back innovation within the EU. The social partners feel this is an essential prerequisite to fleshing out the innovation policy described in broad terms in the European Commission communication Europe 2020: A European strategy for smart, sustainable and inclusive growth.

Generally speaking, the social partners want to see better coordination between European, national and regional policies, not only in terms of content (for instance, coordinating the selection of priority social challenges), but also in terms of the tools to be used. For example, the Joint Technology Initiatives (JTIs) should include regional elements such as competitive clusters, rather than just individual businesses. This requires ongoing dialogue between Europe, the Member States and the regions. The social partners recommend that consideration be given to how such consultations are to be organised, taking care to strike a balance between the different interests involved, both in the industrial sectors concerned and at the level of the Member States.

The quest for "vertical" coherence should also facilitate "horizontal" coherence, i.e. between the regions and/or Member States, in a bid to secure greater compatibility between the different financial support mechanisms and thus a more effective battery of tools. Joint funding of competitive centres on either side of a border, for instance, would foster transnational collaboration more effectively than is the case at the moment. On that front, Europe could provide the necessary leverage.

# DIRECT R&D AND INNOVATION SUPPORT: SIMPLER PROCEDURES AND IMPROVED SYNERGIES BETWEEN THE DIFFERENT EUROPEAN PROGRAMMES

Europe currently has a range of tools designed to provide direct support for R&D and innovation, including not only the framework programmes (FPs), but also the Competitiveness and Innovation Framework Programme (CIP), the European Institute of Innovation and Technology, EUREKA, the Structural Funds and support from the European Investment Bank. The social partners would like to see greater synergy between these programmes both in terms of their content – the various projects must be geared towards the priority social challenges – and in their practical application on the ground. The programmes must be simplified and publicised more effectively, and more must be done to raise awareness among SMEs. The social partners have a number of quite specific demands:

> The European programmes should cover the entire innovation chain (research – development – innovation – marketing), thereby including the links missing up to now and avoiding duplication. The various tools must also "gel" with one another more effectively. It is important, for instance, to coordinate timeframes and topics in the calls for proposals within the various

#### programmes.

- > To counter fragmentation in the research landscape, the social partners are asking that the framework programmes and related schemes (public-private partnerships [PPPs], the Competitiveness and Innovation Framework Programme [CIP]), and the Joint Technology Initiatives [JTIs]) be brought back together within a single joint programme. A set of rules common to all these programmes would be desirable. Each programme could at a later stage go its own way if absolutely necessary. Moreover, there is still the freedom to choose which issues are to be covered under the various programmes, thus enabling each to retain its specific focus in both substance and form.
- > Studies show that the number of businesses and SMEs in particular taking part in the framework programmes is low. Moreover, SME participation is falling and the 15% target is not being met. We know, however, that those SMEs that did take part in the sixth or seventh framework programme found it a very rewarding experience. It is still therefore a challenge to give businesses access to research and knowledge at European level while keeping effective checks on the costs involved. In that respect, therefore, one important European initiative is KAPPA-Health, which was set up to examine the key factors that impact proper SME involvement in health-related activities under the framework programme. Broadly speaking, the social partners are calling for a reduced administrative burden, simplified procedures and shorter timeframes for the framework programme selection procedures. At the moment, the rules for managing the framework programme are too numerous, too vague and too open to interpretation. Care must also be taken to ensure that the financial selection criteria do not become an insurmountable obstacle for young businesses seeking to break out onto the international stage. SMEs prefer to take part in small or medium-scale projects that are easier to manage.
- > Better communication within the programmes is vital. In September 2008, the European Commission published a useful Practical guide to EU funding opportunities for Research and Innovation. However, if this information is to actually reach the companies concerned, experts must be on hand who are well acquainted with the local and regional economy and thus able to give information on the most appropriate support arrangements for potential participants. To do this properly, the national contact points for the framework programme must work closely with local players (sectoral bodies, joint research centres, competence centres etc.) However, the social partners are also calling for more interlinkage and synergy between the Networks of National Contact Points (NCPs) and the Enterprise Europe Network (EEN). Specifically, they are asking that the EEN be allowed to inform the NCPs on issues relating to the framework programme and the CIP, as the contact points' remit covers both these areas.



#### NEED FOR A CROSS-SECTOR ("HORIZONTAL") INNOVATION POLICY

To tackle the social challenges effectively, it is essential to put in place an integrated, cross-sector innovation policy. In this way, innovation would be open to tackling social targets and would be included alongside those targets in the overall framework of each policy area concerned. Education and training, for instance, will be crucial in preparing the market for innovation; environmental policy might be a key element in securing technological change, etc.

Innovative calls to tender designed to address economic and social challenges is one key way to pursue a cross-sector innovation policy. Given that millions of euros are spent on public tenders each year, this approach to innovation does have major potential. To do that, it is vital to build on current strengths. When programmes such as these are being drawn up, the issue of SME access must also be borne in mind. The American model, whereby 25% of the total tendering budget is reserved for SMEs is a good example to follow. Europe must strengthen the framework of such tenders by eliminating persistent legal and financial obstacles. It must also ensure the exchange of best practice between the Member States.

In addition to innovative tendering procedures, the social partners are also keen that Europe should give appropriate attention to norms and standards as these can play a key role in encouraging innovation. Europe must be sufficiently proactive in this area. Setting norms and standards requires the involvement of as many stakeholders as possible, including those that have fewer resources and less time to take part in the processes involved, including SMEs and NGOs.

As mentioned in the introduction, it is also important to give due consideration to the negative impact of certain (technological) innovations. More specifically, in relation to the potentially adverse impact of multimedia on younger people's learning capacity, the social partners endorse the European audiovisual media services directive which reports on media literacy in the various Member States and under which an assessment is to be made of the rules relating to the quality and quantity of advertising broadcast during children's programmes. The social partners even intend to call for a ban on advertising during children's programmes. They would also ask Europe to be particularly robust in dealing with broadcasters from other Member States who circumvent the strict rules in place in the Member States in which they operate.



#### 2. MAKING BETTER USE OF R&D RESEARCH RESULTS

### Issue at hand

Innovation suffers from what is known as the "European paradox". This stems from Europe's poor ability to turn research results into practical commercial products and services and/or new businesses. The failure to capitalise in this way may, potentially, result in a major loss of added value for the economy and society and thus make it harder to maintain, let alone create jobs.

There are many possible reasons for this failure. One is the mismatch between scientific and economic approaches. Under the current arrangements, it is impossible to coordinate R&D in knowledge centres with innovations in companies. This in turn has to do with the structure of the economy. Regions or Member States that show relatively little interest in the medium- and high-tech sectors have tended over the years to specialise in the more traditional lower- or low-tech sectors. These are less knowledge-intensive, less substantive sectors that tend to be spurred on by innovations designed to keep the cost structure under control. It is becoming increasingly difficult to use procedural innovations to secure cost competitiveness as the knowledge involved is to a large extent easy to replicate. Moreover, the failure to disseminate knowledge, a weak culture of cooperation and a poorly developed spirit of enterprise keep this paradoxical situation alive.

The social partners are calling on Europe to remedy the situation by, among other things, fostering better relations between the business world and education and research, promoting open innovation, improving the capacity of businesses to take new knowledge on board, developing a spirit of enterprise, providing better access to risk capital, investing in ICT and providing market support.

# Recommendations for Europe

#### RELATIONS BETWEEN THE WORLD OF BUSINESS, ACADEMIA AND RESEARCH

#### :: Cooperation

It is vital to set up cooperation between businesses (especially SMEs) and universities/higher education institutions. It is important for collaboration to be further integrated and supported by innovation policy measures. This strengthens interaction and complementarity between stakeholders, which improves knowledge sharing. Furthermore, they often form the basis for more formal knowledge sharing at a later date, such as staff exchanges, contract searches, and R&D cooperation.

In Europe, joint technological initiatives to some extent allow the establishment of such a strategic cooperation process. Nevertheless, the social partners call for this to be strengthened.

Indeed, carrying out research in partnership is liable to enable businesses to optimise the value of R&D results delivered by research institutions. These would be carried out more effectively if they were based on proper collaboration that allowed knowledge pooling and an overall improvement in performance, rather than on sub-contractual relations. To achieve this, clear rules on shared intellectual property would have to be defined.

Europe should provide a reference framework in this field.

The social partners also ask for special attention to be given to SMEs since they represent 99% of European businesses. These businesses either have a very small R8D team or none at all, which means that direct use cannot be made of information from knowledge institutions. European programmes must take adequate account of this by facilitating cooperation between SMEs and higher education institutions and research centres, the activities of which are better suited to the needs of this type of business.

Furthermore, intermediation needs to be strengthened. Although efforts in this direction have already been made in some European regions, the social partners call for the European strategy to be based on the instruments set up at the local level by encouraging cooperation.

Existing EU-level instruments (ProTon Europe, EEN, Europe INNOVA etc.) need to be evaluated in order to clarify them and improve their effectiveness. This process should result in a proper European intermediation instrument made up of the various national and regional intermediation instruments.

Some Member States have developed novel methods for organising contacts between universities/higher education institutions and businesses. It would be worthwhile for the European Union to carry out a comparative assessment of these initiatives in order to identify good practice in this area.

#### :: Worker mobility

It is people who hold knowledge and who therefore play a key role in the transfer of information. This is why the social partners would like to see greater staff mobility between scientific institutions and the world of business. The link between research and innovation could be put in place through the consolidation of programmes that would allow businesses to call on a researcher to strengthen technological potential and conversely to allow a doctoral student to complete a thesis in an industrial setting.

The social partners would also like greater prominence to be given to the Leonardo programme, which includes among its goals, the objective "to promote and reinforce the contribution of vocational training to the process of innovation, with a view to improving competitiveness and entrepreneurship, also in view of new employment possibilities; special attention will be paid in this respect to fostering cooperation between vocational training institutions, including universities and undertakings, particularly SMEs".

There are a number of obstacles to staff mobility between scientific institutions and businesses, including differences in evaluation criteria, statutes and even pension schemes. These problems are all the more pronounced in the case of international mobility. This point has already been the object of much discussion. This is why the social partners call for decisions to be taken to remove all obstacles to mobility. Transnational research careers could be the first step.



#### **OPEN INNOVATION**

Open innovation is a new form of collaboration which could become increasingly successful in a globalising world. It is based on a simple statement of fact: there is more intelligence and know-how outside a business than within it. Indeed, due to the growing impact of consumers and stronger competitive pressure, businesses can no longer carry out technological development and scientific research in-house because it is too expansive and because they risk missing opportunities.

The social partners consider it equally vital for users, who are best able to assess products and services, to be able to pass on their innovative ideas in order to improve these products and services. The EU could therefore set up a website as a platform for users to share their ideas without losing their intellectual property rights. De open innovatie neemt dus de vorm aan van een ecosysteem, waar alle deelnemers onderling van elkaar afhankelijk zijn en elkaar iets kunnen bijbrengen en waarbij de grootste uitdaging erin bestaat de intellectuele eigendom op een gezonde wijze te beheren.

Open innovation is therefore a sort of ecosystem where all participants are interdependent and have something to gain. The main challenge would be the correct management of intellectual property.

Access to intellectual property is important for creating new activities. Nevertheless, the existing European patent shows clear shortcomings and is at odds with Europe's declared aspiration to achieve a single European market. As a result, there is an urgent need to create a less expensive and simpler European patent. In the meantime, it is important for members of the European patent system – including Belgium – to ratify, as soon as possible, the London Protocol, which significantly reduces translation needs.

If the European patent is not possible, an alternative would be to define converging criteria so that the principle of mutual recognition of national patents could be applied. While awaiting a response, the social partners call for a preferential rate to be introduced for SMEs, as is already the case with the American (USPTO) and Japanese (JPO) systems.

Once the patent has been granted, it is important that patent rights can be safeguarded. The protection of these rights has to offer legal assurances at a reasonable cost and within a reasonable timeframe. This is not currently the case. Once a patent infringement has been detected in a number of countries, separate actions are brought in each country. This is why we need to work towards regulating patent litigation centrally at the EU level.

#### THE KNOWLEDGE ABSORPTION CAPACITY OF BUSINESSES

Technology transfer and knowledge dissemination between users and developers are the aspects of innovation most likely to impact on economic growth.

It is important for a business to be abreast of the latest technological developments. Access to information is therefore essential but complex for businesses that are short of time and financial resources. This is why the social partners advocate more support for technology watch activities.

European Union initiatives in this area require continued support and improvement, but the outcome of these initiatives must also be adequately disseminated in the Member States. As a result, there is a vital need for networking to be improved between national and European bodies involved in technology watch activities. Furthermore, in order to maximise the absorption capacity of businesses, workers have to be sufficiently qualified to be able to acquire new know-how. This calls for the development of lifelong learning capacities and reliance on ongoing training.

#### **ENTREPRENEURSHIP**

Entrepreneurship makes it possible to pass from concept to action, to transform knowledge into profitable activity. In order to do this, it must combine creativity and/or innovation, risk-taking, and management ability.

Entrepreneurship is crucial to renewing the structure of the European economy as a knowledge-based economy. It is therefore important for Europe to offer entrepreneurs a framework that is at least as favourable as frameworks in other parts of the world. Thus the social partners would like to see more support for the initiatives that Europe has already taken and which the Member States have implemented (e.g. the "Small Business Act"). A specific EU approach (an EU-level programme) for Young, Innovative Companies, a small group of companies with radical innovation projects, which are faced with their own specific problems, is equally needed.

If we wish to foster entrepreneurship and innovation, then it is important to nurture the entrepreneurship of schoolchildren and students. Action needs to be taken to inculcate young people with a taste for enterprise and to teach them to manage risk. A cultural overhaul that recognises and fosters the link between education, entrepreneurship and innovation is a prerequisite for future prosperity and wellbeing.

Furthermore, the awareness and training of researchers must also be geared to business development and management in order to provide them with the necessary tools to use their research results successfully. For this reason, the European Charter for Researchers, adopted in March 2005 by the European Commission, should be completed in such a way as to include this principle in the obligations of employers and its implementation should be set out in measures under the "European partnership for researchers".

In addition to systematic actions to establish favourable conditions for the creation and development of enterprises, including social entrepreneurship (access to guidance facilities, a second chance culture, and funding etc.) and for entrepreneurship in general, the social partners would also like special attention to be given to pro-growth entrepreneurship and accompanying measures: setting up multilingual teams with management experience, support for internationalisation policies, access to risk capital, access to intellectual property etc.



#### **ACCESS TO RISK CAPITAL**

Risk capital is a vital lever for entrepreneurship and innovation. Lack or and/or limited access to risk capital can slow down the efficient functioning of a regional or national innovation system. This, in particular, is why the social partners expect Europe to improve access to risk capital so that businesses can invest and therefore continue to innovate and grow throughout all phases of their development.

Disparate national policy results in significant market fragmentation, which has a negative impact on the acquisition of funds and investment within the European Union. The social partners are therefore in favour of developing an integrated risk capital market, with a view to harmonising national regulatory frameworks and eliminating transnational barriers in order to facilitate the activities of entrepreneurs. An effective communication strategy regarding this instrument is also needed.

#### **INVESTMENT IN ICTS**

Generally speaking, there are three different ways in which ICTs can play an important role in a region. The region can specialise in sectors that offer ICT goods and services. In recent years, these sectors have generally experienced strong productivity growth due to continued technological developments, thereby contributing to the macroeconomic growth of productivity (e.g., Nokia mobile telephone production in Finland). In other words, ICTs make a direct contribution to the economy of a country or region through added value, employment, exports and other factors generated by the ICT production sector.

A region cannot make a profit solely by producing ICTs, it must also apply them across the board to the production process. ICTs are an important aid for new services and products, including in the socio-cultural sphere (e-learning, e-government, e-health, e-security). In this way, they contribute to creating added value, employment, exports, etc. in sectors that use ICTs. In recent years, this indirect effect has grown steadily and it is generally expected to outstrip the direct effect in the future. Finally, the application of ICTs may have external effects (e.g., network effects or spill-over effects) and complements innovations. In order to fully exploit the possibilities of ICTs, non-technological innovations are also required in terms of organisation, logistics and marketing.

In short, ICTs are important to the dissemination of technological know-how and also complement non-technological innovations.

In order to foster and encourage the introduction and application of ICTs in all segments of society, an action plan is required with special focus on the role of public authorities as contracting authorities for innovation and catalysts for the dissemination of new technologies. Furthermore, the effective running of innovation adjudication has to be guaranteed through close cooperation and involvement in the life of the business.

#### SUPPORT FOR MARKETS

Enhancing R&D results can only be achieved through the social validation of the product and service markets they create. This means that users (consumers, businesses, public authorities) need to be involved in the first stages of product and service development in order to improve understanding of potential demand. This approach must be followed right up to the finalisation of methods for identifying tacit consumer needs, in compliance with codes of ethics and privacy laws.

The social partners draw attention to the importance of the leverage effect that public authorities must exercise on emerging and promising markets. To this end, public procurement becomes an important instrument. Public procurement should be able to serve as a showcase for innovative products and services. With this in mind, it must be ensured that procedures allow authorising officers to take innovative solutions into consideration. But the development of rules and standards is another important instrument. As mentioned earlier, Europe needs to be more proactive in this area and to adequately involve "weaker" stakeholders (such as SMEs or NGOs) in the process.

In general, the internal market has to be strengthened, deepened and broadened. Open competitive markets, i.e. efficient markets, are crucial drivers for innovation.



# 3. THE PROCESS OF OPENING UP TO NON-TECHNICAL INNOVATION

#### The issue

The key to innovation is renewal and/or improvement: renewal of products, services, processes or organisational structures, markets, design, company management and economic models.

European innovation policy has long prioritised support for technological innovation. A perceptible shift in the situation has been noted over the last several years, however, as the European Commission has altered its view of what is actually meant by innovation. It has understood that the latter is not always just a simple product of technological and scientific expertise but may be brought about as a result of a combination of non-technological factors (user acceptance, amended value chains, design, marketing and distribution concepts, social innovation, such as modifications in processes and organisations, etc).

Non-technological innovations occupy an increasingly key position in the economic success of businesses, regions and States. One non–technological innovation which, along with other forms, is increasingly on the political agenda is social innovation at organisational level which aims to boost the performance of an organisation, improving work quality and the workplace itself.

Furthermore, the European Commission is aware that in order to boost European competitiveness, in view of its increasing influence on the fabric of the wider economy, innovation is vital to the service sector. And in the service sector non-technological innovation is a very important form of innovation.

In short, the definition of the concept of "innovation" is broadening. But simply expanding the breadth of a definition has little to do with transposing and disseminating it effectively in practice. For this to happen, governments must assume the vital role of facilitator. One of the most important ways in which specific progress can be made in opening up the concept of "innovation" in practice is an appropriate broadening of the innovation pathway which may be eligible for aid.

At European level (the Seventh Framework Programme, the Framework Programme for Innovation and Competitiveness, the European Social Fund, Community Guidelines on state aid for research, development and innovation (2006)), political initiatives have already been undertaken with a view to broadening and extending the innovation pathway which may be eligible for aid.

Improvement is nonetheless possible with regard to the issues listed below:

- 1. Knowledge management of non-technological innovations is lacking.
  - a) A wide range of European instruments exists for broadening the innovation pathway which may be eligible for aid. It is unclear at present which instruments are best suited to achieving broadening it effectively and efficiently.
  - b) European authorities lack an efficient system of knowledge management for non-technological innovations, which may cause their introduction to be delayed.

- 2. The gap between technological and non-technological innovations remains substantial.
  - a) At present, the emphasis is unfailingly placed on supporting and promoting technological innovations.
  - b) There is a failure to integrate non-technological innovation properly into European innovation policy. This is illustrated by the lack of attention given to social innovation. Areas such as job enrichment, creating and developing professional activity, task organisation, work/life balance are for the most part uncharted territory. What is currently lacking is a strategic vision of how innovation may be effectively integrated in organisational terms into government policy.
- 3. The specifics of broadening/extending the innovation pathway which may be eligible for aid remain unclear.
  - a) Even at European level, there is no clear specification of what is to be understood by "broadening". Is, for example, only non-technological innovatory activity to be considered as falling within the framework of direct aid or must a sufficient link with activities geared to technological innovation be demonstrated, as the European Commission currently requires?
  - b) It is not only the concept itself that remains obscure: there is moreover no clear summary outlining to what extent the innovation pathway which may be eligible for aid may be broadened or extended. In other words, there is no over-arching transparent and structured framework to act as a foundation to enable the implementation and broadening of the innovation pathway which may be eligible for aid.

# Recommendations for Europe

Europe wishes to and must make innovation a spearhead of its EU-2020 strategy. The spotlight has always been on technological innovation. In the light of its review of community innovation policy which aims to make it a key element of the EU-2020 strategy, the social partners are urging the European Commission to outline a strategic vision of how non-technological innovation may be enshrined in Community policy on innovation.

The social partners note that the European Commission is sensible to both the impact of non-technological knowledge on innovation and to the crucial role of the service sector. New or revised concepts nevertheless require efficient transposition at political level. The social partners are arguing for a sufficient broadening of the definition of an innovation pathway which may be eligible for aid.



The social partners see two facets to this broadening process.

- > The broadening of development activities in terms of scope and the dissemination of expertise. This means that a "pure and simple development of non-technological expertise and/or the pure and simple dissemination of expertise" could qualify for a financial support mechanism under certain conditions as yet to be defined. This includes the process of opening up to non-technological innovations (social innovation and procedural innovation for example), other sectors (such as services, the non-commercial sector and creative sectors) and the dissemination of expertise.
- > The extension of the innovation pathway which may be eligible for aid across the whole spectrum of research activities. Thus, support would be not only be forthcoming for the development phase, but the innovation pathway which may be eligible for aid would also extend to R&D pathways further downstream (user acceptance, market research, for example). In other words, businesses receive support under the understanding that their research and development outcomes are launched on the market.

The European Commission's realisation that innovation is not restricted to R&D must now be increasingly reflected by a suitable innovation pathway to be subsidised over its complete range of activities and duration. The European Commission must therefore outline a political and structural framework which covers the following areas:

1. A flexible definition of non-technological innovation which may eligible for aid.

A clear but dynamic description of non-technological innovation which may be eligible for aid. This definition will determine the framework for the practical integration of non-technological innovations into the innovation pathway which may be eligible for aid (see 2). This framework is subject to a wide variety of developments for both technological and non-technological innovation.

Drawing up a flexible definition requires strategic intelligence and knowledge management systems (see 4) so that the essence of best practice in the Member States may be distilled.

The social partners characterise one aspect of non-technological innovation, social innovation thus: "Social innovation covers concepts and applications which apply to processes pertaining to work organisation and business management. The aim is to boost work performance and quality in a manner which stands the test of time. These concepts and applications flow from the organisation's vision and mission and find expression through consultation with the parties (directly) concerned".

2. The practical integration of non-technological innovation into the innovation pathway which may be eligible for aid.

### This means:

a) That the practical integration of non-technological innovation into the innovation pathway which may be eligible for aid should be clearly indicated. As noted earlier, the social partners are therefore advocating a broadening and extension of the innovation pathway which may eligible for aid.

- b) That a transparent framework for evaluation should be drawn up so that more unusual non-technological innovation projects may be assessed. This will require the necessary competences to be established.
- c) That a very precise budget forecast for broadening operations should be drawn up at European level. This requires the European Commission to review its aid instruments in order to identify gaps and overlaps in the innovation pathway which may be eligible for aid. It is vital that, from beginning to end, the innovation pathway qualifies for different instruments which governments have at their disposal and not that any instrument may support any part of the innovation pathway. Thus optimum use may be made of the instruments that Europe has available, allowing funds to be allocated in an efficient manner and balanced in such a way that the innovation pathway which may be eligible for aid is broadened.
- d) In every respect, the granting of financial aid for non-technological forms of innovation which support and expand technological innovations (such as the expansion of aid for demonstration projects). Non-technological innovations unable to demonstrate a link to technological innovation need a policy support framework which is both transparent and equipped with amended Community frameworks for state aid tailored to the innovation pathway which may be eligible for aid which Europe must define and outline. This requires the establishment of a clear regulatory instrument which outlines possible forms of aid (fiscal instruments, grants, interest subsidies etc.), the degree of support, aid ceilings, criteria for the granting of aid, and the manner and conditions of broadening operations. Regional and national regulatory instruments must then be adapted to European frames of reference. Establishing an improved framework for non-technological innovations, societal innovations, for example, require an integrated and amended tailored approach.
- 3. The effective communication of broadening operations to business.

With regard to business, it is clear that broadening of the concept of innovation is as relevant to industrial companies as to service providers, to large and small companies as to new and long-established ones. No one group can be excluded from these initiatives but the most effective way of reaching each of these target groups must be studied. Building up networks is an important aspect of promoting non-technological innovations.

4. The establishment of strategic intelligence and systems for knowledge management in non-technological innovations at European level.

The social partners advocate establishing European poles of competence in non-technological innovation designed to gather, concentrate, exchange and bring value to expertise at a European level, with the involvement of the European social partners. Thus for example, a European pole of competence in societal innovation could be established to analyse and diagnose practices in the Member States in order to encourage and support non-technological innovation. Using these value indicators, the essence of best practice may be extracted. This should contribute to the development of effective instruments and encourage the standardisation of practices within the Member States. In this way the social partners can extend their role and be more proactive: with a bank of knowledge at their disposal, they will be in a position to encourage and support organisational renewal.



#### 4. CLUSTERS

#### The issue

Since the end of the 1990s, policies have sought to strengthen existing clusters and create conditions conducive to the establishment of new ones. Almost all Member States have developed specific measures to promote clusters.

Clusters are an essential driver of open innovation. By providing a framework for relations between businesses and between these businesses and research bodies, they facilitate the spread of knowledge and technology transfer within the production system. They also lead naturally to the development of collaborative projects in tune with the growing complexity of the innovation process.

Clusters also encourage businesses to become rooted in the local production system, help them to internationalise, and help to boost a region's image as an area of investment and innovation.

Clustering schemes are thus an important element in regional policy, as they boost a region's growth and competitiveness by drawing on synergies and cooperation between the operators concerned.

There are various definitions of a cluster. In essence, it is:

- > a group of independent businesses and sometimes associated institutions,
- > which are active in a specific field,
- > which may compete but wish to cooperate,
- > which have similar or complementary skills.

To work effectively, a cluster need a supportive environment in which public authorities, research centres, federations, service structures, infrastructure, etc. all play a part.

In 2009 the European Cluster Observatory identified around two thousand statistically significant groupings, which together employ 38% of the European workforce. Europe is thus not short of clusters; however, a fragmented market, weak linkage between industry and research, and insufficient cooperation within the EU mean that Europe's clusters lack the critical mass and innovation capacity they need if they are to sustainably withstand international competition and become world class.

On 5 November 2008 the European Commission published a Communication entitled Towards world-class clusters in the European Union: Implementing the broad-based innovation strategy. The communication outlines a framework to help Member States to work more synergically at policy level in developing competitive clusters.

The EU has also set up instruments to support transnational cooperation between clusters: the "Europe Innova" scheme under the competitiveness and innovation programme, and the European Cluster Observatory.

## Recommendations for Europe

Europe has an essential role to play in encouraging the emergence of clusters, complementing regional and national policies and continuing to remove barriers to trade and mobility within the EU.

#### **FACILITATING REGIONAL INITIATIVES**

The EU's rules on state aid for research, development and innovation accept the principle of financing the operation of innovation clusters, albeit on a degressive scale going from 100 to 0% over five years. If aid is not degressive, the maximum period is five years and the aid must not exceed 50% of eligible costs. As innovation clusters are an important tool of regional economic development policy, the social partners feel there may be a case for making the system more flexible and allowing higher public funding of these structures over longer periods. This reform would make European rules more consistent with the support policies which the EU advocates and/or develops elsewhere.

#### PROMOTING THE FORMATION OF CLUSTERS AT EUROPEAN LEVEL

Europe should encourage the formation of clusters at European level in a few fields of priority importance for today's societal challenges (education and training, energy, climate change, health, ageing population, etc.). These should be selected taking account of the responses which technological development and innovation can bring to the problems identified.

These clusters should be underpinned by an approach that combines economic and social challenges so as to create win-win situations in economic, social and environmental terms. A crosscutting, integrated policy should be devised so that ambitious projects furthering the sustainable renewal of European society can be developed within these clusters.

A long-term instrument for organising, promoting and securing funding for crossborder clusters could also be useful, tapping into the potential offered by the geographical proximity of the partners concerned (dissemination of "tacit" knowledge).

#### PROMOTING COOPERATION BETWEEN CLUSTERS

The European Cluster Observatory provides policymakers with comparable information on clusters policy and their relative strengths in Europe.

This cluster-mapping service for Member States should be refined and improved with a view to promoting transnational cooperation between clusters. It should thus provide cluster organisers and members with tools enabling them to easily identify possible partnerships at European level. In other words, it would encourage the emergence of full-scale business networks with sufficient critical mass. These networks would inter alia help the clusters gain access to European R&D programmes, as joint implementation of specific projects would be the best way of developing cooperation between clusters, following a bottom-up approach.



Tevens zou het goed zijn banden te smeden tussen de clusters, de Gezamenlijke Technologieinitiatieven en de Technologieplatformen om tot een kruisbestuiving tussen deze verschillende voorzieningen te komen.

Links should also be established between clusters and Joint Technology Initiatives and Technology Platforms, so as to encourage cross-fertilisation of these different instruments.

It should be borne in mind that clusters are the result of national or regional initiatives and that their main aim is to boost the competitiveness of their members. The mixture of cooperation and competition which binds businesses in a national or regional cluster will also emerge in the case of cooperation between European clusters. A balance will thus have to be struck between the activities carried out in partnership and those of individual members, so that the strengthening of links benefits all parties.

Cluster externalities must be maximised and optimised. Not all businesses could or should become part of a cluster. Each cluster is designed to give a structure to the industrial system within its orbit. It is thus up to the various clusters to combine three types of relationship: internal cooperation, i.e. between members; cooperation with other regional, national and European clusters; and relations with businesses operating in similar or connected fields, under variable arrangements (ad hoc partnerships, subcontracting, mentoring, etc.).

#### **EVALUATING POLICIES**

There are two approaches to cluster formation: a top-down one where the initiative comes from the public authorities and a bottom-up one which is self-determined by local players. It is difficult to say yet which approach is better. As clusters are a relatively recent phenomenon in Europe, it is too early to evaluate national and regional policies in this field. Europe should ask the Member States to evaluate their policies and then help them to compare experiences in order to ascertain the best policy mix

In this context, special attention must be paid to the position of SMEs within clusters, given the opportunities which clusters offer them for innovating and forging links with large companies and international partners. Moreover, although clusters benefit from the presence of large multinationals, the inclusion of dynamic, innovative SMEs is very important for enabling them to attain high levels of excellence and innovation.

The evaluation must also flag up initiatives which are not bringing any added value, thereby raising the question of whether to continue public support (which is only justified if the aim of the mechanism is being met). It must also lead to the drafting of a code of practice to ensure inter alia that clusters are open to all interested businesses and that there are no barriers to entry, as these would distort competition.

#### PROMOTING EXCELLENCE

Leadership is vital to the success of a clustering exercise, which must be organised and overseen by people with sufficient knowledge of the sector, activity and businesses forming the cluster.

As these managerial activities are publicly funded, at least during the cluster's early stages, the authorities should ensure that the role of the facilitator is properly professionalised. This is vital in order to ensure high-quality support services for businesses and to help cluster schemes become independent in the longer term.

The EU, notably through the European Cluster Observatory, has a role to play here, collecting and circulating information and good practice in this sphere.

Later, when the cluster is operating independently, it is up to the members to make sure that the management meets their needs.



