OTHER STAKEHOLDERS' VIEWS

A BETTER FRAMEWORK FOR INNOVATION

26 January 2016, 9.00 – 17.00

Permanent Representation of the Netherlands to the EU
Avenue de Cortenbergh, 4 - 1000 Brussels

Innovation
principle
Governance
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BUSINESSEUROPE
European Round Table of Industrialists
European Risk Forum

Foreword

Let me start by saying that I am personally, as well as the Commission, committed to getting the conditions right for innovation in Europe. Clearly one of the most important of these conditions is the regulatory framework. This is why the Commission has already innovation within its new Better Regulation framework and has emphasised the importance of innovation friendly regulation in its Single Market strategy.

The Commission's paper on "Better Regulation for Innovation-Driven Investment at EU Level" presents, for the first time, an in-depth analysis of how the regulatory environment at EU level can hamper, or indeed stimulate, innovation. It builds on the outcome of consultations that took place during the past year with Member States, and a range of organisations and industry stakeholders. These exchanges and the analysis performed by the European Commission services have helped build an evidence base, in the form of case studies, across different sectors and provide a basis for debate and action at political level.

For me the most important challenge is to put in place a regulatory framework that can adapt to the pace of change of new technologies and new forms of innovation. Getting this right is an imperative for innovative products and services to enter the market and for innovators to benefit from the scale and scope of the Single Market. Regulatory frameworks should allow newcomers to challenge incumbents and increase Europe's ability to attract mobile international inward investment. Moreover, without the right regulatory framework, Europe will lose the benefits - in terms of jobs, growth and environmental and social wellbeing - that come from its investments and world leading position in research and development.

To do so, we have to assess systematically the impact of new EU policy and legislative initiatives on innovation and the tools for such a forward looking approach are being introduced within the framework of Better Regulation. But we also need to find new ways to help innovators who currently face regulatory barriers - real or perceived - to investing in getting their innovations to market. For this reason, the Commission will pilot a new non-legislative approach which we are calling "Innovation Deals". The aim is to enable innovators and regulators to reach a joint understanding of how new technologies and innovations can be progressed in existing regulatory frameworks. As the Commission announced recently, we will pilot this new approach of Innovation Deals in the area of the Circular Economy.

I am deeply convinced that we can make real progress in creating a regulatory framework in Europe that is fit for innovation and can adapt to the future. This will require the involvement of multiple stakeholders, and in particular a closer interaction between innovators and regulators. I look forward to further progress on this crucially important issue.

Wishing you nice reading and enjoy the conference,

Carlos Moedas, Commissioner for Research, Science and Innovation
European Commission

What the EU can do for innovation, what innovation can do for the EU, its citizens and businesses

The current status of EU innovation policy

EU innovation policy is in need of a rethink. It is not a matter of "quantity": as a matter of fact, there has been no shortage of initiatives on innovation at the EU level over the past few years, from Innovation Union to Horizon 2020, the Start-up Europe initiative, the launch of the EIT, the design of new financial instruments (e.g. Innovfin) and many more. If anything, all this has created a degree of confusion and complexity in the overall governance of innovation at the EU level, with too many lines of action, too many expenditure programs, too many platforms governed by a variety of policy actors. Rather than quantity, the real problem is the quality of innovation policy, and its consistency with other areas of the EU acquis.

For what concerns innovation policy per se, there is a strong need for a more systemic approach, aimed at ensuring that all actors of the innovation ecosystems, from consumers to institutions, large and small companies are thriving at EU level. Europe excels in many areas of research, but still experiences problems in the commercialisation and, even more importantly, the diffusion and uptake of innovation. This is both a supply-side and a demand-side issue. From a supply-side perspective, it is important to realize that innovation cannot be seen as a linear, industrial process anymore, but rather as an increasingly open, multi-stakeholder, distributed process that brings to market new products and services through innovative business models, not just technologies. From the demand side, innovation is being negatively affected by the economic crisis, which affects demand for new products by consumers; but also by the slow uptake of innovative forms of public procurement; and by the lack of adequate skills in many areas of the economy, which limits the uptake of new products.

But even more important is the need to align policies beyond innovation policy stricto sensu. Many areas of EU law, starting with competition policy and tax policy, are still hardly in line with market needs. And besides a general feeling of uncertainty on future returns to investment, there are also many innovative and potentially welfare-enhancing technologies and business models that are not met by sufficient interest or by an adequate regulatory framework, and thus do not easily find their way to market. This can depend on many factors, including pressure by incumbents aimed at blocking the entry of new business models that would challenge their well-consolidated market position; cases of market failure, such as collective action problems that prevent from the creation of interoperable networks for new products (e.g. in the case of electric or hydrogen cars); or obsolete laws, designed for the twentieth century economy (e.g. in the case of some cloud-based services, driverless cars, or mobile payment networks based on distributed architectures).

Finally, it is worth reflecting on the type of innovation that is most needed at the EU level. Rather than being a goal in and of itself it is important to recall that innovation is a means to an end, i.e. enhanced social welfare. This, in turn, means that policymakers should seek to promote the type of innovation that can contribute to solving outstanding societal challenges such as youth unemployment, the need to revive productivity, decarbonization goals, growing inequality, and the peculiar needs of Europe's ageing society. This is why innovation policy today has become an important ingredient of sustainable development policies, and should be approached from this specific perspective, without falling in the trap of adopting a "silo" approach again. On the contrary, only a systemic approach to innovation can lead Europe towards a new path of prosperity. The current evolution of the EU better regulation agenda seems to be increasingly recognizing this aspect. We need a mission-driven, challenge-led innovation policy, and a suitable regulatory environment around it.

How could the so-called innovation principle complement the European precautionary principle

In a perfect world, there would be no need for an innovation principle in the EU policymaking process, since impact assessments and ex post evaluations should in principle already factor innovation impacts into the overall evaluation of EU legislation. That said, too often policies are approved without an adequate reflection on the long-term impacts on innovation, and in turn on sustainable development. Moreover, the scientific input into the policy process is still insufficiently developed, which in turn makes EU policymakers too blind to the needs of entrepreneurs, innovators and consumers. Needless to say, the fact that the policy cycle is still incomplete at the EU level (since some of the EU

institutions do not assess the impacts of their amendments, and many Member States have a rather under-developed better regulation agenda) does not help mainstreaming innovation in the policymaking process. In this second-best world, an innovation principle could represent an important wake-up call for policymakers acting in the many fields of EU policy that affect innovation. If coupled with a viable and effective intern-institutional agreement on better lawmaking, it could make a difference for the EU.

Against this background, whether an innovation principle can co-exist with the precautionary principle is a complex issue. The possible co-existence depends very much on whether the innovation principle is interpreted in a way that considers innovation as a means to a more important end, i.e. sustainable development or sustainable growth. In other words, not only the innovation principle should lead institutions to ask themselves the questions "does this rule promote innovation in the long term?" and "is this the most innovation-oriented option among those available to address the policy problem?"; but also, importantly, whether innovation will lead to sustainable growth and jobs. This way, possible impacts on innovation will have to be balanced with potential shortcomings in terms of safety, security, health, the environment, etc. And the potential of the innovation principle will be harnessed without any detriment to the ultimate objective of EU policymaking. In this respect, the emphasis currently placed by the European Commission on innovation-driven investment seems to only partly take into account that promoting innovation can also mean facing trade-offs with other, equally urgent and important, policy goals.

The way ahead for innovation in Europe

The policy mix that Europe could rely upon to stimulate innovation is much broader than the typical, R&D-oriented innovation policy. Besides revisiting the EU acquis to improve its fitness for innovation, the EU should work on infrastructure deployment (e.g. high-speed fixed and mobile broadband, smart grids, intelligent transport); education (including school, college, university, lifelong training); and the elimination of barriers to the single market.

In addition, a consolidation of the numerous existing platforms for innovation orchestrated or endorsed at the EU level (EIPs, JTIs, KICs, and many more) into single research and innovation platforms/partnerships dedicated to a limited number of grand societal challenges would lead to a major transformation of the way innovation policy is designed and implemented in Europe. Such platforms, one of which could certainly be dedicated to Industry 4.0, could become important permanent consultation bodies, able to feed into the policy process with technology and market roadmaps. These platforms would need to feature a balanced multi-stakeholder presence and governance, in order to ensure alignment with the public interest and avoid path-dependency and other incumbency-related problems.

Another important area, in which EU institutions can promote innovation, is basic research. As widely acknowledged among academics, the role of the state in funding basic research has proven essential for many scientific discoveries and new technological solutions that have later hit the market becoming components of widely diffused products such as the now ubiquitous smartphones. As recently advocated also in the US by a group of MIT scientists, smart investment in basic research is not only a matter of scientific pride, but also of global competitiveness. Reducing investment in basic research can only be detrimental to innovation and growth in Europe.

Furthermore, the EU can stimulate innovation by opening up its government and related data to European citizens. The way towards innovation-driven growth is chiefly dependent on the extent to which the EU will be able to adopt open government practices, an open science model, and a citizen science strategy. In this respect, the current agenda announced by DG Research and Innovation appears very promising, and will have to be translated into a practical course of action to deliver results.

In summary, it is important that EU institutions learn over time how to answer two different, but related questions. The first is "what can the EU do for innovation". The second is "what can innovation do for the EU, its citizens and businesses". CEPS will be stimulating the debate on both questions during 2016 with new flagship publications, including a major Task Force report and reports for EU institutions, all expected in the first half of the year.

Prof. Andrea Renda, Centre for European Policy Studies
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Coherence, Collaboration and Agility are key for innovation

The EU has only one main raison d'être: to substantially contribute to the Common Good by supplementing the efforts made by Member States where collective actions are the only way forward in the present context. Thus the independent, tripartite High Level Group on Innovation Policy Management, launched by the Polish and continued by the Irish and Italian Council Presidencies, argues for the development of innovation ecosystems.

The Commission rightly states in its Innovation Scoreboard (2014) that innovation is a tool leading to sustainable growth and competitiveness: it fosters value creation, increases employment, supports empowerment and addresses major societal challenges. Innovation rankings show a strong correlation between an innovation-friendly environment and an above-average economic performance at micro and macroeconomic level, high competitiveness, growth and employment, and citizens' happiness.

However, the decline in Europe's overall innovation record and the wide gaps between Member States concerning their innovation capacity demonstrate that Europe is far from achieving its full potential. The EU and the Member States urgently need an overarching focus on innovation, and the Commission can become their common change agent, like the director of an orchestra. Outdated ways of thinking need to be replaced by a focus on both the European and the global market, to be in tune with the companies' needs. The EU should not shy away from experiments and radical reforms to allow comprehensive innovation ecosystems to promote and expedite Europe's competitiveness.

The real danger is the status quo, and discarding new markets and opportunities as a result. Everything else is an opportunity. Only innovation and competitiveness will allow Europe's cherished and exemplary societal models and citizens' adherence to be maintained; if well managed, they will reduce the fear large sections of society have of the future and the ensuing Euro scepticism. Self-commitment from all policy-making actors to arrange for all-encompassing innovation in all policy areas is an indispensable pre-condition.

This requires foresight, evidence based and lateral thinking, a coherent, comprehensive system approach; adapting structures, procedures and rules; and managing complexity in interacting systems which can only be done through collaboration between key stakeholders, the quadruple helix, as the Open Innovation Policy & Strategy Group of the Commission formulates it in its Dublin Declaration (2014). Moreover, this places an emphasis on learning, experimentation, reviewing existing rules and structures and embracing change. The Digitalisation of the economy and society will add a new quality and will continue to advance new, open governance which is needed to ensure maximum benefit for all.

The key problem in the EU is not money, but the effects of silo thinking and institutional egotism in public administrations, though companies or business associations as well as non-governmental organisations are not immune to it either. Helped by the complexities of the EU system, this can lead to interest capture instead of a focus on the Common Good. Recent reforms in the Commission, such as enhancing policy coherence by the Vice-Presidents or introducing foresight through the EPSC are all steps in the right direction. But the Communication on Better Regulation, though useful, falls short of a fundamental approach towards new tools of governance suited for the rapidly evolving European digitized economy and societies, probably because traditionalist forces are still influential.

However, building innovation ecosystems requires also a new approach in Member States. There is no single way to achieve excellence with regard to innovation performance and each country has its own specificities, but certain similarities have been found between the most innovative countries: efficient and coherent governance tool sets, innovation strategies and modes of funding, excellence in research, public-private partnerships and university-business cooperation, together with rapid commercialisation of new know-how by systematically eliminating barriers to innovation in markets and society, focus on the Single Market, on cross-fertilisation between sectors, to name but the most important. In its Blueprint 'The way forward to improve people's lives', the tripartite High Level Group on Innovation Policy Management presented over 50 recommendations of what to do and how. Former President of the European Council Herman Van Rompuy commended its 'outside-the-box thinking' (speech on 10 October 2013).

The country systems performing well at innovation and competitiveness have some of the highest R&D expenditures and benefit from strong operational R&D networks, but a simple increase in R&D expenditure will not necessarily lead to growth and more quality jobs. There is a need to integrate ex-ante and ex-post multi-stakeholder evaluations and to ensure that R&D investments can be transformed rapidly into the single and global market. Innovation ecosystems are primarily national, even regional and sometimes local, with an important European addition for common challenges and frameworks (the Single Market). It is essential that they are able to interact fluidly as open networks. They provide answers, deliver arguments and ensure public acceptance as a generic resource and an indispensable necessity.

Creating the framework conditions at European and country level where entrepreneurs, citizens, governments and centers of knowledge regularly interact to deal with complexity through collaboration, competence, competition and communication to achieve concrete solutions, with a focus on people in the real world, is not only a task for public authorities. It requires also companies, and indeed others stakeholder, to improve the operational quality of their inputs in the policy and regulation debate; to develop practical, day-to-day collaboration between all relevant actors in a multi-layered public governance (as in the EU); to seek management methods to work through the many complexities and contradictions in the present EU regulatory chain in order to build innovative frameworks that integrate multiple stakeholder demands, creates alignment while significantly reducing the burden on the economy. Without forgetting how to strengthen reputation and social capital (license to operate) in a rapidly changing non-market context and with key political institutions, in order to ensure proportional regulatory approaches.

This ecosystem model can be achieved through the systematic and radical deepening, widening and completion of traditional EU and national innovation policies, through the creation of innovative, collaborative governance models and methods. In order to guarantee the functioning of the system, a complete revision and continuous monitoring of the methods, procedures and output of governance within the various EU institutions and all Member States, as well as of the interaction between themselves and between them and the EU institutions, must also be achieved. It requires creative and bold thinking, evidence-based and transparent, free from bureaucratic constraints and a one-sided focus on regulation, able to achieve innovative solutions and capable of addressing new challenges as well as developing alignment with stakeholders.

Prof. Dr. Stefan Schepers, High Level Group on Innovation Policy Management
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Better regulation and innovation

EPC views on the Commission's better regulation agenda and what to expect

Better Regulation has been on the EU agenda since the early 1990s, with significant progress being made, for instance with the establishment of the Impact Assessment system or the steps taken to cut administrative burden on companies. With new initiatives pursued by First Vice-President Frans Timmermans, the current European Commission continues work on Better Regulation policy and especially its implementation, placing it high on the political agenda, which should be welcomed. Some of Timmermans' proposals are promising, such as the one to establish the Regulatory Fitness and Performance Platform comprising two standing groups representing governments and stakeholders. The Platform will be supposed to gather, consider and pass suggestions for reducing administrative burdens directly from stakeholders to the Commission, thus enabling greater involvement of stakeholders in the process of cutting red tape. The Commission's "Lighten the load" website with a dedicated contact form should also serve this purpose, as well as the pilot project of "Innovation Deals". The question remains however whether these proposals can deliver the expected results.

Furthermore, the Commission needs to be clear where excessive unnecessary regulation is the problem, calling for a deregulatory approach, and where an inconsistent EU framework hinders cross-border exchange, e.g. in the Single Market, which calls for more harmonisation and a radical mutual recognition, i.e. potentially more (EU-level) regulation. Indeed, a coherent Single Market is the best driver for innovation.

In order for the Better Regulation agenda to fully deliver on its potential, there is a range of other issues that the Commission should pursue, including establishing a consistent inter-institutional better regulation framework, considering implementation of legislation in the Member States and measures to avoid gold-plating as well as finding ways to increase stakeholder engagement while ensuring that the effectiveness of decision-making processes is maintained.

How the European Commission's better regulation agenda addresses innovation aspects and what could be improved

In October 2014, the EU's High Level Group on Administrative Burdens led by Edmund Stoiber, the then EU's "Mr Red Tape", submitted a report to the Commission on reducing bureaucracy in the EU. Johannes Ludewig, a member of the group and chairman of Germany's National Regulatory Control Council, pointed out at the time that SMEs are most harmed by excessive regulation, with innovative start-ups being more and more inhibited as well. This problem is also recognized in the Commission's "Better Regulation Toolbox", which states e.g. that poorly designed public interventions can create barriers to innovation. When examining new initiatives, the Commission also proposes to measure the impacts on research and innovation, with one part of the "Better Regulation Toolbox" addressing this issue specifically. Here, particular attention should be paid to decision-makers' approach to risk, e.g. when having to choose between the precautionary principle and the development of new technologies bearing uncertain risks, which is often at the heart of the trade-off between innovation and legislation.

The Commission 2015 staff working document on better regulation for innovation-driven investment at EU level presents innovation as an indispensable element for creating sustainable European growth, depending among other factors on the regulatory framework. As stated in the document, "the Commission is committed to evaluate the impact of existing or proposed EU regulation on innovation to maximize the way it can support innovation" through the Better Regulation procedures and REFIT programme and intends to pursue its work on the subject together with the Presidency of the Council in the first half of 2016. In this context, it must be remembered that while some aspects of innovation can be hindered by excessive regulation, regulation can also foster innovation in other areas e.g. environmental legislation may drive improvements in renewable technology. Deciding on exactly how much legislation is needed requires examining the given issue from multiple perspectives with a clear focus on the overall objectives the legislation is aiming to achieve. When addressing innovation through initiatives in the Better Regulation framework, the Commission should make a clear distinction between public and business innovation. These two areas are driven by very different factors, which means a one-size-fits-all approach will not bring the expected results and may even turn out to be counter-effective.

How and at what stage of the EU's policymaking process could the impact(s) of a given regulation on innovation be best measured and assessed

Most often, it would be recommended that impacts of regulations on different activities take place at an early stage of the decision-making process. However, innovation is a highly dynamic field, making it hard to predict developments. Thus, a more general approach should be applied and the question whether legislation provides enough flexibility for innovation to take place should be addressed at the outset, drawing on external expertise. Public consultations should be strongly promoted, especially among micro- and small-enterprises that pursue innovative activity and might not follow the Commission's day-to-day activities due to their more limited operational capacity. Afterwards, in specific cases, stakeholders should also be consulted with regard to draft Impact Assessments, so their views could be taken into account in preparation of the final version. It is crucial that the IAs are completely transparent and independent. In addition, regular ex-post evaluation should be carried out for the adopted legislation. In case of underperformance adequate corrective measures should be put in place.

Fabian Zuleeg, Chief Executive, European Policy Centre
www.epc.eu

Science based policy advice and innovation

The role of academies in providing the evidence base for political decisions

The European Commission opened a new chapter in independent scientific advice for its policy-making activities when it set up the Scientific Advice Mechanism (SAM) in May 2015 following the expiration of the Chief Scientific Adviser's mandate. By explicitly including the European Academies in the new mechanism, the European Commission established a high-quality channel for a structured dialogue between the scientific community and the European Commission.

Given the increasingly multi-faceted and cross-cutting nature of global challenges, policy advice can only be successful if it takes into consideration not only some scientific disciplines, but dwells upon the expertise of all relevant scientific domains including the social sciences. Euro-CASE and its sister Academies' Networks - Academia Europaea, the pan-European Academy of Humanities, Letters and Sciences; ALLEA, the European Federation of Academies of Sciences and Humanities; EASAC, the European Academies' Science Advisory Council; and FEAM, the Federation of European Academies of Medicine Networks bring together more than 100 Academies across Europe with some 10,000 eminent scientific experts.

The European Commission is aware of the need for independent and unbiased scientific policy advice and supports evidence-based decision making. The Academies' Networks can help in this respect as they do not only join the expertise of highly respected members of the scientific community but also have a decentralized structure and can provide regional and national perspectives.

Within SAM, the joint goal is to make better use of our combined knowledge and competences and to provide joint reports and statements. A clear and competent voice of experts from across all scientific disciplines would support the debates about benefits and risks of new technological and scientific advances and contribute to increasing the evidence base for political decisions. Euro-CASE fully supports this process and will actively contribute to the advancement of this new mechanism.

Within this multidisciplinary consortium, Euro-CASE represents the technical and applied natural sciences while also drawing on expertise from areas such as economics, law, ethics, philosophy, humanities and psychology. From its beginning, the exchange between research and industry and the topic of innovation have played a central role within Euro-CASE's portfolio. When it comes to research and innovation it is essential to make best use of the fact that the majority of research activities are carried out by the private sector. Business expenditures of R&D across the EU28 are at 55% of GDP. As such, Euro-CASE aims to further stimulate the European debate around important future topics by combining scientific and business research experiences in its policy recommendations.

It needs to be noted that the overall position of competitiveness of Europe is still relatively strong. The EU is one of the world's top performers in terms of producing high-quality science and innovative products. However, the aggravation of reduced innovation financing opportunities due to financial crises might prejudice this situation as the gap between excellent science and the translation of its results into marketable products and services (the so-called European Paradox) might increase. This is a serious challenge as advances in science and new technological discoveries are the basis for economic growth in Europe. What we have to do better is to bring our excellent research results to the society and to the market and Euro-CASE aims to support this process by providing scientific evidence and business experiences from its fellows.

While Euro-CASE believes that research, innovation and technology led by specific missions is a viable way to go ahead it considers a change in the innovation culture and the way entrepreneurial activities are valued in Europe as prerequisites to make Europe more innovative. Europe cannot and should not compete on the basis of cheap labour. Therefore, overarching topics such as embracing technological change, driving the next industrial revolution and supporting a culture of innovation across both academia and entrepreneurs alike are important steps for Europe's competitiveness.

Within SAM and the consortium of Academies' Networks Euro-CASE will emphasise the importance of applied research and engineering for solving the societal and economic challenges lying ahead. Aiming at presenting scientific evidence from basic and applied research Euro-CASE is particularly able to touch upon topics such as energy, innovation and industrial production issues. We are looking forward to this challenging task together with our partners within SAM.

Reinhard F. Hüttl, President, Euro-CASE
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Science and media for innovation

The Role of Science and Media for Innovation

"We can no longer make policy as we used to in the 20th century, because those days have simply gone. . .
You cannot exclude citizens from the evidence base. They must be part of it, and they must be part of the decision making around how we balance out risk and reward, and how we use that evidence."

Prof. Anne Glover, former Chief Scientific Advisor
to the President of the European Commission

In today's world, there is a strong need for better collaboration and more effective knowledge transfer between different sectors; the challenges that we will have to face in the coming years in energy, social security and climate issues are huge and will require input from all different directions. We will need politicians, business, interest groups, scientists and the single individual to come up with innovative solutions; we will need geologists, engineers, chemists, physicists, economists, sociologists — all of our scientists — to find comprehensive solutions.

Carl Sagan famously stated that "we live in a society exquisitely dependent on science and technology, in which hardly anyone knows anything about science and technology". Unfortunately this is true and this is a problem for innovation policy.

If we are to create a framework that supports innovation and new technologies, we need to ensure that policy makers and citizens have access to and are informed of the evidence-base for that decision.

This is why EISMD strongly supports and promotes a stronger emphasis on evidence-based policymaking in Brussels and the need for science communication and key tools for promoting innovation in Europe.

Evidence-based Policymaking

Never before in human history has so much scientific knowledge been available and so easily accessible. We have the means to understand the challenges we face and to make effective policies. Nevertheless the record in delivering truly evidence-based policy is mixed, at best and is cause of considerable frustration to scientists.

Why science sometimes succeeds in shaping and influencing the policy agenda and why it fails is poorly understood. A better understanding of the policy process by scientists and of the scientific process by policymakers would surely help. Recognizing the democratic drivers behind policymaking also calls for more public engagement in science and policy, now much more possible in the digital age.

Science Communication

Better dialogue between science, media and democracy will not only ensure a more informed and responsible society and policymaking but also support the strengthening of the European innovation system. Indeed, there will be increased trust for new technologies as well as innovation through interdisciplinary and intersectoral dialogue and collaborations.

Atomium – European Institute for Science, Media and Democracy (EISMD) is a Brussels based International Non-Profit Organisation that brings together some of the most authoritative universities, newspapers and businesses in Europe in the first intersectoral platform to promote knowledge sharing and "out of the box" thinking on issues regarding the development of a European knowledge society.

EISMD has been actively developing and launching concrete projects to support the strengthening of these issues in Europe. These include the Special Initiative for Citizens Engagement in Science and REIsearch.

The Special Initiative on Citizen Engagement in Science (SpICES) aimed to assess how media can engage the public at large in a two-way dialogue about science-related issues in order to develop a more participatory way to develop science policy at European level.

The pilot project was developed together with Der Standard, El Paìs, Frankfurter Allgemeine Zeitung, Il Sole 24Ore and The Irish Times and ran in 5 European countries (Austria, Germany, Ireland, Italy, Spain) in April and May 2013 and saw the participation of over 50 000 people within a couple of weeks.

The results of the Initiative were submitted to the European Commission and supported as a contribution to the preparation of the topics of the first call for proposals of Horizon 2020 (notably the 'Engagement' part of the challenge 'Inclusive, Innovative and Secure Societies' in the Commission's proposal (former SiS))".

The success of SpICES prompted the development of REIsearch, an open-platform promoting active interaction between science, citizens and policymakers through the active involvement of European media and social media.

REIsearch supports the development of a more reliable information ecosystem, leading to a better informed society. To be launched in 2016 it will encourage citizens' participation in research debates and on-going research processes, as well as in discussions on the results and impacts of research on society, policy and the framing of future research projects.

There are many more tools that need to be implemented at a European level in order to support a more prominent role for science in strengthening Europe's innovation agenda. Best practices across Europe like the UK Science Media Centre or Sense about Science stand to show that there are a number of organisations and actions that can be put in place in order to reinforce the framework and incentive system at a European level.

Erika Widegren, Atomium – European Institute for Science Media and Democracy (EISMD)
www.eismd.eu

Europe needs Impact Delivered:

Time to support Industrial Value-Chains and Innovation Ecosystems

World's economic landscape is changing rapidly. Many estimate that by 2050 Europe's share of world GDP will be half of todays. In order to secure its place among the most advanced countries, Europe needs to improve its economic performance. Two of the main drivers for growth are research and innovation. This explains why current policy discussions at EU level are increasingly concerned with delivering impact from investments and putting in place better framework conditions for innovation.

In its recommendations published in autumn 2014, EARTO made a clear plea for stronger action regarding innovation policy at EU level. These recommendations highlighted Europe's need for strong innovation value chains and innovation eco-systems and for a clear demonstration of the impact in terms of growth and jobs delivered from the much needed national and international RD&I investments. Short term thinking risks impairing Europe's economic future and economic resistance to shocks: how will Europe be able to absorb current challenges and resist future ones unless European leaders take stock of what needs to be done in terms of innovation policy and investments to ensure Europe's economic future?

Today, our competitors are clearly increasing their own innovation capacity: Canada, US, Japan, South Korea, China, India, all are currently strongly building up their applied research capacity by investing heavily. The EIC should be taken as the opportunity to further set up EU's strategy to tackle the challenges of keeping our innovation performance afloat and strengthening it compared to our competitors, driving it to global leadership. While our global competitors are addressing their own innovation challenges at a fast speed, we are lagging behind in Europe looking at innovation in a scattered fashion. We risk losing sight of the fact that our innovation battle is not an intra-European one but one we play on a global scene, in a complex system comprised of innovation value-chains which have regional, national and international ramifications linked to how businesses act globally.

In our EU current economic and political context where the EU RD&I investments targets are clearly not reached by most Members States, and when reached the proportion of applied/industrial research investment is often the poor parent, delivering impact from RD&I investments at EU, national and regional levels is today high on RTOs agenda.

The EU High Level Group Key Enabling Technology's final report published end 2015 clearly brings such issues forward as a "Time to Act" which demonstrates that our global competitors have been linking their industrial policies together, investing heavily in the innovation capacity of their strategic industrial value chains. This has allowed them to reinforce their competitive advantage by supporting value-chains' productivity and related employment.

In such a context, EARTO clearly see the benefit of creating a new European Innovation Council (EIC) as it sees such EIC as a possible answer to this "Time to Act" call made by industrialists and RTOs CEOs last autumn and a new European "Way to Act" on industrial and innovation policies. EARTO hope that EU industries networks will take the opportunity today offered by EU Commissioner Moedas to set up an EIC: it is great time to set innovation higher up on the EU agenda. Today the ERC supports excellent research, the EIC should support excellent innovation.

EARTO does not envision the EIC as yet another of too many existing instruments, EARTO believes that the EIC could bring real added-value to EU's current innovation policy by:

1. Implementing a strong European innovation strategy, partly by identifying specific areas to focus actions which will improve coherence of EU policy,
2. Co-ordinating the range of EU actions supporting innovation and undertaking new specific actions such as:
    a) Aligning of cross European innovation networks on strategic topics of common European interest (solutions for grand societal challenges, open platforms, etc.),
    b) Providing the grounds and the financial means for orchestrated EU activities addressing applied research and innovation for European industry and society,
    c) Setting up dedicated tools for technology infrastructures, for example with specific calls within existing instruments and establishing a pan European network of innovation infrastructures aiming at improving awareness on those infrastructures and allowing an easy access to industries, especially SMEs.

Without a stronger and ambitious EU's strategy on innovation, Europe will fail to sustain EU industries, and their supporting partners like RTOs, to compete with global players.

Finally, coming to back the fact that "Europe needs impact delivered" as titled in this article, EARTO took the challenge up to show that investments in applied research were worth it: meaning that RD&I investments were bringing returns and not only in the long run but surely in the short term too. Accordingly, EARTO just published a new study showing the economic footprint/impact of 9 of its key members in 2014 in terms of job creation and fiscal return to national and regional governments. The results for 2014 are that for each job in an RTO, a total of 3 jobs are created elsewhere and that for every 1 invested in an RTO, 3,8 returns back to governments. The report also showed that the European 9 RTOs together are responsible for a total of 226 000 jobs, 29,3 billion turnover, 14 billion value added as well as 5,2 billion fiscal return to governments in 2014. This study is only an economic footprint giving a yearly picture of the RTOs impact: an already interesting tip of the iceberg that represent the full impact of investments made in RTOs (which has not been calculated by this study).

Hopefully, industry will support such efforts in bringing forward additional information on how investments in industrial/applied research have impact, should not be viewed only as cost items and should be further strengthened in Europe by a strong EU innovation policy.

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