

REPORT & RECOMMENDATIONS (virtual) MEETING

7 July 2020

During its (virtual) meeting on 7 July, the independent tripartite High Level Group on Innovation Policy continued to 'think outside-the-box', as is the task given to these temporary think tanks, set up following an initiative in the Competitiveness Council.¹ The High Level Groups (HLG) are an 'open innovation' approach combining governments, business and academia, in order to inject innovative policy ideas into the EU system.²

- I. Reform of the European Research Area and of competition policy
- II. European Research Area and Health policy

I. Reform of the European Research Area and of competition policy

There are currently exemptions for state aid rules for SMEs and for start-up companies, but they are thought to be insufficient and not well integrated in a comprehensive innovation policy approach. Public-private research cooperation still meets obstacles, which hinder RTOs to fulfil their role as key intermediaries between science on one hand and economy and society on the other hand.

An overly legalistic approach to state aid and M&A risks failing to take account of the realities of complex innovation processes and of novel developments in global markets. Traditional state aid rules are particularly useful instruments to ensure a level playing field, but this may vary according to the sector concerned. To start with, there is a need for an updated definition of state aid.

The Commission has recognised indirectly that this is necessary with its IPCEI (Important Project of Common European Interest), but it is an underused tool till now and represent a rare exception from the state aid rules. It is necessary to recognise that highly innovative economies have a more holistic and flexible approach than the EU, which is hindered by a policy culture and procedures dating from

¹ Council of the EU, 5-6 December 2011, Presidency Note.

² All members participate in their personal capacity. All recommendations for action and all ideas for further consideration have not always been agreed on by all members, but advice is based on a very wide consensus. The final version is written under responsibility of the chairman and the secretary general.

half a century ago. Cognitive gaps can easily be filled by more inclusive consultations, including a greater variety of disciplines and responsibilities, such as people with experience in funding.

But Member States cannot have a single market with its benefits and an uncoordinated approach to innovation: there is a lack of synchronisation between them and with the strategies of business focussed on the single and global market. The EU suffers from fault lines between the EU and the Member States, a lack of common vision and of differentiated but synergetic approaches, and this needs to be recognised. In the short term the Commission should push for a more collaborative culture and procedures and for more horizontal linkages between DGs. Good new initiatives, such as “green hydrogen”, risk delays if not worse without managerial change. Public governance issues are a main cause of Europe’s weakness and they are insufficiently researched and addressed by political decision makers in all EU institutions.

Therefore, competition policy should also be up for a fundamental review. It must take account of the flexible functioning of a research to innovation value chain as well as of the global market conditions. A dominant position in Europe may still be a weak one globally. Foreign subsidies for foreign companies distort the EU market, this should be recognised and amended. Companies and RTOs should be able to benefit from pre-approval for their cooperation. Regulatory compliance is not the holy grail, delivery of socially and economically beneficial outputs is, and this requires more flexibility, more support also for the later phases of innovation development. Macro-objectives such as the Green Deal will become hopeless unless there is change of research & innovation policy, and this must happen very soon, in the context of the ERA revision.

Research and innovation policies, by using some tools (as state aid, public procurement, venture capital) need to be thought as complementary and always together as a single policy, and not in isolation. The procedures for procurements must be simplified at EU-level. The complementarity of instruments for research and those for innovation is what helps creating an effective innovation ecosystem. The Small Business Innovation Research (SBIR) Programme has been used as a first step, but it is 'too little and too slow'. DG RDT and DG Comp need to deepen this instrument urgently and in close cooperation with each other.

Improved cooperation with companies is often hindered by different interpretations of the research institutions of contract research (100 percent fixed cost mark-up) and research cooperation (approx. 20 percent fixed cost mark-up). The resulting Distortion of competition among research institutions should be eliminated, through a uniform interpretation of EU law and a clear and unanimous definition by the member states’ ministries. For SMEs in particular, cooperation with higher education, university and non-university research institutions is essential for the development of innovations.

Therefore, besides adaptation of state aid rules, it is necessary to harmonise them in the Single Market. And due to the interdependencies between competition policy and R&I policy, spaces need be created where the two policy areas can speak to each other. For instance, competition policy officials should take part in the reformed ERAC, alongside experts with experience in innovation processes, and experts with good insight in other successful ways of stimulating innovation. The US DARPA system is one example to be inspired by as a key model for a successful competitiveness policy which is aligned with innovation and research; it is a key tool for American competitiveness based on technologies; China's research and innovation chain is also more competitive than the European one.

The new ERA should overcome the isolation from research and innovation policy and consider them as one process to achieve the objectives of the Green Deal and other mega-objectives, including the enhancement of competitiveness in a goal-oriented manner. There are multiple ways to improve ERA and they do not need Treaty changes, only alignment of vision and new management approaches instead of the EU focus on bureaucratic procedures. Outcomes and tangible resolutions matter to people more than ever before, and especially in times of crisis. ERA must be a key player to develop European innovation ecosystems.

Therefore, to achieve better competition in the EU market, research policy should not only focus on excellence, but on efficacy of output and impacts; its priority is not to deliver top publications, but stimulate innovation of products and services, it must be useful to the strategies of European companies and to society. It must be agile enough to allow to have a rapid effect in the market. The patchwork of measures (IPCEI and others) must become one coherent package.

In the 1980's and early 1990's the focus was on pre-competitive research which was fundamental for European companies in e.g. electronics and transport industry. Focus on near market is also good but the concept of pre-competitive research must be reintroduced. The best researchers are also needed in those collaborative projects and incentives (e.g. academic merit) should be given to researchers to take part.

To achieve efficacy, research policy should determine end points, for example in energy sector which should only be adjusted after longer periods of leaning. These then can stimulate cooperation between research, industry and agriculture to help achieve them (for example taking energy out of production).

Another instrument insufficiently used is public procurement, which is an underused market maker in the EU. Under WTO rules it is not classified as state aid, so why is it not used more effectively by national, regional and local governments? Is it because of bureaucratic indicators? Or of a mistaken view that innovation is a linear process?

RECOMMENDATIONS

- 1.1.** The EU must have specific planning for research funding. The HLG recommends that research funding sets endpoints (objectives) which are linked to the grand missions which the EU Commission has set. With these objectives in mind, the EU can more efficiently spend financial resources achieving specific objectives of competitiveness, climate mitigation, public health or other.
- 1.2.** The complex legal procedures of the EU hamper the development of efficient research funding schemes addressed to improve the competitiveness of the EU. The EU needs to look beyond and move away from a theoretical and ideological logic of research funding, opening the doors to direct funding of industry research which is close to reach an endpoint or a specific objective, as set in the previous recommendation, which can bring faster added value and solutions to a specific need.
- 1.3.** The EU must make an exercise of identifying areas of research priorities, including unknown known and unknown unknown scenarios and give them a prominent place in the EU research portfolio. Creating potential scenarios for the future and identifying areas which can be important for the future and funding research in those areas will help to be prepared for potential scenarios. (ie pro-active research on pandemics would have saved lives and the economy in the current COVID crisis).
- 1.4.** A specific fund should be established to fund research for contingency purposes in those areas which offer a clear and immediate danger. This is the essence of prevention and preparedness for future scenarios, in return the EU would still maintain a high level of competitiveness even in the event of a crisis or scenario which can be anticipated.
- 1.5.** Private collaboration is essential for maximising the competitiveness of European businesses, private research cooperation programmes should be promoted and supported to maximise the transformation of research and innovation into solutions for society and competition rules or their application should not constitute barriers. The public interest can be protected in various ways (independent supervisory mechanisms for example).
- 1.6.** The Commission must recognise that highly innovative economies have a more holistic and flexible approach than the EU to the concept of “state aid”, which is hindered by a policy culture and procedures dating from half a century ago. It is time to evolve and reconsider the opportunities that involving public funding to businesses can result in a return to the general public. The rules on state aid need to be revised and harmonised with a flexible approach to the needs and capacities of each Member State.

- 1.7. Competition policy should be up for a fundamental review taking into account the flexible functioning of a research to innovation value chain and the global market conditions. Companies and research and technological organisations should be able to benefit from pre-approval for their cooperation.
- 1.8. Regarding to public governance, the European Institutions need to consider an innovative way of management, building more collaborative culture and procedures for more horizontal linkages between DGs. This will require outside expert advice and human resources training.
- 1.9. Research and innovation policy instruments of the EU need to be redesigned and implemented in a complementary and mutually reinforcing way, including R&D funding, venture capital (EIC), public procurement and state aid.

II. European Research Area and Health policy

The COVID health and economic crisis has shown multiple weakness such as such as: disruption of value chains, lack of knowledge of the virus, lack of research capacities and hospitalization, cost-cutting, efficiency being not all, lack of resilience, stockpiling of resources but also of ideas. This, in return, has led some politicians to start asking for repatriation of industries and manufacturing.

In health policy a lack of foresight can be perceived immediately whenever a human health crisis takes place. Scientists have warned since the previous health crisis caused by SARS viruses that there would be new ones and that these might reach Europe. But high risk – low probability issues do not seem to make it on the political agenda, yet there are other risks besides COVID-19 and climate change may increase them. Yet the JRC could play a useful role if properly positioned in the system, which it is not.³

A specific budget should be envisaged for high risk – low probability research by JRC, in collaboration with other expert bodies, including a collaborative project with key industries how they can contribute to problem solving if (and when) it happens. Clearly, the high cost of unpreparedness justifies a new way of policy thinking and funding.

There was a lack of preparedness to protect human health, some pundits maintain that the EU has a more efficacious system for protection of animal health. The multiple fault lines in the policy and decision-making system of the EU and Member States showed up clearly in the early phases of the COVID-19 crisis, leading to avoidable problems for health care.

³ HLG on Innovation Policy Blueprint, 2019.

There seems to be also a lack of systemic preparedness for innovation, which is part of the problem discussed above, but more acute and pressing now in the health sector. Pandemics require not just research and innovation but coherence with other policies, not least with all those which affect the biosphere where viruses emerge from. This requires globally coordinated research efforts; the EU could take the lead to bring this about.

There is a deep shift taking place in health research and health delivery (both prevention and cure) but the EU approach, due to its systemic fault lines in policy making, is not keeping track with it. Digital transformation is speeding forward and should be used more effectively for research and for vaccine production. Therefore, the Commission should consider a new 'mission' (in addition to the existing ones: adaptation to climate change, cancer, oceans...): *health policy*.

The focus of this 'mission' could be on how to reduce by 2030 mortality caused by viruses (and this focus should be oriented towards studying their rapid outbreak and proposing measures to quickly counter the effects of their outbreaks). This would certainly be welcomed by citizens and it would be a real contribution to the economic recovery bringing certainty and foresight to citizens.

As in other sectors deemed strategic, the EU should seek protection of the public's essential needs without protectionism. Parts of the recovery funds could be used to improve resilience and to ensure better control of supply chain by bringing them to the periphery of the EU. This would help economically these members states and create assurance for all others when the next health crisis arrives. In case of bad market behaviour, access to manufacturing needs to be guaranteed.

Overall, this will require a process of new thinking about economic efficacy, which cannot be measured only in maximization of corporate profits. Other yardsticks should be introduced, in cooperation with business, and the necessary adaptation to make this possible should be elaborated by Commission and Member States in collaboration, given the division of competences. It will be unavoidable to re-think some regulations and taxation mechanisms.

Assuring resilience through research and innovation should be an issue for the new ERA to work on. As said before, efforts should be focussed on end points set by Commission and Council, with sufficient freedom from bureaucratic rules for designing the required research and experimentations. This can be achieved by setting up an independent advisory group of management and digitalisation experts. The new ERAC should act as an ERA Forum involving stakeholder such as EARTO, EUA, Science Europe, and Business Europe among others.

RECOMMENDATIONS

- 2.1.** Foresight studies carried out by independent research has proven to be essential; Europe has suffered from a lack of it in the current COVID pandemic. A specific budget should be envisaged for high risk – low probability research by the Joint Research Centre, in collaboration with other expert bodies, including a collaborative project with key industries. Study outcomes should be submitted to peer review and public debate.
- 2.2.** The Commission should consider a new 'mission' entirely focused on health policy which foresees and elaborates an ecosystem for innovation in the health sector. The current approach to the health care sector needs to be reviewed and prepared for a more homogeneous actions across the EU. It is not that much about further integration of health policies but about maximising the capacities that the European Union currently has, such as coordination methods, innovative legislative framework for new products, coherence with other policies or promotion of health research.
- 2.3.** Collaboration with private research and support to their priorities, which obey to a need of the society needs to be fostered and led by the European Commission to ensure a policy and legislative framework in which the private sector feels comfortable to research and innovate.

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