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Subject: Council conclusions on "Accelerating knowledge circulation in the EU"

Delegations will find in the annex the Council conclusions on "Accelerating knowledge circulation in the EU", adopted by the Council at its 3620th meeting held on 29 May 2018.

COUNCIL CONCLUSIONS

ACCELERATING KNOWLEDGE CIRCULATION IN THE EU

THE COUNCIL OF THE EUROPEAN UNION

RECALLING:

- that one of the Union's objectives is strengthening its scientific and technological bases by achieving a European Research Area in which researchers, scientific knowledge and technology circulate freely;
- the Conclusions of the European Council of 13 and 14 March 2008, inviting Member States and the EU to remove barriers to the free movement of knowledge by creating a "fifth freedom"¹;
- its Conclusions of 29 May 2015 on open, data-intensive and networked research as a driver for faster and wider innovation², in which it considers that openness of research data could further increase the efficient use of public funding and highlights that making data discoverable, accessible, assessable, reusable and interoperable would considerably increase innovation potential and create new business opportunities;

¹ 7652/1/08

² 9360/15

- its Conclusions of 27 May 2016 on "The transition towards an Open Science system"³, in which the Council acknowledges that unnecessary legal, organisational and financial barriers to access results of publicly funded research should be removed as much as possible and appropriate, in order to attain optimal knowledge sharing, taking into account when necessary the need for exploitation of results; ~~and~~ in which the Council underlines that the principle for the optimal reuse of research data should be "as open as possible, as closed as necessary"; and in which the importance of ensuring long-term sustainability of Research Infrastructures is underlined and a targeted action plan is asked for;
- its Conclusions of 27 May 2016 on "FP7 and the Future Outlook: Research and Innovation investments for growth, jobs and solutions to societal challenges"⁴, which recognise that the Commission and the Member States should aim for better use of other EU funds to support research and innovation (R&I) projects and cater for downstream exploitation of research results for marketable products, services and social innovations;
- its Conclusions of 27 May 2016 on "Research and Innovation friendly regulation"⁵;
- its Conclusions of 29 November 2016 on "Measures to support early-stage researchers, raise the attractiveness of scientific careers and foster investment in human potential in research and development"⁶ in which the Council stresses the need to equip the new generations of researchers with the relevant set of skills giving emphasis to the use of digital technologies, entrepreneurship and knowledge transfer as well as research integrity and open science;

³ 9526/16
⁴ 9527/16
⁵ 9510/16
⁶ 15013/16

- its Conclusions of 1 December 2017 "From the interim evaluation of Horizon 2020 towards the ninth Framework Programme"⁷ in which the Council highlights the importance of disseminating and exploiting effectively research and innovation (R&I) results; recognises that the European competitiveness hinges on the effective circulation of new ideas and knowledge and underlines the importance of better synergies between different EU funding sources;
- the ERAC Opinion of 7 July 2017 on the Interim Evaluation of Horizon 2020 and preparations for the next Framework Programme (FP)⁸, in which ERAC recognises FPs as generating a wide range of impacts, from science to society and from business to culture, but it also considers that the "productivity paradox"⁹ observed in Europe is partly due to the slow dissemination of innovation to the society;
- the Commission Communication of 11 January 2018 on "Horizon 2020 interim evaluation: maximising the impact of EU research and innovation"¹⁰ which stresses the need to build on progress made in terms of making the scientific publications and data generated by Horizon 2020 openly accessible to the wider scientific community and the public;
- The recommendations of the High Level Group of Innovators on establishing a European Innovation Council, which stress the importance of enabling a quicker uptake of knowledge;
- the contribution of the Commission and those of ESFRI (European Strategic Forum on Research Infrastructures) and other relevant stakeholders to the debate on the long-term sustainability of Research Infrastructures and takes note of the discussion on the priority actions during the Bulgarian Presidency Flagship Conference "*Research Infrastructures beyond 2020 – sustainable and effective ecosystem for science and society*";

⁷ 15320/17

⁸ ERAC 1207/17

⁹ European Commission: *The economic rationale for public R&I funding and its impact*, 2017

¹⁰ 5271/18

Transfer of knowledge for maximising the impact of Research and Innovation (R&I)

1. CONSIDERS that the EU needs to make full use of the relevant scientific and technological knowledge it produces and ensure a more effective transfer of R&I projects results to society and industry in order to maximise the impact of R&I investment and further amplify the EU added value of the Framework Programme; UNDERLINES the importance of supporting fundamental research and of fostering collaborative R&I projects and innovation, particularly for providing the basis for new solutions and enhancing the innovative power of Europe, and bottom-up incremental and breakthrough innovation and research, including by SMEs;
2. CALLS on the Commission to develop monitoring and evaluation framework for the next Framework Programme allowing to track progress towards achieving an impact at the programme level on the short, medium and long-term; CONSIDERS that the approach to facilitate impact and innovation should be adapted to the specificities of each instrument;
3. ACKNOWLEDGES the crucial importance of circulation and transfer of knowledge for an efficient European Research Area. EMPHASIZES the importance of the curiosity driven, frontier research for the development of ground breaking science and innovation capital. NOTES the pivotal role in this respect played by the European Research Council, acting as a catalyst for such research and the contribution of the Marie Skłodowska-Curie Actions to the circulation and transfer of knowledge within the EU; ENCOURAGES the Commission to further strengthen the latter instrument supporting scientific excellence of researchers and knowledge circulation in the EU;

4. INVITES Member States to step up efforts to examine and share best practices on knowledge transfer, e.g. by optimising access for innovators and citizens to national and regional R&I programmes and by fostering academia-business collaboration; RECALLS that the links between businesses, including SMEs, and research, are essential for market application and uptake and turning knowledge into new products and services, and that the creation, scaling-up and interconnection of research and training and innovation hubs throughout the EU could strengthen the innovation ecosystem; RECALLS the contribution of key enabling technologies, including ICT, to industrial competitiveness and leadership of the EU;
5. CALLS on the Commission to encourage the application of the principles and measures of its 2008 Recommendation on the management of intellectual property in knowledge transfer activities and the Code of practice for universities and other public research organisations¹¹ and together with the Member States to raise awareness on those recommendations and if appropriate to propose incentives for application of this Recommendation to further boost the impact of R&I through knowledge transfer; and INVITES the Commission to explore new solutions for establishing networks of demonstration and piloting facilities across all Europe where companies, and notably SMEs, can try out their latest smart products and manufacturing systems, with the aim of a more effective deployment of new technologies;
6. Invites the Commission, in line with the Recommendations of the High Level Group on maximising the impact of EU Research & Innovation programmes and the Open Science Skills Working Group Report to explore options for the next Framework Programme to reinforce support for skills and competence-development in EU-funded projects;

¹¹ http://ec.europa.eu/invest-in-research/pdf/ip_recommendation_en.pdf

7. INVITES the Commission to regularly monitor the innovation potential and promote policies and tools for the use of the FP projects results, through for example clustering of complementary results or the Innovation Radar; and in this regard CALLS on the Commission to develop and implement a strategy for dissemination and exploitation to further increase the availability and use of R&I project results and accelerating their potential uptake, paying particular attention to Open Access clauses and clauses on intellectual property rights in grant agreements, thus boosting the overall impact of the Framework Programmes;

Openness, dissemination and mobility of researchers

8. UNDERLINES that increased openness and dissemination of research results for societal benefit and thereby an enhanced uptake of results by European researchers, innovators, research organisations and industry, in particular SMEs, together with improved research and innovation framework conditions, are prerequisites for boosting the European competitiveness and prosperity;
9. WELCOMES the Commission's work on making information on data and results of R&I projects publicly available through the European Open Science Cloud, the Horizon 2020 Dashboard, CORDIS and through the official Commission dissemination portal of R&I results and data stemming from projects funded under all Framework Programmes;

10. STRESSES that ensuring and incentivising open access to publicly funded research results, such as open access to publications and FAIR¹² research data, as well as optimal dissemination and exploitation of knowledge, are important enablers for increasing European competitiveness and growth; RECOGNISES the role of education and life-long training, including setting up targeted skills agendas especially concerning open access, data management and processing, and intellectual property rights. REQUESTS the Member States and the Commission to promote and implement the necessary training and incentives schemes for Framework Programme participants, researchers and innovators to make their results and data accessible for use and reuse;
11. ENCOURAGES career planning for researchers including transnational and inter-sectoral mobility as part of their continuous professional development and as one of the key factors for their spreading of knowledge. RECOGNISES that open science and the exploitation of the global data ecosystem demands new sets of skills for researchers and other data users as well as incentives and rewards; CALLS on the Member States and the Commission to support the knowledge circulation by implementing and further enhancing mobility and training for researchers while ensuring a proper monitoring, through Marie Skłodowska-Curie Actions, COST, ERASMUS+ and initiatives such as EURAXESS, HRS4R and RESAVER;

¹² FAIR data: Findable, Available, Interoperable and Reusable data
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

Framework Conditions and Synergies between EU programmes

12. STRESSES the importance of ensuring open access to research results in order to promote their use and to enable innovators, research institutions and enterprises in all Member States to innovate; UNDERLINES that European, national, regional and local administrations may affect positively the multiplier effect of innovation by strengthening the Single Market and the innovation value chain; Promoting public-private cooperation and potential for quicker commercialisation; and conceiving, designing and implementing favourable framework conditions for research and innovation, including appropriate State aid rules and innovation-friendly regulation, for instance through innovation deals and the application of the innovation principle;
13. In this context, STRESSES that striking a fair balance between protecting intellectual property rights and dissemination of knowledge through open access is key to boost knowledge circulation;
14. REITERATES the importance of exploiting synergies between Horizon 2020 and other relevant EU Programmes such as the European Structural and Investment Funds (ESIF) and ERASMUS+. Such synergies can pave the way for building of resilient regional economies, favouring the integration of cutting edge research results in education and training activities and fostering the circulation and take-up of knowledge with the final aim of promoting positive spill over effects among research organisations, universities, industries and societies all over Europe;

15. CONSIDERS therefore, as stated in its Conclusions of December 2017¹³, that the regulations for the FP and the European Structural and Investment Funds, as well as any other relevant EU programmes, must be designed from the very beginning with synergies, coherence, compatibility and complementarity in mind both at programme design and programme implementation levels, pursuing significant simplification and increased usability for beneficiaries. This can help improve diffusion of information on support from all EU funding sources and deepen its impact;

Long-term sustainability of Research Infrastructures

16. CONSIDERS that Research Infrastructures play an essential role in the advancement and circulation of knowledge, fostering scientific excellence and enabling researchers to participate in cross-border research activities, and HIGHLIGHTS their contribution to generate high quality data;
17. ACKNOWLEDGES the positive role of ESFRI in fostering the development of the state-of-the-art Research Infrastructures in Europe and STRESSES the need for further strengthening and consolidation of the landscape of pan-European Research Infrastructures in view of their long term sustainability;
18. UNDERLINES the importance of further efforts within the framework of ESFRI for a better aligned decision making for setting-up and participating in ESFRI Research Infrastructures in particular by exchanging experience about national roadmaps procedures and their national budget lines practices;

¹³ Conclusions of 1 December 2017 "From the interim evaluation of Horizon 2020 towards the ninth Framework Programme" (15320/17).

19. Stresses the importance of human resources and training skills as key factors in the success for Research Infrastructures and ACKNOWLEDGES the need for Research Infrastructures to strengthen a service-driven approach; INVITES Member States and the Commission within the framework of ESFRI to develop a common approach for monitoring of their performance and INVITES the Pan-European Research Infrastructures, on a voluntary basis, to include it in their governance and explore options to support this through the use of Key Performance Indicators;
20. UNDERLINES the importance of the effective use of the European Structural and Investment Funds and the European Fund for Strategic Investments to support the development of Pan-European Research Infrastructures in view of addressing imbalances of R&I in the European Union. In this context, INVITES Members States and the Commission to explore a more coherent use of these programmes and the development of transnational R&I co-funded activities to support in particular the construction and early phase operation including the commissioning¹⁴ of Pan-European Research Infrastructures;
21. CALLS on the Commission and Member States to explore new measures to make European Research Infrastructures more broadly available and affordable, building on the European Charter of Access to Research Infrastructures thereby developing common transparent access policies, including for training and skills enhancement purposes of researchers and to establish cross-border access schemes, for example on the basis of co-funding;

¹⁴ Process by which an equipment, facility, or plant (which is installed, or is complete or near completion) is tested to verify if it functions according to its design objectives or specifications.