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*to the*

COMMISSION DECISION

**on the approval on behalf of the European Union of the EU-CELAC 2021-2023 Strategic Roadmap for the implementation of the Brussels Declaration and EU-CELAC Action Plan on Science, Technology and Innovation**

## ANNEX



### **EU-CELAC 2021-2023 Strategic Roadmap for the implementation of the Brussels Declaration and EU-CELAC Action Plan on Science, Technology and Innovation**

1. The European Union and the members of the Community of Latin American and Caribbean States endorse the outcome of the Eighth Senior Officials Meeting on Science and Technology (SOM) of the EU-CELAC Joint Initiative on Research and Innovation (JIRI), held on 30 October 2020, as set out below.
2. At the Eighth SOM of the EU-CELAC JIRI, based on the results of an intense, open and participatory preparatory process of consensus-building consultations, the Senior Officials reached a consensus on the future steps to be taken.
3. As the world faces extraordinary threats, such as the global COVID-19 pandemic, climate change and environmental degradation, the Senior Officials, hereafter referred as the Participants, emphasised the significance of the 2015 Brussels Declaration and EU-CELAC Action Plan as a catalyst for long-term, systemic and sustainable solutions. The further development of the EU-CELAC Common Research Area constitutes a key part of the joint response.

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#### **EU-CELAC Common Research Area**

4. The Participants reviewed the developments in the EU-CELAC Common Research Area under each of the three pillars (mobility of researchers; cooperation of research infrastructures; global challenges), which hold the key to unlocking the potential of both regions, and set out their views on the way ahead.
5. With the wide range of priorities that both regions have identified, the Participants underlined the importance of a strategic as well as action-oriented approach on the topics of health, environmental aspects of sustainable development (known in Europe as green transition) and digital transformation under the ‘Global Challenges’ pillar. They underlined the key importance of developing common approaches to the complex challenges which most urgently face both continents. They highlighted the essential contribution of social sciences and the humanities to address the global challenges and recognised that engineering sciences and mathematics are transversal disciplines at the interface of science, technology and the needs of society.
6. The Participants pointed to the vital role of academic and researcher mobility as the basis of knowledge transfer and intercultural understanding between the regions,

and of developing stronger links between research infrastructures as a platform for common scientific and innovation endeavours and the sharing of improved data, particularly in the areas of the global challenges.

7. Such joint push towards a shared area for science, technology and innovation can contribute to the strengthening of the capacities in both regions and lead to the generation of a greater number of state-of-the-art interregional research teams and results. Participants also recalled the priority, which should be given to public policies in the field of education, and in particular higher education and student mobility, with special attention to distance and hybrid learning in the wake of the pandemic, as well as to health to frame the efforts towards these objectives.

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## **8. On the 'Research Infrastructures' pillar, the Participants**

- a. Recognised the importance of the Research Infrastructures as an essential pillar for the construction of the Common Research Area, and of continuing to build a healthy and sustainable EU-CELAC collaboration on a Research Infrastructures framework to support frontier research and innovation, and provision of transnational services, supporting education and skills development.
- b. Acknowledged the multidisciplinary and strategic role of the Research Infrastructures to promote collaboration across borders of scientific domains, contributing to EU-CELAC strategic priorities in response to Global challenges.
- c. Took note of the progress made by the EU-CELAC Working Group (WG) on Research Infrastructures since its establishment in 2017. They welcomed the joint work on establishing a shared understanding of issues such as roadmapping, governance and access policies, as well as on practical support to the partnering of Research Infrastructures. The Participants highlighted the importance of keeping the momentum gained by the WG and of intensifying the efforts along these lines.
- d. Welcomed the discussion within the WG on the common priority areas for the EU and CELAC, such as health, the environmental aspects of sustainable development (known in Europe as green transition) – in particular energy, climate change, biodiversity and food security – along with emerging technologies and the digital transformation. The WG should continue adding this thematic discussion to the work already under way, both on the framework conditions of research infrastructures cooperation and specific initiatives with research infrastructures sites.
- e. Thanked for the support of the EU-LAC RESInfra project, funded by the EU Framework Programme for Research and Innovation, Horizon 2020, to this work and underlined its importance to the closer collaboration. They emphasized the importance of the support provided for the operation of the Working Group, which will continue to be necessary in future. To this end,

the co-chairs should present their assessment of the available options, including their operational modalities, to the next JIRI SOM meeting.

- f. Encouraged the WG to emphasise in its work the strategic role of open access to data as a catalyst for a free and open collaboration across both regions and a key contributor to better science. To this end, the WG should develop its activities and dialogue with RIs in both regions in a way that will favour the open access philosophy and encourage to the maximum effect possible the sharing of scientific data for evidence based policy and for the benefit of research and innovation in the EU and CELAC countries.

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## **9. On 'Researcher Mobility' pillar, the Participants**

- a. Underlined the importance of human capital development through training and mobility, capacity building of research and innovation organisations from all sectors, and creation of and support to excellent doctoral programmes and post-doctoral fellowships within the framework of international and inter-sectoral cooperation.
- b. Highlighted the importance of reinforcing the tools and instruments to inform on existing national, regional and Union programmes supporting human capital development, international collaboration and knowledge transfer, such as the Marie Skłodowska-Curie Actions under Horizon Europe and Erasmus+. The Participants also welcomed the extension of the Euraxess mobility portal to the whole CELAC region. They also encouraged to focus efforts on developing capacity and retaining knowledge in the networks of National Contact Points, creating stronger links among the relevant CELAC stakeholders, strengthening ongoing initiatives such as Euraxess and cooperating closer with the alumni associations.
- c. Underlined the importance of strong cooperation links within the regions, so as to provide a solid foundation in each region as a basis for future cooperation between the continents.

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## **10. On the 'Global Challenges' pillar**

### **a. Health**

- i. The Participants highlighted the importance of shared challenges related to the epidemiology of COVID-19, infectious diseases and pandemic prevention; antimicrobial resistance; non-communicable (chronic) diseases; and cancer, including personalised medicine approaches and built upon previous experiences, such as 'EULAC PerMed'. In particular, the Participants encouraged a full exploitation of the results of projects thematically close to the Coronavirus

disease that have been launched in the previous years, for a further boost to the current global efforts to tackle the pandemic and for efficient building of resilience and preparedness.

- ii. The Participants emphasised the benefits of: a) participation and cooperation in existing global health research initiatives, such as the GACD (Global Alliance for Chronic Diseases) and GloPID-R (Global Research Collaboration for Infectious Diseases Prevention); b) support to CEPI (Coalition for Epidemic Preparedness Innovations) and GAVI ('the Vaccine Alliance'), with vaccination being treated as a global public good, guaranteeing affordable and fair access to vaccines for all.
- iii. Finally, the participants called for strengthening regional research networks, including on the link between health and environment and in support of the efforts of the CELAC countries on priority topics, e.g. on the CELAC Network of Specialists in Infectious Agents and Emerging and Re-emerging Diseases. The Participants also encouraged collaboration in chronic, metabolic and infectious diseases, anti-microbial resistance and personalised medicine. They recalled the shared commitment to the promotion of open science in both regions as a key enabler of an effective joint response to the health challenges, for example through coordination between data repositories, such as the European COVID-19 Data Platform ([www.covid19dataportal.org](http://www.covid19dataportal.org)).

**b. Environmental aspects of sustainable development (known in Europe as green transition)**

- i. The Participants recognised the important contribution of wildfires to biodiversity loss, pollution and climate change, with up to 20% of total global greenhouse gas emissions per year and their effect of further reducing the climate mitigation potential of carbon sinks. The Participants emphasised the essential role that joint research, demonstration and deployment of innovative means and methods have in reducing this risk and drew the attention to the potential of using data and related services (e.g. remote sensing, community data, Copernicus service) to provide additional assistance to this effort.
- ii. The Participants underlined the importance of research and innovation on sustainable agriculture and the bioeconomy and circular economy both to climate change and to the well-being and prosperity of citizens, and took note of the efforts envisaged under the Horizon Europe programme in the framework of its proposed Mission on Soils. They noted that, in addition to policy exchanges, the use of earth observation infrastructure and increased digitalisation could bring benefits to both regions.

- iii. The gateway between the two regions, the Atlantic Ocean deserves special attention, and it is necessary to enhance joint research efforts on both sides of the ocean from the Arctic to Antarctica. The Participants highlighted the necessity for a systemic approach to the challenges and opportunities offered by the Atlantic Ocean, including its subsets such as the Caribbean, and welcomed the move towards an All-Atlantic Ocean Research Alliance, where active involvement of CELAC countries could bring further benefits, through enhanced cooperation of countries connected to the Atlantic Ocean, including through instrument such as the Atlantic International Research Centre (AIR Centre). Special attention should be given to youth involvement (ocean literacy and beyond).
- iv. On sustainable urbanisation, the Participants welcomed the debate about the optimal ways to address the key focus areas, such as sustainable cities and communities, nature-based solutions, renewable energies, availability of clean water and sustainable resources management, reduction of flood risks, urban transport, secure societies, fight against crime, impact of urbanisation challenges on population and human behaviors, and management of plastic waste. The Participants also underlined the need to explore synergies with the mobility and the innovation pillars through complementary actions, further stressing the importance of a transversal, multidisciplinary and systemic inclusive approach.
- v. The Participants recalled that such systemic and participatory approaches are already being prioritised in both regions and looked forward to the renewed efforts of the Working Group in this area.

### **c. Digital**

- i. The Participants agreed that connectivity is an essential enabler of knowledge exchange, productivity and growth in this digital age and welcomed the efforts by both sides to establish a high-speed link between both regions. The Participants highlighted the value of the BELLA cable to further boost the future cooperation potential in all areas, including research and innovation, and continue to explore the extension of the cable to maximise its reach within the CELAC countries.
- ii. Cybersecurity is a vital element in building trust in the digital environments, helping secure the novel IT-based economy and digital lives of the citizens. To this end, the Participants underlined the importance of protecting their digital systems at all levels, which form the backbone of the current economy. They particularly underlined the importance of a proper evaluation of risks affecting the introduction and deployment of innovative digital technologies and encouraged a closer collaboration between the EU and CELAC in this area.

- iii. The Participants emphasised the critical role of digital standards in the definition and inter-operability of the IT-based systems in both regions, helping make cooperation and use of digital applications seamless and future-proof. The Participants encouraged a joint work between EU and CELAC in defining common standards and promoting their adoption at the global level.
- iv. In order to properly support future developments and to make digital society accessible to all segments of the population, the Participants underlined the need to continue developing the digital skills necessary for the citizens and economy to thrive in this period of digital transition. Special attention should be given to areas of particular significance to the society, such as big data or artificial intelligence.

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## **11. On the new 'Innovation' pillar**

- a. The Participants acknowledged that innovation is an essential ingredient for long-term prosperity of the citizens and for the promotion of sustainable and inclusive development. They welcomed the organisation of the 2019 EU-LAC Innovation Cooperation Conference in Brussels and took note of its conclusions and its recommendation to build enhanced innovation cooperation and make better use of existing initiatives, such as mobility of researchers, technicians and innovators between both regions; structured dialogue on research infrastructures; EUREKA; and support to the transition to a more productive, diversified, and environmentally sustainable economy.
- b. To this end, the Participants underlined the importance of deepening the work on the EU-CELAC Common Research Area, in particular by adding 'Innovation' as its fourth fundamental pillar. Innovation should thus become one of the key areas of policy collaboration between the two regions. The Participants called for the consideration of innovation processes and ecosystems, bridging academic and business development communities, from a systemic perspective. They also emphasised the importance of a detailed assessment of the framework conditions of innovation (understanding this concept from three central aspects: economic, social and also in institutional and management terms) in both regions as the stepping stone towards further policy exchange in future.
- c. The Participants took note of the first exchange on this topic in the preparatory meetings and encouraged actions to strengthen management capacities and complementarity, and understand the specificities of technological development processes in bi-regional terms, such as:
  - i. Initiatives such as innovation scoreboards that should help taking stock of the current innovation landscape;

- ii. Efforts to support intellectual property, "management of intangible assets", the creation of ecosystems to promote innovation, the transversal aspects of innovation, or the links between regional technology hubs and enterprises;
  - iii. Improvement of capacities in terms of technology transfer and in the management of these processes;
  - iv. Instances of discussion on institutional innovation as the axis where virtuous processes of technological development, business creation, public-private articulations, etc. are generated.
  - v. Instances of discussion on social innovation that allow to show the organization processes, the innovative potential at local level, as well as the social projects that arise within the communities.
- d. Smart specialisation is a promising area for further development, with potential to foster localised, innovation-driven sustainable territorial development. The Participants took note of the EU pilot actions aimed at testing the smart specialisation approach in the region of Latin America and Caribbean, such as the one supported under the EU Regional Facility for Development in Transition.

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## 12. Open science

The Participants:

- a. Highlighted that CELAC states have a strong tradition of open access publishing, and there is a wide variety of initiatives on research data management in CELAC states ranging from open data policies to the implementation of data repositories in higher education institutions and research organisations.
- b. Noted that the EU is committed to accelerating a transition towards immediate open access scientific publications that reaches worldwide. Open access repositories and institutional publishing initiatives have a pivotal role to play. The Participants underlined that this could represent a point of common interest between CELAC and the EU and possible joint initiatives in this area should be explored.
- c. Recalled that the EU also encourages open access to, and reuse of, research data, following the principle 'as open as possible, as closed as necessary', and with emphasis on responsible research data management and FAIR data (Findability, Accessibility, Interoperability, and Reuse of digital assets). It supports the development of the European Open Science Cloud towards a web of FAIR research data and services.



- d. Concluded that CELAC and the EU should have a common interest in exploring the potential for linking emerging ‘data commons’ around the world and of reaffirming the principles of Open science and its underlying values at the multilateral level, especially in the context of the current elaboration of a recommendation on open science by the UNESCO.

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13. The Participants highlighted the increased engagement between the EU and CELAC at the highest political level in the wake of the outbreak of the global COVID-19 pandemic and recalled the direct link between the political discussions encouraging closer partnerships between the regions and the S&T cooperation conditions framed by the SOM dialogue.
14. The next EU framework programme for research & innovation, Horizon Europe, will launch in 2021 and will remain open to the world. The Participants encouraged good use of the opportunities offered by this programme to the CELAC S&T community for additional support to their activities and closer links with their counterparts in the EU. Specific flagging of calls in Missions and Partnerships can be instrumental for boosting the EU-CELAC cooperation.
15. In conclusion, the Eighth JIRI SOM Co-Chairs thanked the participants for their rich contributions and for their indications of the priorities to be pursued in the coming period. The Co-Chairs invited the working groups to take account of these priorities in their future activities and looked forward to the success of their work. The Co-Chairs invited the working groups to report on progress at the next Senior Officials Meeting, which will be hosted by the European Commission.