

Call for Action

Towards an Africa-EU Science, Technology, and Innovation Programme

Preamble

In December 2021, the European Commission and the High Representative for the Common Foreign and Security Policy proposed a new strategy to guide the EU's global infrastructure investments – the [Global Gateway](#). The **Global Gateway** recognises the need for Europe to invest more – and better – in infrastructures around the world to meet the Sustainable Development Goals, fight against climate change, develop stronger health systems and strengthen the global economy. The Global Gateway envisions priority investments across five sectors – digital, climate and energy, transport, health, and education and research. Of these, research and education are essential pillars in themselves, as well as being critical enablers of the Global Gateway's other pillars.

At the Sixth European Union – African Union (EU-AU) Summit in February 2022, African and European leaders [identified](#) science as a prominent area for renewing the strategic partnership between the two continents. As part of a wider **Africa-EU Science, Technology and Innovation (STI) Initiative**, they launched the development of a joint [AU-EU Innovation Agenda](#) to strengthen long-term cooperation between African and European research institutions, support talent circulation, develop world-class research infrastructures, and foster the emergence of joint Centres of Excellence and advanced study institutes between the two continents.

We – **leading universities and research organisations in Africa and Europe** – have welcomed the AU-EU Innovation Agenda as a key step towards the development of equitable research partnerships that will support the sustainable development of Africa and Europe. We commend the EU's commitments to earmark funding for cooperation, through Horizon Europe's Africa Initiative and Erasmus+, and we support the development of initiatives benefiting the African research community through the Union's Global Europe/NDICI instrument, such as the Intra-Africa Academic Mobility Scheme and the African Research Initiative for Scientific Excellence (ARISE) Pilot Programme. We also recall the importance of continuing to improve the traditional forms of short-term cooperation supported by Horizon Europe and Erasmus+. Our universities and research organisations, both in Africa and Europe, need the existing opportunities to be more flexible and relevant in order to be able to engage with them. And the EU needs to facilitate the awareness and buy-in of the research community when developing these.

At the same time, the ambition to accelerate Africa's transition to an innovation-led, research-based, and knowledge-based economy requires a novel approach to science cooperation between Africa and Europe, grounded on sustainability, excellence, capacity-building, and scalability. Ahead of the finalisation of the AU-EU Innovation Agenda in June 2023, and as part of the Global Gateway Africa-Europe Investment Package, **we therefore call on the AU and the EU, in partnership with African and European states, to pilot an integrated Africa-EU STI Programme for the period 2023–2027.**

This Africa-EU STI Programme will support the implementation of the AU-EU Innovation Agenda. It will enable the two Unions to build on successes, test an innovative structure to support scientific cooperation between Africa and Europe, and frame the investments made in the context of the Global

Gateway. To strengthen the African research ecosystem as a whole, the Africa-EU STI Programme should target the individual and institutional levels, addressing at the same time the need for research and innovation infrastructures, through support for:

1. Excellent African researchers
2. AU-EU Centres of Excellence
3. Research and innovation infrastructures

The Africa-EU STI Programme should draw on the EU's Global Europe/NDICI instrument and the AU's Education, Science, Technology, and Innovation Department resources. To be up to its ambitions, it also needs to leverage national and private funding in Europe and Africa, including through a Team Europe approach.

1. Building on the success of ARISE to support excellent African researchers

Starting at the level of individual researchers, the Africa-EU STI Programme must build on the initial success of the ARISE Pilot Programme. For this, **we request the continuation on an annual basis of the ARISE Pilot** until 2027, as implemented by the African Academy of Sciences (AAS). The ARISE Pilot Programme, modelled after the European Research Council's Starting Grants, contributes to strengthening the African science ecosystem. It seeks to address some of the root causes of the African brain drain, by creating professional opportunities for African researchers to conduct excellent research at African institutions. The ARISE grantees and their teams also reinforce the scientific relations with Europe through the built-in mobility opportunity in each grant, fostering a virtuous circle of research cooperation, networking, and mutual training between the two continents. Last but not least, ARISE encourages in particular female scientists to take part and to pursue a scientific career in Africa.

We recommend integrating the ARISE experience into the development of the broader research ecosystem in the region for even better results and outcomes. Support for the individual researchers must be aligned with their participation and engagement with the best research universities and research institutes available in the region. ARISE researchers should have access to the most advanced research facilities in Africa, regardless of where they come from. The programme should therefore seek synergies with the Regional Scholarship and Innovation Fund (RSIF), part of the Partnership for Skills in Applied Sciences, Engineering and Technology (PASET), and engage with existing Centres of Excellence. In the future, the development of ARISE alumni network programmes will also be essential to promote excellent science in Africa. Finally, to ensure the effects of the programme are felt in the long run, it is essential that the ARISE programme leverages the strengthening of research and research support capacities in the home institutions of the ARISE grantees. The excellence generated by ARISE must be sustained beyond the lifetime of a single grant, ensuring former grantees and their research teams continue to enjoy excellent conditions for conducting their research.

With each Principal Investigator required to recruit up to 4 PhDs and 8 Master's students research assistants, each ARISE call will support a minimum of nearly 585 early-career researchers across Africa. In the medium term, **we also call on the EU and the AU to develop further schemes to support mid-career and senior researchers**. This will ensure, on the one hand, that the excellent researchers supported by ARISE can have career progression opportunities on the African continent, and on the other, that there are opportunities for brain circulation for the established African researchers outside of Africa.

2. Establishing AU-EU Centres of Excellence to champion new types of institutional partnerships with a transformative potential

As part of their renewed vision for equitable science partnerships between Africa and Europe, the two Unions have agreed to create joint Centres of Excellence. The Global Europe/NDICI programme will also support the establishment of Centres of Excellence, as part of the priority on Digital and Science, Technology, and Innovation. The Africa-EU STI Programme could provide a testbed for these initiatives, that will strengthen African universities and research institutions, and foster a sustainable environment for world-class research in Africa.

As our universities and research organisations already have experience with initiatives aimed at boosting institutional capacities for science in Africa,¹ **we call for this collective experience together to develop a new AU-EU model for institutional partnerships in science.** Today, Africa and Europe have a unique opportunity to lead the way on rethinking how science can support sustainable development at the local and international levels.

The AU-EU Centres of Excellence should aim to:

- Integrate universities and research organisations across Africa and Europe.
- Perform excellent collaborative research and boosting this research capacity through training programmes, in particular joint doctoral schools, to train the next generation of African researchers, technicians and experts – with a special attention to promoting a gender balance in the graduate cohorts.
- Encourage the mobility of research staff and graduate students across the partner institutions, to develop their scientific potential – in particular, female students and researchers – and form a firm international network, including across Africa.
- Develop – depending on the Centres’ thematic focus – close relations with local, national, and regional governments in Africa and Europe, as well as the private and civil society sectors, to facilitate the uptake of science for policy and socio-economic developments.
- Become a focal point for investments in research infrastructures.

To be transformative and sustainable, **we urge that any funding for the AU-EU Centres of Excellence is awarded through an open competition** based on:

- **Research excellence** in one of the four areas defined in the AU-EU Innovation Agenda (Public Health, Green Transition, Innovation and Technology, and Capacities for Science)
- **Long-term vision**
- **Capacity-building** (including joint training programmes and doctoral schools)
- **Inclusiveness** (geographical and sectoral)

With funding drawn from the Global Europe/NDICI instrument, the primary beneficiaries of the AU-EU Centres of Excellence should be African universities and research organisations. At the same time, the embedded partnership with European institutions of each Centre will contribute to fostering African institutions’ success rate in Horizon Europe and Erasmus+, and the excellence component will contribute to building a pool of excellent researchers at all career stages, including for ARISE, in all parts of Africa. This will enhance the resources and sustainability of the AU-EU Centres of Excellence.

¹ Such as the World Bank/AFD’s African Centres of Excellence for Higher Education (ACE Impact) Project, the AU/NEPAD Networks of Centres of Excellence, the DSI-NRF Centres of Excellence, the ARUA Centres of Excellence, and the ARUA-The Guild Clusters of Excellence.

3. Developing research and innovation infrastructures to boost the impact and the sustainability of cooperation

Both the Global Gateway strategy and the AU-EU Innovation Agenda envision research infrastructure development as a key driver for the relations between Africa and Europe. At the same time, the shortage of appropriate equipment, laboratories and buildings at African universities and research organisations slows down the development of scientific knowledge, reinforces dependence mechanisms to infrastructures in the Global North, and fosters brain drain.

If Africa and Europe want to strengthen their relations with equity and quality as principles for investment and cooperation, the Africa-EU STI Programme should also **include a transversal dimension aimed at supporting research and innovation infrastructures** at African universities and research organisations. All efforts aiming to develop professional opportunities for African researchers and strengthen the African science base are doomed to fail if no investments are made at the same time in strong and well-maintained research infrastructures on the continent.

The AU-EU Centres of Excellence will provide a frame for supporting the creation and maintenance of high-quality research infrastructure, at the service of research across the wider region. Research and innovation infrastructures are costly to build and to maintain, but a coordinated effort between the EU, the AU, European and African governments, and development cooperation agencies will reduce the burden and make a long-term difference for researchers across Africa. In particular, the Global Europe/NDICI envelope could be mobilised to steer investments in cooperation with EU partners, while also providing a direction for private foundations support and private sector investments. For the success and sustainability of such research infrastructures, it will be essential to ensure long-term commitment and support by African governments.

With the development of a 'Team Europe approach' to EU investments in cooperation with Africa, there is an opportunity for the European Union, the African Union, and their member states to work better together to assess the needs for science, technology, and innovation in Africa, and leverage the resources to address them. With a view to gathering support for the Africa-EU STI Programme and beyond, **we recommend the establishment of a coordination platform** between the main public funders of research and innovation in Africa (African Development Bank, AU, EU, French Development Agency, German Agency for International Cooperation, World Bank, etc.) as well as African governments, to avoid the duplication of initiatives, learn from each other, and make a greater impact, together.

Conclusion

Ahead of the launch of the AU-EU Innovation Agenda, and to make concrete the EU's Global Gateway strategy through the renewal of the partnership between Africa and Europe to address our societal challenges together, we call on the AU and the EU to leverage the potential of research and innovation to accelerate the sustainable development of the two continents. Research and innovation have a unique potential not only to strengthen our knowledge societies, but also to address common challenges around digital transformation, climate and energy, health, transport and other key fields, to generate a positive impact on African and European societies and economies, and to strengthen our relations. This vision is critical for achieving the Global Sustainable Development Goals together and supporting the African Union's Agenda 2063, including the skills revolution underpinned by science, technology, and innovation. Our universities and research organisations are ready to assume their responsibilities in support of the Global Gateway and the Agenda 2063. But this bold, comprehensive,

long-term vision requires a new funding instrument that is equally bold, long-term, sustainable, and integrated. This must be the ambition of the Africa-EU STI Programme.

1 June 2023

Signatories

University associations:

- The African Research Universities Alliance (ARUA)
- The Association of African Universities (AAU)
- The Agence Universitaire de la Francophonie (AUF)
- CIVIS – Europe’s Civic University Alliance
- The Coimbra Group
- Crue Universidades Españolas
- EUTOPIA – A European University
- The Guild of European Research-Intensive Universities (The Guild)
- The German Rectors' Conference (HRK)
- The Slovak Rectors' Conference (SRC)
- The Association of Swedish Higher Education Institutions (SUHF)
- Udice
- Una Europa
- The Flemish Interuniversity Council (Vlaamse Interuniversitaire Raad/VLIR)

Research organisations:

- The African Academy of Sciences (AAS)
- The French National Centre for Scientific Research (CNRS)
- The French National Research Institute for Sustainable Development (IRD)
- The International Centre of Insect Physiology and Ecology (icipe)

Individual universities:

- Brno University of Technology
- Charles University
- The University of Chemistry and Technology, Prague (UCT Prague)
- University of Hradec Králové (UHK)
- The University of Ostrava
- The University of South Bohemia in České Budějovice
- University College Cork (UCC)
- The University of the Witwatersrand, Johannesburg

Non-Governmental Organisations and Foundations

- Deutsche Stiftung Weltbevölkerung (DSW)



Quotes:

Christelle Roy, Director of the Europe and International Department at CNRS said: *“Along its [multiyear cooperation roadmap with Africa](#), the CNRS is committed to establishing strong, lasting, and equitable relations with African partners. Promoting excellence across research training and research practices, within competitive and stable environments is key to leverage the potential of research and innovation of African partners. The support of efficient European programs in this endeavor is essential.”*

CIVIS and its six strategic partner universities in Africa (Université Hassan II de Casablanca, Université Cheikh Anta Diop de Dakar, University of the Witwatersrand, Makerere University, Universidade Eduardo Mondlane, Université de Sfax) stated: *“CIVIS – Europe’s Civic University Alliance and six leading universities in Africa have entered a strategic partnership for addressing joint societal challenges facing our home continents. We see enormous potential in European University alliances as platforms for bringing African and European universities into new, productive science relationships – for the benefit of the institutions involved, our HE sectors as well as our societies at large. An AU-EU Science, Technology, and Innovation Programme will significantly contribute to unlocking this potential.”*

Ernest Aryeetey, Secretary-General of ARUA said: *“ARUA and The Guild are working together to promote the development of strong collaboration between African and European researchers, in pursuit of the strategies outlined for AU-EU cooperation. The Africa-EU Science, Technology, and Innovation Programme has the potential to support the transformation of science in Africa and a better understanding of Africa in Europe.”*

Eva Voldřichová Beránková, Vice-rector for international relations at Charles University said: *“Charles University highly welcomes the Call for Action – Towards an Africa-EU STI Programme since it offers a great opportunity to support sustainable high excellence research cooperation with African universities, taking into account various fields of study. We believe that the initiative will significantly contribute to the development of scientific discussion about global topics such as health, education, and social values. Charles University considers Africa a very important region for its internationalization policy and would be delighted to intensify the cooperation.”*

Filip Faltejsek, Head of Department of International Relations of UCT Prague said: *“The Africa-EU STI Programme Pilot is a transformative initiative that holds the key to sustainable development and equitable research partnerships between Africa and Europe. By supporting excellent African researchers, establishing AU-EU Centres of Excellence, and investing in research and innovation infrastructures, we can build a future where knowledge knows no boundaries. Together, we can unleash the power of science and innovation to address global challenges, promote gender equality, and create opportunities for collaboration and sustainable growth.”*

Hanna Snellman, Chair of the Una Europa Board of Directors, said: *“The Una Europa partners share a strong commitment to creating equitable partnerships with higher education institutions in Africa to contribute to a vibrant global community of researchers and address global challenges together. A dedicated Africa-EU Science, Technology, and Innovation Programme will drive research collaboration across disciplinary, institutional, and geographical boundaries and contribute to a diverse knowledge*

base – a pre-condition of deeper understanding, excellence, and innovation to the benefit of all global citizens.”

Jan Palmowski, Secretary-General of The Guild said: *“The AU’s Africa 2063 strategy and the EU’s Global Gateway both put knowledge at the heart of their vision. Through the Africa-EU STI Programme we can make a transformative beginning, ensuring that we invest in excellent research, long-term collaboration, and sustainable research infrastructure. The unity of the research community assembled in this call underlines: we are ready to play our part in strengthening the AU-EU strategic partnership; we call on policy-makers to support us in this endeavour.”*

Jens-Peter Gaul, Secretary-General of the German Rectors’ Conference said: *“The German Rectors’ Conference representing more than 270 universities and universities of applied sciences in Germany endorse the “Call for Action - Towards an Africa-EU STI Programme”. Substantial investments in the research capacity of African universities and new efforts to strengthen research collaborations between African and European universities and research institutions are timely and urgently needed to realise EU-AU Innovation Agenda ambitious objectives.”*

Ladislav Janíček, Rector of the Brno University of Technology said: *“The Brno University of Technology welcomes Call for Action – Towards an Africa-EU Science, Technology and Innovation Programme, and supports open cooperation not only within Europe, but also across continents in the area of key challenges of today’s society with focus on connecting science, research, innovation and education in technology with positive impacts on the sustainability of society. It is vital to strengthen long-term cooperation between African and European research institutions, support the movement of talents and promote the idea of sharing world-class research infrastructure and the creation of joint centres of excellence between the two continents.”*

Leona Stasova, Vice-Rector for International Affairs at The University of Hradec Kralove said: *“The University of Hradec Kralove fully supports establishment of the Africa-EU STI Programme as a transformative and sustainable way of partnerships among African and European institutions. There is a great potential to develop a joint innovative research and education space, notably the AU_EU Centres of Excellence will contribute to all, not only institutions themselves, but also students, academics, researchers, general public and also the private sector internationally, nationally and on regional level.”*

Luděk Berec, Vice-rector for science and research at the University of South Bohemia said: *“University of South Bohemia in Ceske Budejovice (Czech Republic) values research collaboration with international partners. Several activities in the fields of biology and archaeology involving African researchers are now ongoing, including doing research, conducting exchange visits, and training specialists and building capacities in Africa (including Senegal, Cameroon, Ghana, and Republic of South Africa). Promoting these and other activities further via AU-EU Centers of Excellence would for us be a natural great step forward.”*

Robin Drennan, Director for Research Development, Wits University said: *“Wits University, from its position in Johannesburg and the global south, encourages multi-national and multi-disciplinary research, undertaken through equitable partnerships, that promotes sustainable development of Africa and Europe. We commend the EU’s commitment to funding collaborative research through the Horizon Europe’s Africa Initiative and Erasmus+. The world’s challenges need to be tackled from many different perspectives. Thus, this support of the African research community is important to ensure that responses to the challenges are just and sustainable.”*

Rudolf Kropil, President of the Slovak Rectors' Conference said: *"The importance of collaboration with Africa's universities and researchers is rising and yet not fully recognized. Multi-actor partnership with Africa became a key priority for the European Commission as well. We ask European institutions to increase support for science, art, innovation and academia as such to support mutually beneficial economic growth and shared values and interests as well to improve the lives of people on both continents who deserve to live in peace, security, democracy, prosperity, solidarity and human dignity."*

Segenet Kelemu, Director General & CEO of icipe said: *"Science is crucial for all continents to sustain or meet their growth aspirations, especially creating job prospects for the youth, ensuring food security, conserving biodiversity, building resilience to climate change, and delivering global health. The Africa-EU science, technology and innovation programme recognises this central role of science in global development. We see the initiative as a partnership that will promote science and research for development that is mutually beneficial for Africa and Europe."*

Slim Khalbous, Rector of Agence Universitaire de la Francophonie (AUF) said: *"For over 60 years, AUF is engaged in promoting numerous education and research cooperation initiatives worldwide, with the belief that sustainable and inclusive development can only be reached if designed and promoted globally. Strengthening long-term cooperation between Africa and Europe thus becomes a step of the utmost importance to foster a global strategy based on a "win-win" approach, which endorses a multi-level convergence and the creation of a real space of exchange of talent."*

Tiziana Lippiello, Rector of Ca' Foscari University of Venice and Chair of the Board of Directors of EUTOPIA said: *"EUTOPIA wholeheartedly endorses the Call for Action Towards an Africa-EU Science, Technology, and Innovation Programme, advocating for comprehensive scientific collaboration with Africa. A novel approach to science cooperation between Africa and Europe is for our ten universities an absolute necessity to address the African brain drain and wellbeing. As we are building our own model of global partnership, EUTOPIA is happy to join the efforts of other Higher Education Institutions in Europe and Africa for this great ambition."*