

ERIC Forum Implementation Project 3rd Innovation and Technical report: ERICs: International Cooperation. Looking beyond Europe

Work Package 6 - Deliverable 6.15

Deliverable no	6.12
Deliverable Title	Innovation and Technical report: ERICs: International Cooperation. Looking beyond Europe
Contractual delivery month	38
Responsible Partner	LW ERIC
Author(s)	Juan Miguel González-Aranda, Cristina Huertas Olivares, Christos Arvanitidis, Declan Kirrane

Executive summary

This report has been produced in the context of the **ERIC FORUM H2020 Project**. It forms part of the **Work Package 6: "The Role of ERICs in European science policy and research strategy"**. It presents suggestions on how ERIC FORUM Members can foster internationalization, that is engaging global actors in their activities.

The first chapter describes ways in which ERIC FORUM could contribute to the internationalization of Research Infrastructures through European Policies, Programmes and Initiatives. The second chapter explores global initiatives through which ERIC FORUM could trigger the internationalization of Research Infrastructures. The third chapter suggests some European and Global events to implement what has been described in chapters 1 and 2.



Copyright notice



This work by Parties of the ERIC Forum Implementation project Consortium is license under a Creative Commons Attributation 4.0 International License (<u>http://creativecommons.org/licenses/by/4.0/</u>).

Document log

Issue	Date (yyyy-mm-dd)	Comment	Author/partner
			Juan Miguel González-Aranda,
			Cristina Huertas Olivares,
			Christos Arvanitidis, Declan
1	19.07.2022		Kirrane



Table of Contents

EXECUTIVE SUMMARY	<u>1</u>
1. INTRODUCTION	4
2. INTERNATIONALIZATION VIA EU POLICIES, PROGRAMMES AND INITIATIVES	5
2.1 EU Global Gateway	5
2.2 Neighbourhood, Development and International Cooperation Instrument (NDICI/Global Europe)	6
2.3 How ERIC FORUM Members could access Global Europe/NDICI	7
3. INTERNATIONALIZATION VIA GLOBAL INITIATIVES	9
3.1Key UN Agencies	10
These are the key United Nations Agencies here ERIC Forum can make an impact for	10
contribution:	10
3.2 UN Summit of the Future	12
3.3 G7	13
3.4 SOME CONSIDERATIONS	19
4 SUGGESTED INITIATIVES	20
4.1UNGA77	20
4.2 IMF and the World Bank	21
4.3 NDICI/Global Europe	21
4.4 G20/COP27	21
4.5. Summit of the Future 2023	21
4.6 Leveraging the NDICI for ICT for Africa	21
5. RECOMENDATIONS	23
5.1 For ERIC FORUM	23
5.2 For Members of ERIC FORUM	23
6. REFERENCES	24



1. INTRODUCTION

To address global challenges, scientists state that the way by which several critical areas of human activities are performed should be changed, including food, energy, consumption and production, and cities. These changes can be achieved through coordinated action by governments, businesses, communities, civil society and individuals. **Science** has a particularly vital role to play, a role that can be further strengthened by increasing investment in science for sustainability and innovation and in natural and social science institutions.

Achieving the SDGs will require a deep scientific understanding. ERIC FORUM and the Research Infrastructures capability it represents has a role in delivering and enabling science globally, in particular in relation to delivering the SDGs and Agenda 2030. The policy basis for this is the EU's commitment to alignment with UN SDGs, particularly the launch of the global Gateway initiative on 1 December 2022, including the NDICI/Global Europe process. These initiatives can significantly improve its objectives and delivery by contributing to ESFRI ERIC Forum's research infrastructure capacity and innovation.

This paper sets out a number of specific areas where the ERIC Forum can contribute meaningfully into the EU's interaction at global level, supporting science diplomacy and Europe's engagement with third countries in a meaningful way to support the EU's two principal objectives at global level: put in place a new Green Agenda and supporting digital transformation. These initiatives are being supported through a policy and regulatory process led by the European Union. This will provide a ready framework in which science can operate and deliver change for good.



2. INTERNATIONALIZATION via EU POLICIES, PROGRAMMES AND INITIATIVES

2.1 EU Global Gateway

On 1 Dec 2021, the European Commission and the High Representative for Foreign Affairs and Security Policy launched the Global Gateway, the new European Strategy to boost intelligent, clean and secure links in digital energy and transport, strengthening health, education and research systems, across the world.

It stands for sustainable and trusted connections that work for people and the planet to tackle the most pressing global challenges, from climate change and environmental protection to improved health security and support of competitiveness, as well as global supply chains. The Global Gateway aims to mobilise up to €300 billion in investments between 2021 and 2027 to underpin a lasting global recovery, considering the partners' needs and the EU's interests.

The Global Gateway is about increasing investments promoting democratic values and high standards, good governance and transparency, equal partnerships, green and clean environment, secure infrastructures that catalyse private sector investment.

Through a Team Europe approach, the Global Gateway will bring together the EU Member States with their financial and development institutions, including the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD) and seek to mobilise the private sector to leveraged investments for a transformational impact. **Combining different sources of finance is novel approach** yet is in line with an increased synergy trends across nations and stakeholders, in particular at the level of the United Nations. Therefore, the Research Infrastructures of **ERIC FORUM can benefit from a more open-minded and socially-oriented approach to investment.**

The EU Delegations worldwide, working with Team Europe, will play a key role in identifying and coordinating Global Gateway projects in partner countries. This exercise will be ongoing throughout the global Gateway process: **ERIC FORUM should input this process by working with EU delegations in developing nations.**

Stakeholders must understand the benefit that the Research Infrastructures of ERIC FORUM bring in capacity building to developing countries and address critical global challenges, including health, biodiversity, digital transformation, and green deal.

The Neighbourhood, Development and International Cooperation Instrument (NDICI)-Global Europe, the Instrument for Pre-Accession Assistance (IPA) III, as well as Interreg, InvestEU and the EU research and innovation programme Horizon Europe; all allow the EU to leverage public and private investments in priority



areas, including connectivity. In particular, the European Fund for Sustainable Development+ (EFSD+), the financial arm of NDICI-Global Europe, will make available up to ≤ 135 billion for guaranteed investments for infrastructure projects, including science infrastructure and data capacity building, between 2021 and 2027 up to ≤ 18 billion will be made available in grant funding from the EU budget and European financial and development finance institutions have up to ≤ 145 billion in planned investment volumes.

In general, development finance bodies have not funded science in any strategic way. This is a clear opportunity for research infrastructures to prioritise funding globally, particularly in developing nations.

The EU is committed to working with like-minded partners to promote sustainable connectivity investments. The Global Gateway and the US initiative Build Back Better World could mutually reinforce each other. This commitment to working together was reaffirmed at COP26, the 2021 United Nations Climate Change Conference, where the EU and the United States brought together like-minded partners to express their shared commitment to addressing the climate crisis through infrastructure development that is clean, resilient and consistent with a net-zero future.

The Global Gateway is fully aligned with the U.N.'s 2030 Agenda, Sustainable Development Goals, UN Local2030, and the Paris Agreement signed at Cop21 in Paris in 2015.

2.2 Neighbourhood, Development and International Cooperation Instrument (NDICI/Global Europe)

The European Commission's Neighbourhood, Development and International Cooperation Instrument (NDICI) – 'Global Europe' supports the EU's external action with an overall budget of €79.5. billion

This instrument underpins the EU's external action and enables the EU to be a leading global player and a reliable partner in the international scene, supporting the EU's multilateral agenda. It provides the flexibility to respond faster and more coherently to ongoing and emerging global challenges while supporting global priorities such as peace and stability, good governance, trade, and inclusive and sustainable growth.

NDICI - 'Global Europe' incorporates the cooperation with Africa, the Caribbean and the Pacific into the budget, which has been financed for decades by the European Development Fund. This Fund was directly funded by the EU Member States, not by the EU budget, and therefore was not subject to the scrutiny of the European Parliament. Through NDICI - 'Global Europe', the EU will also boost its support to sustainable investment worldwide under the European Fund for Sustainable Development Plus (EFSD+) by leveraging private capital to complement direct external cooperation grants.



On the other hand, Global Europe will be the tool to support sustainable global recovery and promote comprehensive partnerships across the world that invest in democracy and human rights. With the instrument's financial arm, the EFSD+, the EU will have the means to increase the mobilisation of private investments towards achieving the Sustainable Development Goals. This instrument will consolidate a stronger Europe globally by aligning EU funding to overall priorities for the geopolitical Commission.

The new instrument will **cover the EU cooperation with all third countries**. The total budget will be divided as follows:

- €60.38 billion for geographic programmes (at least €19.32 billion for the Neighbourhood, at least €29.18 billion for Sub-Saharan Africa, €8.48 billion for Asia and the Pacific, and Americas and the Caribbean €3.39 billion);
- €6.36 billion for thematic programmes (Human Rights and Democracy, Civil Society Organisations, Peace, Stability and Peace Conflict Prevention and Global Challenges);
- . €3.18 billion for rapid response actions.

The new instrument will notably support countries most in need to overcome the long-term developmental challenges. It will contribute to achieving the international commitments and objectives that the Union has agreed to, particularly the Sustainable Development Goals, the 2030 Agenda and the Paris Agreement. It merges several current external financing instruments under the EU budget.

2.3 How ERIC FORUM Members could access Global Europe/NDICI

The ERIC Forum can make a meaningful contribution to global science through NDICI/Global Europe. For example:

- Develop a strategic paper matching the contribution of ERIC Forum ingredients with the strategic objectives of the NDICI/Global Europe, ensuring alignment with the EU-Africa strategy.
- NDICI funding is applied directly at the benefit country level. Therefore, ERIC Forum needs to establish
 relationships with relevant stakeholders in African nations. Prominent examples would be a canyon,
 Nigeria, South Africa, Ghana, Mozambique, Tanzania, Ethiopia and Sudan. Of course, there are many
 others, including the northern African states. Science diplomacy will be an important tool here.
- ERIC Forum can use the outcome of the EU-Africa Summit which concluded on the 19th February 2022 to build profile and build engagement with African leaders; specifically, the Summit announced an EU-



Africa innovation strategy and open the consultation process to identify how this strategy can be delivered. The strategy consultation process will close on the 17 May 2022. ERIC Forum might make a submission.

- Build a strategy with approximately five African nations for a combined NDICI funding proposal. Such a
 thematic approach will be important: biodiversity or more broadly environemtnal issues seem to be an
 obvious priority theme. However, it would be more applicable if this approach would be cross-domain,
 including for example social and economic disciplines, health, food production, etc. A holistic approach
 would be much more applicable since it would have lot more chances to address the priorities set by
 different countries (see below).
- NDICI funding is not awarded on a competitive basis: funding is applied based on the prioritisation set forward by the beneficiary nations.
- Establish a special ERIC Forum board-level meeting on engagement with Africa and the NDICI for the period September to December 2022 to advance a funding proposal;
- Work to include a relevant theme in the work programme for Horizon Europe 2023;
- The European Union's Strategic Forum on International Cooperation (SFIC) is the European Council body responsible for strategising international science. The ERIC FORUM should submit a white paper to address these needs;
- The European Parliament can benefit from a better understanding of the ERIC FORUM: the FORUM should make a formal presentation to the ITRE Committee which is responsible for science. In addition, the Science and Technologies Options and Assessment (STOA) Committee chaired by Christian Ehler MEP can both improve the working of the Committee and can provide a basis for policy engagement and policy level support for the ERIC FORUM.



3. INTERNATIONALIZATION via GLOBAL INITIATIVES

This section explores Global Initiatives where ERIC FORUM could make a significant contribution.

The United Nations SDGs provides an eloquent narrative on how global communities come together to address pressing challenges. The SDGs have informed much of European Union policy, particularly since the Commission President is committed to align the SDGs with European Union policy priorities.

In 2015, the United Nations General Assembly formally adopted the 2030 Agenda for Sustainable Development. Seventeen SDGs and 169 associated targets were adopted. This marks a turning point in European commitment to sustainable development. Even though sustainable development (SD) is one of the objectives in Article 3 Treaty on European Union and an official strategy since 2001, operationalised even as a set of SD relevant indicators since 2005, it was not particularly visible at the EU high-level politics. This might have be caused by a lack of ownership and governance. Since then, the EU has committed to implementing the SDGs both in its internal and external policies and realized that better regulation would foster policy coherence in the long run.

The SDGs are prominently featured within the European Research Area ERA: "Public authorities at all levels jointly promote consistency between their R&D cooperation activities and develop joint initiatives that give Europe leadership in addressing global challenges and reaching sustainable development goals." In November 2016, the Commission published the "Next Steps for a Sustainable European Future" 3, its Communication on the Sustainable Development Goals that ensures all coming EU policy measures take on board SDGs at the outset. Designing better regulation tools is a "way to ensure further mainstreaming of sustainable development in European policies", since "all Commission impact assessments must evaluate environmental, social and economic impacts so that sustainability is duly considered and factored in". Research and innovation are, therefore, framed to implement specific SDG targets in this communication.

Thus, Horizon Europe is committed to contributing at least 60% of its budget to sustainable development, with sustainable development being understood as the integration of economic, social and environmental objectives. In the 2020 Multiannual Financial Framework, the Commission proposes to set the ambitious goal for climate mainstreaming across all EU programmes, with a target of 25% of EU expenditure contributing to climate objectives. We are, therefore, witnessing a growing factual commitment towards the sustainable development in addition to its legally binding embedding in the Lisbon Treaty. Thus the SDGs could be further mainstreamed and fostered in STI policies and funding strategies. They have the potential to provide a framework for policies, both horizontally with criteria for funding and evaluation, and thematically, e.g. by anchoring goals and missions.



Practically, there is enormous scope for engagement with multilateral bodies beyond the EU's commitment to broad alignment at the policy level. The following paragraph includes a list of UN agencies where ERIC FORUM could build a constructive dialogue with and collaborate to deliver on shared objectives.

Responses to global challenges increasingly rely on science and innovation. In addition to the SDGs, this is reflected in the <u>United Nations Roadmap for Digital Cooperation</u> and other key recommendations. The Roadmap Panel completed its deliberations and submitted its final report, entitled "The Age of Digital Interdependence", in June 2019. In the report, the Panel included five sets of recommendations on how the international community could work together to optimise the use of digital technologies and mitigate the risks:

- Build an inclusive digital economy and society;
- . Develop human and institutional capacity;
- Protect human rights and human agency;
- Promote digital trust, security and stability;
- Foster global digital cooperation.

The ERIC FORUM has a pivotal role to play in all of the above recommendations in particular, in recommendations one and five.

3.1Key UN Agencies

These are the key United Nations Agencies here ERIC Forum can make an impact for contribution:

ITU

The International Telecommunication Union (ITU) is the United Nations specialised agency for information and communication technologies – ICTs. Founded in 1865 to facilitate international connectivity in communications networks, allocates global radio spectrum and satellite orbits, develops the technical standards that ensure networks and technologies seamlessly interconnect, and strives to improve access to ICTs to underserved communities worldwide.

UNOOSA

The United Nations Office for Outer Space Affairs (UNOOSA) works to promote international cooperation in the peaceful use and exploration of space and the utilisation of space science and technology for sustainable economic and social development. The Office assists any United Nations Member States to establish legal and regulatory frameworks to govern space activities and strengthens the capacity of developing countries to use



space science technology and applications for development by helping to integrate space capabilities into national development programmes in

UNDP

The UN Development Programme operates in 170 countries and territories, helping eradicate poverty, reduce inequalities and exclusion, and build resilience so countries can sustain progress. As the UN's development agency, UNDP plays a critical role in helping countries achieve Sustainable Development Goals.

UNEP

Since its inception in 1972, the United Nations Environment Programme (UNEP) has been the global authority that sets the environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the <u>United Nations system</u> and serves as an authoritative advocate for the global environment. UNEP's mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising future generations.

UNCSTD:

The United Nations Commission on Science and Technology for Development is a subsidiary body of the <u>Economic and Social Council (ECOSOC)</u>. It holds an annual intergovernmental forum to discuss timely and pertinent issues affecting science, technology and development. Its members are composed of national Governments; however, civil society contributes to discussions. Strong links exist with other UN bodies (The Commission on Status of Women, Regional Commissions, ITU, UNESCO. The CSTD include providing the United Nations General Assembly and ECOSOC with high-level advice on relevant science and technology issues.

UNCTAD

United Nations Conference on Trade and Development: Globalization, including a phenomenal expansion of trade, has helped lift millions out of poverty. But not even nearly enough people have benefited. Still tremendous challenges remain to be met. It supports developing countries to access the benefits of a globalised economy more fairly and effectively. It helps equip them to deal with the potential drawbacks of greater economic integration. To do this, it provides analysis, facilitates consensus-building, and offers technical assistance. This helps them use trade, investment, finance, and technology as vehicles for inclusive and sustainable development.



Financing for Development

The ECOSOC Forum on Financing for Development follow-up (FfD Forum) is an intergovernmental process with universal participation mandated to review the Addis Ababa Action Agenda and other financing for development outcomes and the means of implementation of the SDG.

3.2 UN Summit of the Future

In 2023 the UN will organise a Summit of the Future, which would "forge a new global consensus on what our future should look like, and how we can secure it". The Summit will address the perennial issues of peace and security, setting out a "New Agenda for Peace", with more investment for peace-building, support for regional conflict prevention, a reduction of strategic risks such as nuclear weapons and cyberwarfare - and dialogue on outer space to ensure that it is used peacefully and sustainably.

The application of human rights online would also be covered at the Summit in a Global Digital Compact to ensure that new technologies are a force for good. Other tracks would include the peaceful and sustainable use of outer space and the management of future shocks and crises. The Summit will take account of today's more complex context for global governance: a more inclusive and networked multilateralism to navigate the complex landscape and deliver effective solutions. The Summit will also call for better partnerships between governments, multilateral organisations, the private sector, civil society, and an emergency platform to better prepare for global crises, with more robust global health security.

One example is the creation of a Futures Lab, which would work with partners including governments, academia, civil society, and the private sector to issue regular reports on mega-trends and catastrophic risks. In addition, measures on education, skills training, and lifelong learning are proposed, including a Transforming Education Summit planned for 2022 to address the learning crisis and expand opportunities and hope for the world's 1.8 billion young people. A Global Social Summit, to be organised in 2025, which would coordinate international efforts to create peaceful, secure societies based on human rights and dignity for all.

These meetings would coordinate efforts to bring about inclusive and sustainable policies that enable countries to offer their citizens essential services and social protection. "Governments should never again face a choice between serving their people or servicing their debt", said Mr Guterres.



3.3 G7

According to the Cornwall Conclusion, G7 leaders are committed to developing a robust, diverse and resilient science and research community inclusive of all groups, as recognised by the Working Group on Financing Science for Inclusive Growth. It is essential to deepen the participation of underserved, under-represented and marginalised communities and expand their involvement in the research and innovation ecosystem. Such an inclusion will enhance the strength of our research base and increase momentum on dismantling the social, legal, and regulatory barriers limiting participation and complementing our G7 gender equality goals by tackling gender gaps. Principles and practices of inclusive growth distribute the benefits of science among diverse communities and regions across the G7 and beyond.

Openness, reciprocity and cooperation are shared G7 values. We commit to working together to uphold and protect the principles that underpin effective international collaboration that is as open as possible and as secure as necessary. To facilitate this, we support continued collaboration on Open Science by continuing the existing G7 Working Group and establishing a new Working Group on the Security and Integrity of the Research Ecosystem. In light of this, the G7 nations committed to work together to:

1. Maintain policies, legal frameworks and programmes which promote research collaboration – among our scientists, research institutions and innovative businesses;

2. Promote the efficient processing and sharing of research data as openly as possible and securely as necessary across the G7 and beyond by improving the availability, sustainability, usability and interoperability of research data, technologies, infrastructure and services. The group will work together to address the administrative, legal, and regulatory barriers that hinder its scientific cooperation and slow their ability to respond to crises. A specific case study focussed on data sharing in an emergency will increase the resilience by working through barriers;

resilience by working through barriers;

3. Explore incentives, including enhancements to research assessment that foster recognition and reward collaboration across all disciplines and topics to drive a culture of rapid sharing of knowledge, data, software, code and other research resources. Investigate how open science practices help achieve increasingly robust, reliable and impactful research outcomes;

4. As G7 continues to see the benefits of international collaboration in response to the Covid-19 pandemic, they have a shared aspiration for more flexible and agile research collaborations facilitating rapid, interdisciplinary,



and evidence-based answers to future systemic crises and natural disasters across G7 nations and beyond. Accordingly, G7 will explore how existing and potential new mechanisms

G7 will explore how existing and potential new mechanisms and initiatives can support risk reduction, prevention and response to these events;

5.The G7 Working Group on the Security and Integrity of the Research Ecosystem will develop a standard set of principles which, when implemented, will help to protect the research and innovation ecosystem across the G7 from risks to open and joint research collaboration, and preserve the principles of open science and research freedom and independence. The Group will develop proposals for a virtual academy and toolkit, bringing together and developing the skills and experience of researchers, innovators, business leaders, and policymakers from any nation to develop a shared understanding of research integrity and security. This will embed the behaviours, systems and processes needed to protect valuable knowledge and technology assets where necessary, allowing international collaboration to continue with confidence.

3.4 ERIC FORUM vs SDGs

This table presents a list of ERIC Forum Research Infrastructures along with the relevant SDGs, where plausible cooperation can readily be developed. This list can be expanded to include the relevant information and can form the basis of a report to present to the United Nations at the General Assembly in September 2022.

ERIC Forum Research Infrastructure	Relevant for UN Sustainable Goals
Energy	'
ECCSEL-ERIC	·SDG 7 Affordable and clean energy
	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	·SDG 10 Reduced Inequalities (Target
	10.2)
	·SDG 11 Sustainable Cities and
	Communities
	·SDG 13 Climate Action
	·SDG 17 Partnering for the Goals



Environment

LifeWatch ERIC	·SDG 4 Quality Education (Target 4.3)
	·SDG 13 Climate Action
	·SDG 14 Life Below Water
	·SDG 15 Life on Land
	•SDG 17 Partnering for the Goals
EMSO-ERIC	·SDG 13 Climate Action
	·SDG 14 Life Below Water
	•SDG 17 Partnering for the Goals
EURO-ARGO ERIC	·SDG 9 Industry, Innovation and

	Infrastructure (target 9.5)
	·SDG 13 Climate Action
	·SDG 14 Life Below Water
	•SDG 17 Partnering for the Goals
ICOS-ERIC	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	·SDG 13 Climate Action
	•SDG 17 Partnering for the Goals
EPOS-ERIC	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	·SDG 17 Partnering for the Goals
Health and Food	



EU-OPENSCREEN	·SDG 3 Good Health and Well-being ·SDG 9 Industry, Innovation and Infrastructure (target 9.5) ·SDG 10 Reduced Inequalities (target 10.2) ·SDG 17 Partnering for the Goals
EMBRC-ERIC	·SDG 3 Good Health and Well-being ·SDG 4 Quality Education (Target 4.3) ·SDG 9 Industry, Innovation and Infrastructure (target 9.5) ·SDG 10 Reduced Inequalities (Target 10.2) ·SDG 17 Partnering for Goals
Instruct-ERIC	·SDG 3 Good Health and Well-being ·SDG 4 Quality Education (Target 4.3) ·SDG 9 Industry, Innovation and Infrastructure (target 9.5) ·SDG 10 Reduced Inequalities (Target

	10.2)
	·SDG 17 Partnering for Goals
BBMRI-ERIC	·SDG 3 Good Health and Well-being
	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	·SDG 17 Partnering for Goals



EATRIS-ERIC	·SDG 3 Good Health and Well-being
	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	•SDG 17 Partnering for Goals
ECRIN-ERIC	SDC 2 Cood Upplth and Wall being
	·SDG 3 Good Health and Well-being
	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	 SDG 17 Partnering for Goals
Euro-Biolmaging ERIC	·SDG 3 Good Health and Well-being
	·SDG 4 Quality Education (Target 4.3)
	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	·SDG 17 Partnering for Goals
Physical Sciences and Engineering	
CERIC-ERIC	·SDG 4 Quality Education (target 4.3)
	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	·SDG 13 Climate Action
	 SDG 17 Partnering for Goals
European Spallation Source-ERIC	·SDG 2 Zero Hunger (Target 2.4)
	·SDG 3 Good Health and Well-being
	·SDG 7 Affordable and clean energy
	SDG 7 Anordable and clean energy
	Growth



	SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	·SDG 13 Climate Action
	·SDG 14 Life Below Water
	·SDG 15 Life on Land
	•SDG 17 Partnering for Goals
JIV-ERIC	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	·SDG 17 Partnering for Goals
ELI-ERIC	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	·SDG 13 Climate Action
	·SDG 14 Life Below Water
	·SDG 15 Life on Land
	 SDG 17 Partnering for Goals
Social and Cultural Innovation	
CESSDA-ERIC	SDG 4 Quality Education (Target 4.3)
	SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	SDG 17 Partnering for Goals
CLARIN-ERIC	·SDG 4 Quality Education (Target 4.3)
	SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	•SDG 17 Partnering for Goals



DARIAH-ERIC	SDG 4 Quality Education (Target 4.3)
	·SDG 9 Industry, Innovation and
	Infrastructure (target 9.5)
	·SDG 10 Reduced Inequalities (Target
	10.2)
	•SDG 17 Partnering for Goals
European Social Survey-ERIC	SDG 4 Quality Education (Target 4.3)

	·SDG 5 Gender Equality
	SDG 10 Reduced Inequalities (Target
	10.2)
	·SDG 16 Peace, Justice and Strong
	Institutions
	SDG 17 Partnering for Goals
	CDC 2 Cood Uselth and Wall hains
SHARE-ERIC	·SDG 3 Good Health and Well-being
	·SDG 5 Gender Equality
	SDG 10 Reduced Inequalities (Target
	10.2)
	SDG 17 Partnering for Goals

3.4 SOME CONSIDERATIONS

3.4.1 Development Financing

Future funding for ERICs will also be a challenge: new avenues have to be explored, the two key domains that need to be understood and analysed for the development finance bodies, including the World Bank and the IMF, as well as venture capitalists who are now more interested in ESG, approaches to financing, rather than an exploitative model.



The World Bank and the IMF or institutions of the United Nations. Therefore, their agendas are aligned with the EU and more broadly, the SDGs fulfilment and attainment. At its annual conference in December 2021, the World Bank recognised the contribution of science and innovation to its broader strategic objectives.

Amongst other things, this recognises that not only does the World Bank engage in funding, for example, national analysis on STI, but also recognises the overarching importance of science and innovation in contributing to the world Banks role in addressing the SDGs. This opens up the prospect of science becoming a priority for development finance in general and the leading development finance agencies, the IMF, World Bank amongst others.

3.4.2 Data Regulation

Current data protection regulations in the European Union and in developed nations will impact on data developed and maintained in the research infrastructure environment. ERIC FORUM Research Infrastructures will need in place a robust response to the burgeoning regulatory environment in Europe and globally in order to ensure regulation does not impede the potential of these key research infrastructures. This will be enabled through a more sustained engagement with policymakers and regulators, including a proactive mechanism for dialogue.

4 SUGGESTED INITIATIVES

4.1UNGA77

Use the United Nations general assembly 77 in September 2022 as a platform to demonstrate the contribution of ERIC Research infrastructures to the United Nations sustainable development goals, SDGs, and the agenda 2030;

Date: 27 September 2022 Location: New York City Duration: 10 AM to 1 PM local time New York



Target audience: UN officials, diplomats, science policymakers, financiers, scientists, civil society stakeholders, SDG stakeholders, business, industry and so forth;

Input: ERIC Forum Position paper on the SDGs. Presentation by six experts followed by a bilateral dialogue with UN officials' general assembly, including the 2nd committee responsible for science and technology. Outcomes:TBD

4.2 IMF and the World Bank

The World Bank annual General Meeting takes place in November 2022. This will be an opportunity to provide input by way of a strategic paper setting out the contribution of ERIC Forum Research infrastructures to the broad policy objectives enshrined in the IMF and World Bank development finance objectives: Date: 2 November 2022 Location:Washington, DC (international press club premises) Duration: 4 PM to 6 PM local time Washington Target audience

4.3 NDICI/Global Europe

European Union's NDICI/ Global Gateway initiative events on 1 December 2021 is a perfect opportunity to have Research Infrastructures as part of the narrative strategy for the Global Gateway, including bringing a focus on science capacity to address critical challenges in the area of biodiversity, climate change and health;

4.4 G20/COP27

The G20 and cop 27 processes, hosted by Indonesia and Egypt respectively in 2022, present a clear opportunity to build scientific capacity. A version of the ERIC strategy should be tailored to these meetings by way of input and support output engagement.

4.5. Summit of the Future 2023

In September 2023, the United Nations will host the Summit of the Future, and the Eric Forum should be part of this crucial dialogue host the roundtable with development finance bodies, including the World Bank, the IMF, the European investment bank, the African Development Bank, the Arab Development Bank and others.

4.6 Leveraging the NDICI for ICT for Africa

The online meeting will be designed to foster practical level cooperation between your leadership and the European Unions principal development funding instrument for Africa, Neighbourhood, Development and International Cooperation Instrument, NDICI. Recall from previous discussions that this program will provide



approximately €800 billion for developing nations: the vast majority will go to African countries. One of the programmes is a broad development programme, a digital transition plan in Africa.

The objective of the session will be:

- . Raise awareness of the activities supported by the ITU to support ICT capacity building in Africa
- Foster an understanding amongst decision and policymakers of the potential synergies between the ICT and the NDICI programme in particular concerning the digital transition agenda
- Ensure a focus on common standards and related regulatory issues
- . Highlight best practices and key initiatives already underway by the ITU
- Support a robust digital transition plan for the forthcoming EU-Africa summit, currently scheduled to take place during the upcoming French
- Council Presidency, commencing on 1 January 2021
- Support the implementation of NDICI initiatives in the ICT areas in Africa
- . Create synergies between ITU supported actors in Africa and the NDICI programme
- Support the development of particular programs to support women and girls into the digital transition in Africa
- . Advance the development of the ICT skills agenda in Africa
- Support ongoing priority setting about the NDICI programme over the life of the programme for the period 2021 to 2028
- . Support awareness of the leadership role of Doreen for ICT in Africa



5. RECOMENDATIONS

5.1 For ERIC FORUM

- Develop a ERIC FORUM policy paper designed for consumption by international bodies including the UN, development finance banks, international and global partners and regulators;
- Ensure all reforms have coordinated messaging on the websites, reflecting the contribution to key international fora and the SDGs;
- Build key events, along those instanced in this report; this will ensure a sustained awareness at international policymaker level;
- ERIC FORUM should design and develop policy inputs not only for Europe, but also for application in developing nations and groups of nations;
- Develop a sustainable financing model based on private sector finance, development finance in addition to governmental funding, including the European Union;
- Develop an MOU with the United Nations Development Programme and the United Nations environment programme and the United Nations Office for Outer Space Affairs
- Accommodate indigenous knowledge in the future development of ERIC for research infrastructures;
- In light of the commitment of the European Union and the United Nations to inclusiveness, develop a ERIC FORUM inclusiveness strategy, perhaps focusing on disability groups and women;
- Access to data is critical: ensure that the ERIC FORUM Research Infrastructures have an open access policy, including one which is regulatory compliant globally and is committed to fair benefit sharing, in particular in developing nations;
- Since the ERIC FORUM has a very strong northern hemisphere presence, develop a Global South strategy.
- To specific countries:
 - Concept and benefits of RI
 - Examples of RIs as success stories on collaboration across countries
 - Importance of the need of funding stability for a few years
 - Small grants for seed projects, staff exchanges, workshops, etc.
 - Importance of political engagement
 - Co-funding between several countries for transnational projects

5.2 For Members of ERIC FORUM.

For specific bi-lateral programmes:



- Align scientific priorities between the countries and the RI.
- Engage them in EUropean projects.
- Set an strategy to build trust and relationships.
- Take into account the differences between countries: funding, legal and ethical frameworks
- Take into account communication needs to the community: E.g. Open-access.
- Open virtual communications.
- Aim for official long-term agreements, not only informal or project basis collaboration.

6. REFERENCES

- *Kim, M. (2021) Recommendations towards cooperation between Latin American and European Research Infrastructures. RI-VIS.* (https://ri-vis.eu/network/rivis/white-papers)
- *Kim, M. (2021) Recommendations towards cooperation between African and European research infrastructures. RI-VIS.* (https://ri-vis.eu/network/rivis/white-papers)
- European Commission (2022). https://ec.europa.eu/info/index_es
- United Nations (2022). https://www.un.org/en/about-us/un-system