

Template for reporting the JIRI Working Groups statement of work

Objectives of this template:

- To inform about the key outcomes and main activities carried out by the JIRI Working Groups.
- To present an overview of the JIRI WGs achievements for discussion with the European Commission representatives and other relevant stakeholders.

JIRI Working Group on Biodiversity

Overview

Main thematic lines of work

The EU-CELAC SOM has been established as a regular bi-regional dialogue on Science, Technology & Innovation to implement the JIRI through biannual Action Plans focus on thematic areas. The SOM assesses the strategic issues and provides recommendations for a JIRI Annual Work Plan that is implemented by the different existing projects (ALCUE NET, ERANet-LAC, EULAC Health, etc.).

The working group on biodiversity and climate change had the following objectives:

- To have an up to date overview of the project outcomes in terms of biodiversity and climate change with a focus on the ERA-LAC collaboration
- To share success stories, accomplishments and link them with the funding opportunities both within the H2020 framework and other EU funding frameworks
- To put into perspective some of the challenges to face with the linkage of Biodiversity and Climate change within the research communities and in the institutional aspects (new definition of interdisciplinary and knowledge sharing, COP 13 & COP 21 agreements...)
- To create & reinforce synergies between both regions in order to sustain Alcue-net accomplishments in terms of biodiversity and climate change.

Three workshops on biodiversity and climate change were previously organized since the beginning of Alcue-Net project. They were forecasted within the work package 5 led by the IRD, France (Institute of Research for Sustainable Development) and Colciencias, Colombia.

The first workshop in Santa Marta allowed participants to build the scientific bases for (March 2014) the identification of research topics of mutual interest between LAC and European countries, providing substantial elements to elaborate a 1st thematic report submitted to the SOM in early April 2014.

The Marseille workshop (November 2014) enhanced different discussions and propositions on the needs for the LAC region such as the creation of a bi-regional observatory, awareness raising on capacity building opportunities, H2020 funding opportunities, IPR guidelines, joint new activities.

The Bogota workshop (September 2015) co-organised within the CORDEX-LAC framework was a key example of pooled event to maximize results of collaborative work on biodiversity and climate change.

Apart from these outputs, the several workshops have also reinforced a strong network of experts in the fields of biodiversity and climate change, willing to open up at each event in order to maximize shared knowledge, experiences and feed constructive debates according to each own characteristics (regional, research specialty...).

List of countries and institutions involved on the JIRI WG

Country	Institution	Title	Name
Argentina	MINCYT	National Contact Point on Climate Change	Carlos Ereño
	Embassy of Argentina	2nd level secretary	Guillermo Simunovich
Belgium	Belmont Forum	EC liaison officer	Paul Vossen
	Belgian Science Policy (BELSPO)	Senior Advisor	Brigitte Decadt
	Ghent University	Director of the Central and South America platform (CeSAM)	Peter Goethals
Colombia	Colciencias	Head of Internal affairs	Paula Henao
	Colciencias	NCP Coordinator	Angela Goyeneche
	Universidad Pontificia Javeriana	Expert on Biodiversity	Elizabeth Hodson
European Commission	DG R&I	Head of Natural Resources Unit	Birgit de Boissezon
	DG R&I	Latin America Cooperation Officer	Mina Stareva
	EG-DG DEVCO	Policy officer	Mirim Cue
	DEVCO/03	Head of Sector R&I	Francesco Affinito
France	IRD	Researcher in Paris	Eric Chenin
	IRD	Researcher in Montpellier	Emmanuel Roux
	IRD	Expert on Marine Biodiversity and IRD Representative in Brussels	Philippe Cury
	IRD	Head of EU Affairs at IRD in Marseille	Catherine Lauranson

	IRD	EU Affairs Officer at IRD in Marseille	Claire Freour
	IRD	EU Affairs Officer at IRD in Marseille	Laurence Lombard
	IRD	Coordinator of the French IPBES Committee FRB in Paris	Agnes Halosserie
	MNHN	Node Manager GBIF France	Anne-Sophie Archambeau
	Biodiversa	Coordinator of Biodiversa in France	Xavier Leroux
	CIRAD	Researcher in agroecology	Pascal Clouel
Germany	The Alexander Koenig Research Museum	Biodiversity expert based in Montevideo	Klaus Riede
Mexico	UDLAP	Expert on Biodiversity	Carlos Patiño
Panama	SENACYT	NCP's por Climate action, resource efficiency and raw materials	Omar López
Spain	Ministry of Economy, Industry and Competitiveness	Head of Unit - Area for Nanotech, Environment and e-Science	Juan Miguel González
	Ministry of Economy, Industry and Competitiveness	Technical Advisor in the State Research Agency	Juan Climent
Portugal	University of Évora	Expert on Biodiversity	Miguel Araújo
	University of Lisboa	Expert on Biodiversity	Cristina Branquinho
	Açores University	Expert on Biodiversity	Ana Cristina Costa

Outcomes so far: most visible activities; main deliverables; impact and added value

The main results & activities achieved highlighting for instance over 30 workshops organized in several topics, with 1500 experts & policy makers mobilized and more than 500 participants (within and outside the countries members of the consortium) trained to improve LAC participation in Horizon 2020. The main expected outcomes of the workshop:

- Interactions improved between both communities (Biodiversity and Climate change) in LAC and EU.
- Synergies created between both activities and EU initiatives to enlarge CELAC participation in funding calls
- Summary and recommendations to be presented to the next SOM 9
- Cooperation opportunities identified to sustain Alcue-Net activities beyond the project.

The main outcomes of interest in the Alcue-Net context in the last meeting of the Convention on Biological Diversity were highlighted as the following:

- There is little time left until 2020 and only 1/3 of the Aichi Targets are on track (Aichi Target 10 on coral reefs protection have been completely missed). However this gap of Aichi target could be an opportunity to labeled several actions forecasted in ALCUE NET if achieved
- The parties recognized that cooperation among the biodiversity, climate change adaptation, and mitigation and disaster reduction communities' results in a greater ability to design interventions that deliver multiple benefits
- They also recognized the potential for synergies provided by the 2030 Agenda for Sustainable Development and the Paris Agreement
- Finally, the need for improved scientific information concerning the climate change adaptation of the protected areas network, their functionality and connectivity.

Next steps to reach in 2016-2017 (activities and outcomes)

- 1. To promote interdisciplinary research projects on ecosystem-based adaptation and resilience including Biodiversity and Climate communities**
 - Biodiversity and Climate communities are called upon to work together.
 - There is indeed a strong demand to share good practices within institutions (universities, research institutes...) by promoting Biodiversity and Climate communities' exchanges and training.
- 2. To coordinate data acquisition and data management based on reliable, comparable and accessible data, and the use of existing platforms.**
 - Promoting small research projects on database analysis, involving research teams and infrastructures or synthesis centers from both regions, is a key component in strengthening the bi-regional and international cooperation.
 - Joint projects should be encouraged to include training events (summer schools, specialized training courses) on building databases, bioinformatics or data management plans.
- 3. To involve stakeholders into research projects from the local communities to private sector in view of developing "Nature Based Solutions".**
 - Putting forward socio-ecological approaches to develop "solutions inspired and supported by nature that simultaneously provide environmental, social and economic benefits and help build resilience". The deployment of such approaches should be encouraged to promote research on B&CC.

- This will also support the integration of stakeholders into research and innovation projects, from the local communities to private sector to support environmental sustainability.
- Including socio-ecological approaches to address societal challenges, B&CC communities will allow for the strengthening of the role of science to achieve the Sustainable Development Goals.

Possible contribution to the Common Research Area

Mobilities

COLCIENCIAS, as the governing body of the National System of Science, Technology and Innovation in Colombia, seeks with this call to intensify international cooperation in research and innovation, through the strengthening of the country's scientific and technological capabilities, for the promotion and increase of national scientific production, through the generation of strategic links between Colombian researchers who are part of the entities of the National System of Science, Technology and Innovation -SNCTI- and their peers in Europe.

In accordance with the National Development Plan 2014-2018, the call aims to support the formation of human capital with capacity for scientific research and innovation, as well as the generation of a scientific production with greater impact, through the mobility programs and international exchange and the strengthening of links between national and international actors in the field of STI.

Likewise, the call is framed in the institutional strategic objectives of COLCIENCIAS that are in the Institutional Strategic Plan 2015-2018 and in its 2017 action plan, which is called "Generate links between SNCTI actors and strategic international actors and the circulation of knowledge and innovative practices in a global scenario ", which seeks to generate necessary conditions for the development of international networks that allow Colombian researchers to contribute to the generation of new scientific and technological knowledge.

The main purpose of the call is "Conform a Bank of Eligible in the framework of projects between Colombia and Europe (France-Germany) for the exchange of researchers."

This call supported projects related to the following areas of knowledge: Basic Sciences, Health, Engineering, Agricultural Sciences, Environment, Oceans and Biodiversity, Information and Communication Technologies, Geosciences and Human Sciences, Social Sciences and Education.

Strengthened thematic cooperation

BiodivERsA and Belmont Forum call (foreseen in late 2017)

Following the joint activities held by ALCUENET and BiodivERsA, in particular the bibliometric study, LAC countries have been invited to participate in the forthcoming call that will be launched with the Belmont Forum on scenarios of biodiversity & ecosystem services (for a global amount around 20-25 Million Euros). Other fundings agencies are fully aware about this opportunity to take part of an important call on biodiversity and climate change research.

Updates:

BiodivERsA presented the new opportunities to promote international collaboration for research on biodiversity and ecosystem services. BiodivERsA is a European network of 32 research-funding agencies across 19 European countries, created in 2005 and co-funded through the several EU Framework Programs: FP6, FP7 and Horizon 2020. BiodivERsA works on coordinating national research programmes on biodiversity across Europe (including overseas) and organizing joint calls for research projects. BiodivERsA is already a well-known actor within ALCUE NET as it has supported the mapping analyzing the ERA-LAC collaborations⁷ on biodiversity and climate change. The BiodivERsA network aims at creating synergies with joint programming on « Biodiversity, ecosystem services & Nature-based solutions » through several activities (ie: mapping & foresight activities or development & funding of calls for proposals...).

The strategic research and innovation agenda of the network and the forthcoming joint call, to be co-launched with the Belmont Forum in 2017, on « Scenarios of biodiversity & ecosystem services », with an expected global amount of funding around 20-25 million euros. This call will involve many countries in Europe and in other parts of the world, including Latin America (Brazil, Argentina).

Linking with this original widening beyond European borders of the call 2017, the second part focused on the ambition of BiodivERsA to open up its activities to an international dimension, which could be of strong interest for LAC partners. There are some opportunities in the next coming months/years:

- BiodivERsA will rely on the Era-net instrument covering all the main functions of a JPI (Joint Programming Initiative)
- The widening strategy aims at promoting international research collaboration in order to provide sustainable answers and solutions to the issues (need for transdisciplinarity, crosscutting research projects, management of complex and diverse data...)
- Engaging in a widening strategy of BiodivERsA will be a concrete opportunity for reinforcing ERA-LAC collaboration on biodiversity & ecosystem services

Barriers identified on the bi-regional cooperation and recommendations

Biodiversity assessment and monitoring:

Improve baseline distribution data, intensify the cooperation with global data infrastructures (observatory networks) to encourage data use across BD, CC & SS communities.

Difficulties:

Different data format, availability, language impede the development of dialogues among climate and biodiversity communities.

Recommendations:

Link EU-LAC call with existing global data/mapping tools in EU and LAC.
Forster interactions between IPCC and IPBES experts.

Scientists should engage in true interdisciplinary research:

Difficulties:

There is still not enough proportion of co-authoring between the different scientific communities and only 14% of the co-authoring include SHS.

Recommendations:

Provide interdisciplinary coursework, programs and collaborations for the next generation of scientists.

Ecosystem-based adaptation and resilience: incentives are needed to fill the gap between BD, CC and social science communities.

Difficulties:

Scientific communities mostly operate within silos, poor visibility about tools/methods developed in other communities.

Scientist have poor incentives to leave their silo (publications, career).

Recommendations:

Develop calls at the interface between BD, CC & SS.

Joined CORDEX-ALCUEnet publication/IPCC?

Identify pilot studies where combined BD, CC, and SS approaches are needed to solve real-world problems.

- Revision of the JIRI WG strategy (in terms of policies, priorities, instruments, synergies, objectives, EU-CELAC perspectives, etc.)

Building on the mandate of the last JIRI SOM and on the existing work on innovation in CELAC and the EU, the Participants agreed on the need to strengthen the innovation dimension of the EU-CELAC cooperation under the Common Research Area and committed towards the development

of a common innovation agenda ahead of the next JIRI SOM. As a first step, the Participants agreed to support an expert innovation event in spring 2018.

- Expectation towards HORIZON 2020 (regarding identified calls; consortia building; new topics + instruments needed to give CELAC more visibility as target region; joint possible commitments; etc.)

During the last Senior Official Meeting authorities from both regions agreed to foster the participation of CELAC countries on H2020 aiming to strength the cooperation with Europe. The Representatives agreed to “ensure that the EU-CELAC research community will unlock the full potential of opportunities under the last Horizon 2020 Work Programme for the period 2018-2020, the Participants committed towards the widest” (Joint Declaration of San Salvador)

Societal Challenge	Call	Topic	Title	Opening	Deadline
(5) Climate action, environment, resource efficiency and raw materials	Protecting and leveraging the value of our natural and cultural assets: Nature-based solutions, disaster risk reduction and natural capital accounting	SC5-17-2018 (RIA)	Towards operational forecasting of earthquakes and early warning capacity for more resilient societies	07-nov-17	27-feb-18 (First Stage) 04-sep-18 (Second Stage)
(5) Climate action, environment, resource efficiency and raw materials	Greening the economy in line with the Sustainable Development Goals (SDGs)	SC5-13-2018-2019 (RIA)	Strengthening international cooperation on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems	07-nov-17 14-nov-18	27-feb-18 (First Stage) 04-sep-18 (Second Stage) 19-feb-19 (First Stage) 04-sep-19 (Second Stage)

SC5-17-2018: Towards operational forecasting of earthquakes and early warning capacity for more resilient societies:

To help mitigate the risks related to earthquakes, citizens need additional protection that goes beyond building codes and retrofitting actions. Early warning approaches and operational earthquake forecasting, which are under development, need to be seen in a Europe-wide perspective, building on improved, dense, robust and high quality seismic networks and new processing tools and activities. The practical applications and use of shortterm forecasting, early warning methods, time dependent physical and systemic vulnerability estimates and rapid loss assessment for earthquake risk reduction are still far from being operational. Strong European and international scientific collaboration is needed to make substantial progress in the domain

SC5-13-2018-2019: Strengthening international cooperation on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems

Unsustainable, non-resilient urbanisation patterns, the expansion or neglect of urban areas have caused the fragmentation, depletion and destruction of habitats, biodiversity loss and the degradation of ecosystems and their services. Increasing connectivity between existing, modified and new ecosystems and restoring and rehabilitating them within cities and at the urban-rural interface through nature-based solutions ⁶³, is necessary to enhance ecosystem resilience and adaptive capacity to cope with the effects of climate and global changes and to enable ecosystems to deliver their services for more liveable, healthier and resilient cities.

- New actions to explore (ie. EU-CELAC Interest Group, proposed by ERA-Net LAC, etc.)

EU-CELAC Interest group for bi-regional STI cooperation

The EU-CELAC Interest Group is a group of funding agencies from CELAC, EU Member States and Associated Countries wishing to cooperate in bi-regional science, technology and innovation (STI) collaboration.

The EU-CELAC IG organizes joint actions, e.g. joint calls, and thus supports the implementation of the Common EU-CELAC Research Area and creates further added value to its three pillars: Mobility of Researchers; International outreach of Research Infrastructures; Increased thematic cooperation to address global challenges.

The EU-CELAC IG defines priority topics and instruments of common interest, taking the SOM activities and suggestions by participating funding agencies into consideration. To do so, it will meet yearly, alternately in EU or CELAC.

The participating funding agencies are invited to cooperate with full flexibility, to decide individually in which of the joint activities and themes they want to get involved (variable geometry) and to determine their individual level of funds in each activity.

Once a party has decided to participate in one or more of the activities launched by the EU-CELAC IG, a high commitment and the ability to contribute to the implementation of the respective joint action(s) with financial and human resources (according to the capabilities of every actor) are expected.