

IST-Africa Horizon 2020 Workshop

31 October 2016

National University of Lesotho, Roma, Lesotho

Organised by the Department of Science and Technology in cooperation with IIMC, Ireland (IST-Africa Project Coordinator) as part of IST-Africa Initiative supported by the European Commission under Horizon 2020

Workshop Goals

The purpose of this Horizon 2020 Training workshop is to learn about Horizon 2020 as a research and innovation funding mechanism and specifically to discuss opportunities for African organisations involved in Research and Innovation under the ICT-39-2017 Call and other relevant calls.

Participants should review the IST-Africa Guide to Horizon 2020 and the focus of the ICT-39-2017 Call in advance. It is necessary to review the brainstorming questions in the Agenda in advance and come to the workshop with specific ideas to be discussed.

Focus of ICT-39-2017 Call

The Horizon 2020 ICT-39-2017 Call for Proposals (deadline 25 April 2017) provides a unique opportunity for African institutions undertaking Research and Innovation to co-design an Innovation Action based on addressing end-user requirements in sub-Saharan African countries in cooperation with European partners.

Innovation Actions are focused on technological improvements/adaptations as well as innovative service creation based on existing technologies. Activities should be led by a clearly defined **user need/market opportunity for the technology being adapted based on requirements of sub-Saharan African countries identified through co-design**. It is therefore necessary to identify a project focus that is relevant in a number of countries from the same region with a sustainability plan for wider roll out following successful validation and project funding.

Proposals should feature an explicit element exploring technology adoption, through understanding and evaluating behavioural responses to the introduction of new technologies in different regional settings. Societal and gender issues will be taken into account.

Based on the focus of this call it will be necessary to ensure that there are **multidisciplinary teams** – thematic experts in the target domain as well as ICT experts. Based on a number of African countries being involved, it is also necessary to co-design a proposal that addresses a common challenge at national level, that can be validated in a number of scenarios in the different countries.

Innovation Actions have **limited research and development** related to **adaptation of existing technology**. It is expected that any research related to the challenge to be addressed and understanding of the state of the art in the thematic area is already undertaken and demonstrated in the proposal submitted. Since **demonstration and market validation** is the primary focus of an Innovation Action, the consortium must demonstrate relevant links with end-user communities who will be involved in the validation process and this needs to be clearly demonstrated in the proposal submitted.

Horizon 2020 proposals are submitted by a consortia, which brings together necessary complementary expertise to address the project focus from Africa and Europe. It is a requirement of the funding instrument that there are a minimum of 3 European partners from 3

different Member States in addition to the relevant African partners. Horizon 2020 projects are based on a grant to the legal entity who is the partner providing reimbursement of actual costs (personnel rates from payroll, necessary equipment and travel).

Expected Impacts:

- Development of relevant technology responding to specific needs and conditions of the target country;
- Sustainable uptake of results within the targeted countries, beyond the project completion date;
- Reinforced international dimension of the ICT and Innovation aspects of Horizon 2020 and a higher level of international cooperation with low and middle income countries in ICT R&D and Innovation, focusing on areas that are beneficial to the target countries/region;

Type of Action: Innovation Action (18 months - 2 years in duration)

Funding per proposal: 1 - 2 million euro

Deadline: 25 April 2017

Pre-Registration

While there is no charge for participation at the IST-Africa Workshops, **pre-registration is required**. Please contact Lieketseng Tjokotsi <tjokotsil@yahoo.com> for more information. All participants are responsible for any travel costs incurred. It is necessary to complete and return an organisational profile in electronic format prior to the workshop.

Workshop Agenda

09:00 Welcome Address

Mr Tseliso Khomari, Principal Secretary
Ministry of Communications Science and Technology

09:15 IST-Africa Initiative

Paul Cunningham
IIMC International Information Management Corporation Ltd, Ireland

09:30 Introduction to Horizon 2020

Lefa Thamae, Director
Department of Science and Technology

10:00 Introduction from Participants

Each participating organisation briefly introduces itself, its research interests relevant to Horizon 2020 and briefly outlines research track records in relevant areas.

10:45 COFFEE BREAK: Networking Opportunities

11:15 Horizon 2020 Calls for Proposals focused on Africa

Paul Cunningham, IIMC / IST-Africa

- Leadership in Enabling and Industrial Technologies (LEIT) – Deadline **25 April 2017**
 - *ICT39 – 2017: International Partnership Building with Africa*
- Societal Challenge 2: Food security, sustainable agriculture

- *SFS-43-2017: Earth observation services for the monitoring of agricultural production in Africa - Deadline 14 February 2017*

Brainstorming opportunities under ICT39-2017 (Group work)

- a) Which thematic areas are most relevant for Lesotho and why?
- b) What are the end-user needs for each of the specific thematic areas short-listed – bearing in mind that this is a innovation action?
- c) Who are the key stakeholders that should be consulted (e.g. public, private, education and research and societal sector organisations) for each of the short listed thematic areas?
- d) Who are the key stakeholders that could undertake the project work and what work exactly could they do? It could be that one partner from your country is directly involved in a specific project work and other stakeholders are beneficiaries of the results and participate in pilot actions to test the solution.
- e) For each of the thematic areas short-listed, what other African countries should be involved in addition to the necessary European countries and why?
- f) What European organisations has your organisation already engaging with in relation to the thematic areas selected? Please follow up with your colleagues in relation to this prior to the workshop to identify formal and informal relationships that can be leveraged.

13:00	LUNCH: Networking Opportunities
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14:00 **Overview of Horizon 2020 Participation Rules & Instruments**
Lieketseng Tjokotsi, Department of Science and Technology

14:30 **Preparing a Proposal**

Miriam Cunningham, IIMC / IST-Africa

- What is a relevant research and innovation idea for Africa? Putting together an International Consortium with complementary skill, Roles of Partners
- How to co-design a proposal and prepare a budget
- Overview re: Intellectual Property Rights
- How proposals are evaluated

15:00 **Brainstorming in relation to relevant areas of Horizon 2020 and Research Mapping**

16:00 **Wrap-up Session, Questions & Next Steps**

16:30	END OF WORKSHOP
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Background

Horizon 2020 commenced in January 2014 as the new Framework Programme to implement Research and Innovation with funds of €80 billion from 2014 - 2020. Horizon 2020 will address all research and innovation funding that was previously provided through the Framework Programmes for Research and Technical Development (e.g. FP7), Competitiveness and Innovation Programme (CIP) and European Institute of Innovation and Technology. Three main priorities include:

- **Excellence Science** – Research Infrastructures, Marie Curie (Mobility Grants), Future and Emerging Technologies
- **Leadership in Enabling and Industrial Technologies (LEIT)** – Components & Systems, Advanced Computing, Future Internet, Content Technologies and Information Management, Robotics, Micro and Nano-electronics and photonics
- **Societal Challenges** – Health, Food Security & Agriculture, Energy, Transport, Climate action and Environment, Innovation and Reflective Societies and Secure Societies

For more information, please visit

<http://www.ist-africa.org/home/default.asp?page=horizon2020>

<http://ec.europa.eu/research/horizon2020/>

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/>

Additional Support Information

IST-Africa has also prepared a number of reports and guides, which provide assistance:

IST-Africa Horizon 2020 Guide - Download from

http://www.ist-africa.org/home/files/IST-Africa_D3.3_Horizon2020Guide_310116.pdf

IST-Africa Guide to 2017 Calls for proposals within Horizon 2020

http://www.ist-africa.org/home/files/IST-Africa_Guide_2017Calls_Horizon2020.pdf

Overview of ICT-39-2017 Call

http://www.ist-africa.org/home/files/IST-Africa_ICT-39-2017_Overview.pdf

IST-Africa Report on ICT Initiatives and Research Capacity in IST-Africa partner countries

http://www.ist-africa.org/home/files/IST-Africa_ICTInitiatives_ResearchCapacity_v2_310116.pdf

This report provides an overview of the current ICT Initiatives, Research Capacity, mapping of thematic priorities and research capacity in the context of the ICT-39 H2020 Call and updated mapping of research priorities under Horizon 2020 in Angola, Botswana, Burundi, Cameroon, Egypt, Ethiopia, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Senegal, South Africa, Swaziland, Tanzania and Uganda as at January 2016. ISBN No: 978-1-905824-47-2. This is a valuable reference report to assist in identifying partners for inclusion in ICT-39 Proposals.

IST-Africa Project Repository provides insights in previous EU funded projects with participation from IST-Africa partner countries

<http://www.ist-africa.org/home/default.asp?page=project-search>

IST-Africa Organisational Repository provides insights into organisations from Europe and IST-Africa partners who have cooperated in previous EU projects

<http://www.ist-africa.org/home/default.asp?page=org-search>

IST-Africa Paper Repository provides access to research papers published in IST-Africa Conference Proceedings since 2006 including contact details for researchers

<http://www.ist-africa.org/home/default.asp?page=paper-repository>

Focus of Innovation Actions

Innovation actions are considered to be closer to market. They primarily consist of activities directly aiming at adapting and improving **existing technology** to a specific scenario. As a

result the level of effort on research is low, with the main activities focused on adaptation of technology, piloting and validating for market replication.

A 'demonstration or pilot' aims to validate the technical and economic viability of a new or improved technology, product, process, service or solution in an operational (or near to operational) environment, whether industrial or otherwise, involving where appropriate a larger scale prototype or demonstrator.

A 'market replication' aims to support the first application/deployment in the market of an innovation that has already been demonstrated but not yet applied/deployed in the market due to market failures/barriers to uptake. 'Market replication' does not cover multiple applications in the market of an innovation that has already been applied successfully once in the market.

'First' means new at least to the application sector in question. Often such projects involve a validation of technical and economic performance at system level in real life operating conditions provided by the market.

Projects may include limited research and development activities.

Funding level: 100% reimbursement of eligible direct costs plus 25% indirect costs for not-for-profit legal entities (e.g. public university, not-for-profit private university or not-for-profit NGO) or 70% reimbursement of eligible direct costs plus 25% indirect costs for profit-based organisations (e.g. private company, for-profit private university)

Consortia requirement: Minimum of three independent legal entities from three different EU Member States (MS) or Associated countries (AC). Additional information may be defined in the Work Programme

In the context of ICT-39-2017 the consortia must include partners from low and middle income countries in sub-Saharan Africa as well as 3 EU partners. The project focus must have a clearly defined user need/market opportunity for the technology being adapted based on requirements in Sub-Saharan African countries (at national and local level), and where possible, have the potential for wider impact by involving a number of countries from the same region.

Main activity type: Demonstration and market validation (large-scale pilot)

Steps in preparing a proposal

1. Identify a relevant project idea where a pilot can be undertaken in a number of Sub-Saharan African countries for an innovative solution or service
2. Determine the existing technology that can be adapted / improved to deliver this service
3. Determine the skill sets required for partners to develop a successful project
4. Decide which Sub-Saharan African countries this solution or service is most relevant to
5. Engage with relevant European and African partners where an existing relationship exists to determine their interest in co-designing the proposal
6. Download the proposal template for Innovation Actions from http://ec.europa.eu/research/participants/data/ref/h2020/call_ptef/pt/2016-2017/h2020-call-pt-ria-ia-2016-17_en.pdf
7. Agree on project objectives that are clearly aligned with the call focus and with the focus of an Innovation Action
8. Agree work plan structure - Technical Work Packages, Demonstration/Validation Work Package, Dissemination & Exploitation Work Package, Project Management Work Package

9. Depending on the skills and experience of the different partners, work package leaders will be agreed and each work package leader will then start to draft the description of the tasks proposed in each work package and ask for contributions from other partners.

10. Having a general agreement in relation to objectives and work plan structure, it is then possible for some partners, for example, to start work on the Relation to the work programme, and Concept and Approach for Section 1 and other partners to start work on Section 2 related to Impact.

11. The Ambition section needs to provide a clear and succinct overview of the current state-of-the-art with a specific focus on the target countries for the Action and outline how the proposed activities and outputs will go beyond the state-of-the-art.

12. It is important for the consortium to keep checking that the proposal as it is being developed is still answering the focus of the call.

13. There is a fixed number of pages for Section B Part 1 (Section 1 - 3) of **70** pages for an Innovation Action. If the proposal submitted is longer than the number of pages allowed, the extra pages will be marked in red and will not be considered in the evaluation process.

It is necessary that the proposal submitted addresses each point in the proposal template in the correct order to facilitate the evaluators to allocate scores. It is the responsibility for each partner to carefully review the proposal structure and content to ensure that it is relevant to the call and is of high quality.

14. It is important to keep your National Contact point up to date with your progress as they may be able to provide additional support.

Evaluation criteria can be downloaded from

http://ec.europa.eu/research/participants/data/ref/h2020/call_ptef/ef/2016-2017/h2020-call-ef-ria-ia-csa-2016-17_en.pdf