CN+ workshop on Research Infrastructures for EU-Africa Cooperation (26-27 June 2013)

Introduction

Aims of the workshop:

The objective is to build on the work of the joint PAERIP-CAAST-Net¹ conference on Research Infrastructures for Africa-EU Cooperation, which produced a report with recommendations. The full conference report with conclusions and recommendations is available online (<u>http://www.caast-net-plus.org/attach/D3 3_1 c_Accra_conclusions.pdf</u>) and a summary is included below.

These recommendations now need to be examined and taken up where appropriate. The aim should be to advance the discussions and feed into on-going processes and funding possibilities (H2020, CPA, PAP...), with the participation of the policy-makers and "funders" from AU, EU, AU members States, other agencies...

The aim should also be to have such issues among those discussed in the policy dialogue: at the JEG-8 that week and especially at the second meeting of the Africa-EU High Level Policy Dialogue on STI at the end of November 2013.

Approach:

The workshop will consist of three sessions. Session 1 will present the issues. Sessions 2 & 3 will focus on identifying solutions and the way forward. A workshop report will be produced.

Organisers:

Nienke Buisman (DG RTD, D3), Stéphane Hogan (DG RTD, D3 & EU Delegation to AU), Mahama Ouedraogo (HRST, AUC) & Andy Cherry (ACU & CAAST-Net+ project coordinator).

Role of Research Infrastructures in Africa-EU cooperation: conclusions of PAERIP/CAAST-Net conference (3-4 December 2012)².

Introduction:

Two EU-funded projects – **CAAST-Net** (*Network for the Coordination and Advancement of Sub-Saharan Africa-EU Science and Technology Cooperation*) and **PAERIP** (*Promoting African-European Research Infrastructures Partnerships*) – joined forces to organise a stakeholder conference in Accra, Ghana on 3-4 December 2012, to examine how research infrastructures partnerships between Africa and Europe could be enhanced. The conference was attended by over 100 participants from African and European countries, including representatives of governments, research funding organisations, research infrastructure organisations, researchers and civil society.

Research infrastructures (RI) can be centralised or distributed. Examples include bio-banks, radiation sources, clean rooms, observatories, databases, supercomputers, high-speed networks...

Key messages:

"The [conference] conclusions highlight why RI partnerships between Africa and Europe should be concertedly promoted as a priority action in bi-regional cooperation. They also present specific recommendations how bi-regional RI partnerships could be enhanced, ensuring greater impact and mutual benefit for Africa and Europe."

¹ PAERIP is an EU-funded initiative to promote research infrastructure partnerships between Europe and Africa, by undertaking relevant studies to inform the organisation of a policy dialogue and of cooperation promotion events. The project coordinator is the Department of Science & Technology of South Africa.

CAAST-Net is an EU-funded network for the coordination and advancement of bi-regional cooperation in Science and Technology between Europe and Sub-Saharan Africa. The project coordinators are the Association of Commonwealth Universities, UK and MEST, Kenya.

² summarised by S. Hogan from CAAST-Net–PAERIP 2012 conference conclusions report (ref. 3.3.1c).

- Global partnerships are essential for RI as regions and countries cannot do it alone. RI are increasingly complex and costly, while bi-regional cooperation can leverage efficiencies of scale and scope, avoiding duplication of efforts and costs.
- Africa and Europe can benefit significantly for such cooperation and thus it is fully aligned with the objectives of the Joint Africa Europe Strategy (JAES) Partnership 8 on Science, Information Society and Space: building on existing research cooperation partnerships; leveraging mutually beneficial complementary comparative advantages; and building capacity for sustainable development.
- Research infrastructures (RI) should be central to JAES Partnership 8:

- RI are key determinants of competitiveness and development, they can trigger innovation and partnerships with industry; and RI can generate significant "non-science" benefits.

- RI are essential instruments for collaborative research addressing societal challenges and drivers of international cooperation;

- RI encourage multi-disciplinarity; foster excellence; enable researcher training and mobility; and provide ideal platforms for science communication.

- Partnership in this domain should leverage Africa-Europe research cooperation at large and:
 ensure the availability of world class RI to African and European researchers to enable and support their bi-regional cooperation by establishing reciprocal access and RI networking;
 - leverage RI partnerships as instruments of STI capacity building in Africa and Europe.

Recommendations:

Those entrusted with the stewardship of JAES Partnership 8 should promote bi-regional cooperation in research infrastructures, taking into consideration the need to:

- encourage cooperation and coordination of national and regional RI, in particular by raising awareness of each region's RI capacities and needs;

- promote synergies between different funding programmes (national, regional, international) for research, as well as for economic & social development, to leverage better returns on investment;

- foster and exploit the potential contribution of RI to innovation and to innovation systems;

- address human capital needs for RI (eg technical and managerial expertise);
- leverage RI as a tool for human capital development and institutional capacity-building.

Specific recommendations for JAES Partnership 8:

"The conference urged bodies such as the Bureau of the Africa-EU Science, technology and Innovation Policy Dialogue and the Science, Information Society and Space Joint Expert Group (JEG-8) to, as appropriate, undertake and encourage specific actions to promote Africa-EU research infrastructures partnerships in 2013."

Six specific recommendations are made for preparation or development of:

- 1. <u>A roadmap for Africa-Europe RI cooperation</u> (see report for specifications);
- 2. <u>An analysis of available funding instruments</u> to support existing and new bi-regional RI partnerships, including recommendations on how these instruments could best be accessed (see list of possible funding instruments);
- 3. <u>Guidelines for reciprocal access to RI</u> based on best practice;
- 4. <u>A framework document for e-infrastructures</u>, with policy guideline for the advancement of bi-regional cooperation, addressing capacity needs and constraints, best practices and policy.
- 5. <u>A specific event</u> to explore how such partnerships can foster and leverage the innovation potential of RI, eg as early adopters of technology, promoting industry partnerships, stimulating the creation of innovation clusters or creating platforms for technology transfer;
- 6. An Africa-Europe cooperation programme to ensure the availability of <u>human capital for RI</u>, including training and exchange of staff.

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DRAFT programme:

- Wednesday 26 June 12:30 - lunch and registration

- 13h45-14h00: welcome by AUC (Hakim Elwaer, Director HRST) and EC (Elisabeth Lipiatou, Head of Unit, International Cooperation Directorate, DG Research & Innovation).

- 14h00-15h30: **session 1 - introduction** chair: Hakim Elwaer, Director HRST, AUC.

> - PAERIP/CAAST-Net conference report on *Role of RI in Africa-EU coop.* (20') Andy Cherry (AUC, CAAST-Net) & Eric Mwangi (Ministry of Education, Science & Technology, Kenya & PAERIP)

To present the situation concisely while avoiding repetition all the previous discussions, including the HR aspect – technical and management needs, and training function. And also introduce some economic arguments and other "non-science" benefits.

- AU plans for STI (esp. RI). (20') Mahama Ouedraogo, Head of S&T Division, HRST AUC.

- EU priorities (RI in H2020 & ESFRI, etc.) (20') Paul Tuinder – Research Infrastructures unit, DG RTD, European Commission.

- discussion on issues and challenges (30') (prepare list of issues for chair to address, based on PAERIP/CAAST-Net report)

- 15h30-16h00: tea/coffee break

- 16h00-18h00: session 2 – approaches to developing and accessing RIs

chair: Elisabeth Lipiatou, Head of Unit, D3, International Cooperation Directorate, DG RTD, EC.

Insights from Health, Food security, Water, IT and Space research:

- The case of SKA (15') – Daan du Toit, Department Science & Technology, South Africa. Not to present what it will deliver, but rather to discuss the process of promoting it, including the economic arguments and other non-science benefits, how it has been supported so far and what is the outlook and requirements for its full realisation.

- The case of BBMRI (15') – Prof. Kurt Zatloukal, Medical University of Graz. (BBMRI is the Biobanking and Biomolecular Resources Research Infrastructure.)

- Africa Build: Building sustainable capacity for research for Health in Africa (15') – Dr Victor Maojo, Director Biomedical Informatics Group, University of Madrid, Spain.

- examples from "Agricultural research"... (TBC)

- The UbuntuNet Alliance (15') – Dr Iman Maaly, vice-chair of UbuntuNet, CEO of Sudanese Research and Education Network (SudREN) at University of Khartoum.

- The experience of EIROFORUM (15') – Claus Madsen, Senior Counsellor for International Relations at ESO, Member of EIROFORUM.

- Discussion on issues and challenges (30') To examine concretely at how the recommendations of PAERIP could be implemented (building a roadmap for Africa-Europe RI cooperation, guidelines for reciprocal access, strengthening HC for RI).

- 18h00-19h00: networking reception

- Thursday 27 June:

08h30-10h30: **session 3 – Opportunities for promoting Research Infrastructures** chair: Dr. George Owusu Essegbey, Director, Science and Technology Policy Research Institute (STEPRI), Council for Scientific and Industrial Research (CSIR), Ghana.

To examine possible avenues for promoting and developing RI in the Africa–EU context. One aim should be to raise the profile of RI among the other types of infrastructures as instruments of development and thus open the way to these sources of funding. And to explore how this could feed into to the High level Policy Dialogue later this year to obtain commitment from senior officials, as well as leads for a possible PAERIP follow-up.

- AU Working Group on Resources Mobilisation for STI, Daan du Toit, DST, South Africa

- ERAfrica as a possible model for Research Infrastructures - Dr Jean Albergel, IRD, France.

- view from NEPAD - Prof. Aggrey Ambali, Director - Policy Alignment and Programme Development Directorate, NEPAD.

- a South African perspective on the role of research infrastructures in international collaboration, Dr Aldo Stroebel, Executive Director, International Relations & Cooperation, National Research Foundation, South Africa.

- Opportunities in Horizon 2020 - Paul Tuinder, Research Infrastructures unit, DG RTD, EC

- views from UNECA - Mr Kasirim Nwuke, Chief New Technologies & Innovation, UNECA.

- African Development Bank (TBC)...

- final discussion

- conclusions

- 10h30-11h00: tea/coffee

- 11h00 (end)

OTHER USEFUL RESOURCES:

- "Roadmapping of Large Research Infrastructures", OECD report 2008 (www.oecd.org/science/sci-tech/41929340.pdf)

- "Establishing Large International Research Infrastructures: Issues and Options", OECD report 2010 (<u>http://www.oecd.org/sti/sci-tech/47027330.pdf</u>)

- "Opportunities, challenges and Good Practices in international research cooperation between developed and developing countries", OECD report 2011. (<u>www.oecd.org/sti/sci-tech/47737209.pdf</u>).