



## JRC TECHNICAL REPORTS

# Support to the NEPAD African Networks of Centres of Excellence in Water Sciences: Second Year Report

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**Abstract**

Through the Administrative arrangement No 2009-09-31487 NFP CSP between DG JRC and EuropeAid, the DG JRC Unit H01 implemented the project "Support to the New Partnership for Africa's Development (NEPAD) water centres of excellence (CoE)". This document is the Final Report describing the activities carried out and the achievements of this project, started in November 2009 and ended in December 2013.

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## Summary

Through the Administrative arrangement No 2009-09-31487 NFP CSP between DG JRC and EuropeAid, the DG JRC H3 is implementing the project “Support to the New Partnership for Africa's Development (NEPAD) water centres of excellence (CoE)”.

This document is Second Year Report describing the activities carried out and the achievements of the second year of implementation.

The first year of implementation focused on the establishment of the two networks of Centres of Excellence. The nomination of the coordinator of the Western and Southern Africa networks were achieved following the official establishment of the two networks by NEPAD-OST with the technical and scientific assistance of the JRC. This process was smoother for the Southern Africa network and slower for the Western Africa network for reasons that are detailed in the first year report.

Once the networks were established and running, the second year of project implied to the implementation of network activities. This part of the project, even if with some delays mainly due to administrative postponements by the African institutions, started for both networks.

The second year was firstly focused on the establishment of the working relationships between JRC and the Centres of Excellence. This was achieved through two contracts (foreseen by the project) between JRC and the coordinator of the Southern CoE network (the University of Stellenbosch) signed in June 2011, and between the JRC and the coordinator of the Western CoE network (the University of Dakar) signed in November 2011. The activities to be carried out directly by the CoE under the supervision and the responsibility of the JRC are the subject of these two contractual agreements. The implementation of the contract with the Southern network started, under request of the University of Stellenbosch, with some delays in September 2011. The implementation of the Western network contract started on time in November 2011. As defined in the administrative arrangement, although those activities are being carried out by the CoE, the implementation responsibility stays always within the JRC which carries out its continuous technical assistance and scientific support together with the project management and supervision tasks. The establishment of the contracts according to JRC procedures were organised with an initial identification of the activities to be carried out jointly by the CoE and the JRC, coherently with the project documents and as much as possible in line with regional policies related to water resources

management development, capacity building and higher education. Subsequently, the second phase consisted in formulating the terms of reference of the contracts and in establishing the administrative annexes. Finally the contracting procedures were launched in two different instances, one for Southern Africa and one for Western Africa ending with a negotiation phase and with the establishments of the contracts. The final activities of the second year of the implementation were then the starting up of the activities of the contracts with the two Kick off meetings between the JRC and the institutions in charge of the two networks of CoE held in September and in December 2011.

## **1. Background**

Through the Commission Decision No C(2009)2374 of 26 March 2009, the DG EuropeAid of the European Commission has launched the pilot project “Support to the New Partnership for Africa's Development (NEPAD)<sup>1</sup> centres of excellence in water sciences”. This pilot project aims at fostering the capacity development and the ownership of south to south networking and cooperation in water science in the African high education, training, research, advocacy and consultancy communities, in line with the principles of the multi-stakeholder participatory approach fostered by the European Union cooperation policies.

The MONDE Action of the GEM Unit of the Joint Research Centre of the European Commission is implementing this project “Support to the New Partnership for Africa's Development (NEPAD) water centres of excellence” on the European Commission’s behalf through the Administrative arrangement No 2009-09-31487 NFP CSP with EuropeAid.

The JRC Institute for Environment and Sustainability (IES) – Global Environmental Monitoring (GEM) Unit aims at improving the understanding of the interactions between the terrestrial, marine and climate components of the Earth's system, assessing the impact of changes on the long-term sustainability of ecosystem services and highlighting the consequences for EU environment and development policies. The GEM Unit delivers products and services to directly support European policies in the fields of Space, Environment and Sustainability, Climate Change and Development Aid.

This contractual report entitled “Second Year Report” of the “Support to the NEPAD African Network of Centres of Excellence in Water Sciences and Development” describes the activities carried out and the achievement of the second year of implementation.

## **2. Scope of the work**

Transboundary water resources management, integrated water resources management and conflict prevention have been identified by the European Parliament as issues the European commission should address in the water sector in Africa as enablers to socio-economic development. In particular, one of the key limitations to a harmonious development and

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<sup>1</sup> [www.nepad.org](http://www.nepad.org)

management of water resources in Africa is the lack of human and institutional capacity to assimilate the modern advances in science and technology necessary dealing with the complex interactions between the hydrological cycle and the societal needs, while conserving the environment<sup>2</sup>.

At present, research and development in the water resource sector in Africa is highly dependent on developed countries expertise both in terms of knowledge and human resources. African countries can, however, innovate for sustainable development if and when they mobilize and direct their different capacities towards common research and development challenges.

The NEPAD identified through a call for interest already existing organisations sustainably working in higher education, scientific research, consultancy and advocacy in the water sector and recognised their importance for regional cooperation and development with the label of Water Centres of Excellence. The European Commission, through its support, aims also at recognising these Centres of Excellence, currently organized in two networks being represented by two African institutions, as reference for regional development fostering south to south cooperation and hence sustainability of technical support actions.

Therefore, this action aims to support the NEPAD African Centres of Excellence (CoE) in their development of a collaborative approach improving their capacities and strengthening their role in supporting water sector development. This action focuses on higher education, scientific research, consultancy and advocacy in the water sector.

The direct targets of this action are the NEPAD initiative and the institutions members of the network of centres of excellence.

The NEPAD already identified the Centres of Excellence (CoE) of two regions-networks (Southern Africa and Western Africa). In each region-network, the NEPAD also nominated a hub institution as official representative of its respective network. Therefore, the NEPAD Southern African Centres of Excellence network is represented by the University of Stellenbosch (South Africa); and, the NEPAD Western African Centres of Excellence network is represented by the University of Cheick Anta Diop (Senegal).

The target groups include the range of different users/beneficiaries of the network of the CoE who, according to their needs and status (institution, wider public), will have correspondingly different benefits, such as the students as users of the Centres of Excellence but also the

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<sup>2</sup> African Network on Water Sciences and technology: Business Plan. Securing and Sustaining Water: Building an African Network Centres of Excellence in Water Sciences and Development Strategic Plan 2007-2012

continental institutions such as NEPAD and AMCOW, other African institutions such as the RECs, development and cooperation agencies also represented by the EUWI, governments, etc...

In particular, it is important to mention the students of the Centres of excellence. The students are the first and direct beneficiaries of the capacity development and educational activities. Students can be organised in different groups:

- The long term university students that are enrolled to an official course in order to obtain a title such as a bachelor or a masters' degree,
- The short term students that can be practitioners of all kinds and are enrolled to attend seminars, workshops, etc., such as government official, NGO experts, private sector, etc...

This support project aims at working at all the different high education/trainings levels for both kinds of students.

The final beneficiary is the African population who should benefit from the increased capacity at continental level in managing the water resource. The final objective is always to work towards the MDGs for water and sanitation in a sustainable way and this goes always through the implementation of water resource management principles towards sector sustainability.

### **3. Methodology**

#### **3.1. JRC implementing team and organisation**

The Commission's Joint Research Centre's mission is to provide customer driven scientific and technical support for the conception, development implementation and monitoring of European Union policies such as the development cooperation policies. It functions as a reference centre for science and technology for the Union. It serves the common interests of the Member States of the European Union while being independent of special interests. Through its Institute for Environment and Sustainability the JRC implements a series of highly scientific and technical oriented projects in the field of environmental resources



management particularly oriented to the sustainable development of the water sector (for what is relevant to this project) in Latin America and Africa (and not only).

The DG JRC-IES responsible unit for the implementation of this project is the Unit GEM (H03) based in Ispra (Italy). The JRC RALCEA Project Coordinator/team leader is Dr. César CARMONA-MORENO.

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The team leader is supported in the implementation of the project (not continuously) by the Water Team of the GEM Unit. The Water team is composed by the following experts:

- 2 IT experts responsible of the AQUAKNOW Web site development and maintenance and of all the other IT related activities,
- 2 international environmental/water sector experts,
- 1 GIS and satellite imagery expert.

All activities carried out by the experts of the team are under the responsibility of the team leader organising and distributing the tasks.

## **3.2. Main project Actors**

### **3.2.1. Stakeholders organisation**

**The CoE:** they are direct beneficiaries of the activities of the project. They will carry out part of the activities of the project (always under the responsibility of JRC) as described later in the document. The list of the CoEs of the two networks established during the first year of the project is:

#### **NEPAD Southern Africa Members of the Network:**

The coordinator of the **NEPAD Southern Africa Network** is the University of Stellenbosch with its Water Institute. The other members of the Southern Network are:

- The International Center for Water Economics and Governance in Africa (IWEGA), Mozambique

- The University of KwaZulu-Natal, South Africa
- University of the Western Cape, South Africa
- The University of Zambia (UNZA), Zambia
- CSIR's Natural Resources and the Environment (NRE) Unit, South Africa
- University of Malawi, Malawi
- University of Botswana, Botswana

**NEPAD Western African Members of the network:**

The coordinator of the **NEPAD Western Africa Network**, nominated by NEPAD, is the Doctoral School of “Qualité et Usages de l’Eau” of the UCAD University of Senegal with Prof. Alioune Kane as responsible. The other members of the network have already been selected by NEPAD and they are:

- Institut International d'ingénierie de l'eau et de l'environnement (2IE), Burkina Faso
- Le National Water Resource Institute of Kaduna (Nigeria)
- Université Benin City (Nigeria)
- Kwamé NKRUMAH University of Ghana

**The African Governments:** the role of the governments is to insure a direct link between the governments, the CoE and the EC intended both as the JRC and the DG DEVCO. As such they will also be responsible for: facilitating access to the data needed for the studies and pertaining to governmental agencies; exchanging information with centres of excellence, EC institutions (DEVCO, JRC) and others stakeholders; identifying activities to implement; supervising and endorsing the work of the CoE participating to the meetings and workshops to be organised by the two networks. This institutional role of endorsing COE results at continental level is played by the African Minister’s Council on Water (AMCOW). **The AMCOW** (African Minister’s Council on Water) have been identified as an important partner. The participation of the CoE to the 2011 summit of the AMCOW (attached report) has been a good opportunity for strengthening the collaboration. The actual chair of AMCOW is the ministry of Water of South Africa increasing the chances for collaboration and coordination. This activity was identified also during the inception report and given a high priority and in fact is part of the future activities as it will be described later in the document.

**The EC delegations to the CoE countries:** they have been informed and used as dissemination channel for the project official communication. If a particular question arises regarding a particular country, the relevant delegation can be also consulted. In particular each time a meeting/workshop is organised in an African country, the country delegation is informed and asked to participate if useful and relevant.

Since this project deals with research and high education, **DG RTD** was and will still be consulted in order to have coherent research strategies and for possible synergies with FP7 funded project. JRC is well placed to ensure this coordination since it is part of the same “Research Family” of the EC. The exchanges with DG RTD are described in the part of the document concerning the activities.

In general with all the other DGs of the EC which can have an interest in the project, such as for instance DG ENV, DG INFSO, etc., the JRC will be responsible of communicating with them and if relevant JRC will try involving them in relevant activities. The success of this approach will also depend on the availability of the counterparts.

The DG RTD plays also an indirect role of donor through the 7<sup>th</sup> FP for research and development to whom, as one of the activities of this project, some of the CoE already presented joint proposals.

**EU Water Initiative:** the JRC is part of the EUWI secretariat and coordination groups under DG DEVCO, and can collaborate through DEVCO for the re-vitalising of the EUWI in Africa. This particular activity could be supported by the relevant budget of the EC concerning the EUWI implementation usually inscribed in the framework of the ENRTP budget line (Environmental, energy and transport budget line of DG DEVCO) and currently supporting strategy. This issue has to be considered together with DEVCO as it would strengthen the political support, backup and sustainability of the CoE initiative.

### **3.2.2. Other Partners**

The JRC has been approached by international institutions and donors willing to contribute to the NEPAD CoE objectives through complementary activities with concrete funds to support Southern African institutions in particular for sanitation (the Gates foundation already funded

the project though South Africa), and some preliminary discussion were held also with the Swedish government.

As agreed with the CoE, the networks will (if possible) take advantage of the infrastructures of the existing networks in the region to allow an important economy of scale for optimizing resources in particular they are strongly oriented to establish a continuous collaboration with the relevant RECs. Discussions are ongoing already with SADEC. The partnership with existing networks can help leverage funds from other donors toward the CoE institutions.

### **3.3. Communication and functioning of the network**

#### **3.3.1. Communication and coordination protocol with DG DEVCO**

This communication and coordination protocol deals with the distribution of responsibility between DG DEVCO/DG JRC and describes the processes of approval and joint decisions.

DEVCO is responsible of the Direct Centralised Management of the project as described in the project Action Fiche. The contractual arrangements between DEVCO and JRC, entrusted the JRC with the execution and implementation of the NEPAD CoE project, as defined in the Administrative Arrangement.

Besides, the joint decision process followed these rules:

- Events: events such as workshops, trainings, etc. For these events/workshops, trainings, the JRC will present to DEVCO in the relevant reports (annual or final) the relevant documents and proceedings as soon as these are definitive and available.
- Meetings: meetings between JRC and DG DEVCO, if needed, can be planned in advance and will have to be compatible with both services work plan and availabilities.
- Official Reports:
  - o First Annual reports (already introduced and approved): the first annual report was approved at the beginning of 2011.
  - o The second annual reports will be submitted by January 2012. Annual reports will be introduced for approval in January each year.

- According to the Administrative Arrangement, the final report will be submitted by JRC within a three month period after the end of the project. The final report will include at least the summary of results, achieved objectives, and of the final situation of the project. The final report will also suggest the means to achieve the future sustainability of the project. DG JRC will present the "draft final report" in the final meeting will be held at the end of the project in Brussels (save exceptions stipulated in AA).
- Exchange of information: the JRC team implementing the project will maintain an informal communication exchange with DEVCO project responsible. When needed and/or estimated as necessary by DEVCO and/or JRC, if time is available, informal meetings will happen in Brussels in the framework of JRC expert missions.

### **3.3.2. Communication and coordination protocol with the CoE members**

In general, the communication is managed in order to keep the stakeholders of the project updated for the projects progresses and main events.

The communications regards:

- 1- the general progresses and events of the project
- 2- the work carried out by the same centres within the axes of work (as described in the activities chapter below in the document).

Concerning the general progresses and events the JRC aims at communicating all the relevant information in advance. This allows the partners to comment and participate actively to the development of the general activities of the project.

Concerning the work carried out by the COE, the evolution of it can be followed in the relevant AquaKnow groups. The AquaKnow working groups include representatives from all COE plus other relevant partners. Participation to AquaKnow working groups is promoted in order to increase the impact and the dissemination of the results of the project.

The aim of this communication protocol is to limit bilateral emails and communication which represent information not available to all the other recipients. Information and communications should be promptly available to all the people working on it.

As the Coordinators of the two networks are also responsible of the AquaKnow internet groups they will be requested to manage the information accordingly.

### **3.3.3. External Communication and coordination protocol**

Concerning the official communication channel, the main recipients are:

- African governments and institutions
- EC Delegations
- Other relevant EC services such as DG RTD, DG ENV, etc.

Recipients will be kept updated for the projects progresses and main events.

In general the JRC will maintain the contacts with the EC delegation (when needed) and other EC services (when needed), etc. with regards to the execution of the project and scientific and technical matters.

JRC included the project communication and dissemination in its communication strategy. The direct recipients of this communication strategy are the stakeholders of the sector in Africa and in Europe.

This will include the following channels (limited to resources availability): AquaKnow platform, environmental and water related scientific conferences, international sector development events (such as the World Water Week in Stockholm each year in August), international summits relevant to Water Management issues in Developing Countries, other international meetings etc. When possible dissemination material such as brochures, printouts, USB keys, etc. will be produced.

### **3.4. Working tool: AquaKnow**

It is worth to give a brief presentation of the AquaKnow platform, as it is the main communication and knowledge management tool used to organise the distance work and to store the information.

AquaKnow is a collaborative work space and content management system dedicated to technical and scientific knowledge for the sustainable development of the water sector.

Knowledge management and capacity building are key elements towards the design and implementation of sustainable water management policies. AquaKnow is a dynamic platform aiming at sharing knowledge on water sector related issues by gathering scientific and technical information and providing dynamic tools to manage it. These tools are a powerful means to share documents, data, information, ideas, experiences, and to find help and work with other stakeholders involved in the water sector. The AquaKnow platform is oriented to experts and practitioners of the institutions involved in the water sector such as governmental and nongovernmental organisations, Universities and research centres, international organisations, private sector, water utilities, basin agencies, etc.

As in other interactive WEB platforms, users are central, becoming the providers of information and sharing it online through a user friendly interface. AquaKnow is organised around two axes:

- Knowledge Management, organising information through thematic indexes and within the following sections: News, events and library storing in various formats documents or links; the capacity building section providing users with an inventory of trainings, workshops, seminars and methodological tools; the tools and data section, with databases and supporting tools for the water sector. These indexes are users' fed and thus directly updated by members
- Building a community with interactive and user friendly tools allowing to develop distance work and networking users through improving exchanges. The working Groups section is a specific space available in order to develop collaborative work.

This particular feature is one of the most used in the framework of the project as it supports the three working groups created around the three working axes.

### **3.5. Project management**

Concerning the administration management and procurement, the JRC follows the official procedures and procurement rules. The activities to be developed by the network are based on

established terms of reference and will be coherent with the project document and the Commission decision. The JRC has the direct contractual control on the activities being responsible of the procurement.

The activities will be organised in deliverables and will have a calendar established in the framework of the relevant terms of reference (presented later in the document).

The role of JRC as implementing organisation consists in managing all aspects of the project and reporting to DEVCO as defined in the methodology chapter and in particular, procurement, management of the human resources, partnerships, reporting, visibility, etc...

All these activities have the objective of successfully implementing the Administrative Arrangement between JRC and DEVCO. In parallel, the JRC encourages the improvement of the CoE in acting as centres of reference in the water sector at regional level either toward advocacy and consultancy also with the seminar held in February 2011 in Stellenbosch (SA) that saw the participation of 24 representatives of COE, AMCOW, and NEPAD among other institutions. It is clear that the level of development of capacity in general and in particular concerning the water sector is different in the two mentioned African regions. The JRC will have to adapt its approach in a case by case basis.

JRC, with its technical and scientific knowledge of the sector, is responsible of dealing with the definition of all terms of reference for each of the activity to be carried out within the networks. In this sense JRC is also responsible of the coordination of those activities within the EC and with other similar initiatives funded by other donors. JRC remains responsible of the quality of the products and deliverables of the project. As main engagement, the focus is on supporting the project implementation with its experience in managing scientific and technical networks towards supporting the policy making. Therefore the JRC is also responsible of supervising the activities carried out in the framework of those contracts with the objective of supporting the CoE in improving their performances and meeting projects requirements.

### **3.5.1. Activity monitoring and impact on policy making by JRC**



The JRC has the task of monitoring the correct execution and the quality of results based on the ToR and on the Administrative Arrangement. In order to monitor the correct execution, to increase chance of success, reduce risks and delays, the JRC is providing the technical and scientific assistance needed for the implementation of the relevant tasks and deliverables and it is technically, administratively, financially and scientifically supporting the work.

In order to foster the impact on the policy making level the institutions representing the regional and continental level will participate to the workshops of the CoE with the responsibilities of supervising, validating and endorsing their work and results. The participation of governmental institutions to the activities will be monitored, supported at financial and technical level and fostered by the JRC.

### **3.5.2. Implementation methodology of CoE activities**

In order to meet the main projects goals, i.e. regional networking, linking research and policy, etc. the methodology chosen for the implementation of the activities is the following:

- Different activities will be distributed to different CoE, every CoE will at least carry out one activity. The CoE will however have to collaborate on the different tasks, to ensure that a real cooperation between the different consortium members is promoted and eventually established.
- For activities that will imply work in more than one CoE countries, there will be a coordinator and each CoE will perform (in principle and if possible) the activity for its country. This will include surveys and other types of fieldwork.
- The Coordinators (Stellenbosch University and Dakar University) will remain the coordinator of the overall activities.
- The detailed definition of each activities (together with a detailed calendar), in line with what is defined in the contract, will be proposed by each CoE responsible of the activity and validated by all the CoE during a validation workshop. The detail will then be submitted to JRC for approval.
- As mentioned, a JRC Consortium kick-off workshop will take place. The main objective of the workshop will be to ensure that all consortium members know which tasks they are responsible for, and what deliverables are expected as part of the EC JRC project. Further discussions will also centre on how the deliverables of the EC

JRC project, would feed into the networks activities and also the NEPAD CoE initiative.

- Before starting each activities the CoE will ask the approval by the JRC of the detailed definition of each activities, this in order to make more efficient the whole work and reduce the risks.
- In order to reduce risks and possible further delay in the implementation a tentative calendar of all the meetings will be produced and sent to all CoE and partners (including partner governments). The calendar will be included in AquaKnow.

## **4. Activities**

As foreseen in the Administrative Arrangement and in the first year report, this project aims at improving south to south cooperation and capacity development through the NEPAD Centres of excellence (CoE). Therefore, following the establishment of the Network of Centres of Excellence and the nomination of the coordinators, the CoE were directly involved in the implementation of the activities with specific support from the JRC and always under the direct centralised responsibility of JRC and its project management.

### **4.1. Scientific and technical assistance and technical network coordination**

The group of activities carried out by the JRC during this second year of the project concerned the scientific and technical assistance aiming at supporting the establishment and the development of the network

The beneficiaries of all the actions remain always the Western and Southern NEPAD Centres of excellence (CoE) in agreement with the Administrative Arrangement.

During the second year of implementation, as in the first year, the JRC ensured the correct development of the activities of the project through a continuous scientific and technical assistance to the two institutions leaders of the two networks of CoE (the southern and the western hubs) and to the other institutions members of the networks, 5 in Western Africa and 7 in Southern Africa. In particular, the JRC technical assistance and network coordination

focused in supporting the Network for their establishment as exposed in the following section.

The JRC advocacy to the network was oriented to the definition of policy on research and high education taking into account water sector development, improving the multi-stakeholder approach in the water sector, use of sustainable IT in water resources management and improving dialogue between research, Academia and development partners (also including donors and governmental actors). The JRC supported also the development of international partnerships with EU and African institutions, initiatives and other donors. In the following paragraphs the activities are presented in detail.

## **4.2. The definition of the network activities**

With reference to the activities to be carried out by the COE networks, the JRC oriented the priorities of the COE networks based on the project fiche of the Commission Decision (Cris decision ref.nr. 2008 / 020-465). The project fiche included the following activities:

- 1.- Supporting the regional networks of Centres of Excellence in the water sector
- 2.- Implementing the second phase of the Joint Learning Programme (JLP - Train4dev) on SWAp through the regional networks of Centres of Excellence in the water sector
- 3.- Guidelines and policy dissemination at continental, regional and national level
- 4.- Knowledge management and development at regional level in the water sector

The project fiche also contained a general description and indication for the activities to be carried out. These activities were taken and detailed by the JRC and introduced in the terms of reference of the working contracts establish with the Southern and with the Western Networks. In particular after negotiations with the COE the activities included in the points 1 and 2 of the project fiche of the European Commission (page 6 and 7) were clustered in the task 1 of the JRC-COE contract (ToR of the contract annexed) called: “Implement the second phase of the Joint Learning Programme on the Sector Wide Approach in the Water Sector”. This activity includes in fact all the sub-points detailed in the first two clusters of the activities defined in the European Commission project fiche such as the: i. Carrying out studies at regional level assessing training needs in the water sector; ii. Re-orient and improve higher education curricula, research, training, advocacy and consultancy capacities in order to match sector needs; etc.

Concerning the activities included in the points 3 and 4 of the project fiche of the European Commission (page 7 and 8), they were clustered in the Task 2 (KM 2) of the JRC-COE contract called “Improve knowledge management and development at regional level in the water sector”.

Concluding, with respect to the project fiche of the Commission Decision (Cris decision ref.nr. 2008 / 020-465), all the activities mentioned were included and detailed in the two implementation contracts that the JRC establish at the end of 2011 with the Southern and with the Western networks of Centres of Excellence.

The JRC is closely monitoring and supervising the ongoing activities for which the first deliverable (studies on regional needs as per contract) are expected to be submitted at the beginning of March 2012.

### **4.3. Establishment of the working relationships with the Networks**

Following the process of establishing the networks and their coordinators after some delays due to political reasons explained in the first year report, the JRC focused on the establishment of the working relationships with the Networks. The main task of the JRC in this sense was to establish two contracts with the two Networks for carrying out directly part of the activities as foreseen in the project and in the budget.

The JRC started during the first year of the project the detailed definition of the Terms of Reference for the contracts. The JRC worked in order to establish and define in details the two technical annex to the contracts in annex to this document. These, as explained in the first year report, were prepared consulting the partners identified in the methodology paragraph. The procedures for establishing the contracts started in February 2011.

The two contracts foreseen are now in place with the contract between JRC and the coordinator of the Southern CoE network (the University of Stellenbosch) that was signed in June 2011, and between the JRC and the coordinator of the Western CoE network (the University of Dakar) that was signed in November 2011. The activities to be carried out directly by the CoE under the supervision and the responsibility of the JRC are the subject of these two contractual agreements. The implementation of the contract with the Southern network started, under request of the University of Stellenbosch, with some delay in

September. The implementation of the Western network contract started on time in November 2011. As defined in the administrative arrangement, although those activities are being carried out by the CoE directly, the implementation responsibility is within the JRC which carries out its continuous technical assistance and scientific support together with the project management and supervision tasks. Therefore the establishment of the contracts under the JRC procedures were organised with an initial identification of the activities to be carried out by the CoE, coherently with the project documents and as much as possible in line with regional policies related to water resources management development, capacity building and higher education. Subsequently the second phase consisted in formulating the terms of reference of the contracts and in establishing the administrative annexes. Finally the contracting procedures were launched in two different instances, one for Southern Africa and one for Western Africa ending with a negotiation phase and the establishments of the contracts. The final activities of the second year of the implementation were then the starting up of the contract with the two Kick off meeting between the JRC and the responsible of the two hubs of the CoE, the results of this KO meeting are also attached to this report. As defined in the first year report, given the different capacities, the different timing and the difference of costs and objectives of the two regions, the contracts were adapted to the two situations consisting in a lower budget available for the contract of the Western Africa network as showed in the next paragraphs.

Concerning the activities to be implemented, as detailed in annexes, these have been adapted and grouped into two major sections as shown below:

**Task 1 (JLP 1): Implement the second phase of the Joint Learning Programme on the Sector Wide Approach in the Water Sector**

The activities will aim to promote a better integration of the academic actors in Sector Wide Approach (SWAP), which is the process of sector development through participation and contribution of all relevant actors.

The series of seminars will include also:

- Awareness raising and skills development on Sector Wide Approach and development to be defined in phase 1;
- Workshops/seminars as well as a coaching perspective, to cater to the much expressed need for follow-up support;

Concretely, a series of trainings and seminars will be designed and carried out for the sector in countries members of the NEPAD Southern African Centres of Excellence.

The seminars and the training will be designed and organised from the logistic and content point of view. Seminars and training materials, deliveries, follow-up, proceedings, presentations and all the possible relevant interesting information will be up-loaded to the AQUAKNOW web based system managed and developed by the JRC in collaboration with EuropeAid.

The seminars and the training will be also the opportunity to treat (and disseminate) information on water resources management sustainability, improving impact of research in the water sector, improving the participation of academia/research and high education to the water sector towards aid effectiveness and economic development.

**Task 2 (KM 2):** Improve knowledge management and development at regional level in the water sector

As defined in the EC project the CoE have to regularly update the AquaKnow (the AQUAKNOW updating frequency and responsibilities will be defined together with the CoE during the Kick-off meeting) and orient its development in order to address beneficiaries needs also for operational water resources management tools.

Based on the AquaKnow system but also through the existing CoE courses and seminars, the CoE will produce information, dissemination and educational material. Although Task 1 consists in up-loading the reports material from seminars, Task 2 consists in producing educational material (online courses) coming from Task 1 seminars , but also for existing CoE courses and products of the AQUAKNOW (i.e. the Water Tool Kit).

These activities will be done in close collaboration with the Joint Research Centre IES-GEM, currently responsible for the implementation and development of the AQUAKNOW system on European Commission's behalf.

In the next paragraphs the activities, as established in the contracts, are listed.

### **4.3.1. Activities of the Southern Africa Members of the Network**

The coordinator of the **NEPAD Southern Africa Network** is the University of Stellenbosch with its Water Institute. The University of Stellenbosch Water Institute focuses on developing water research, the other members of the Southern Network are:

- The International Center for Water Economics and Governance in Africa (IWEGA), Mozambique
- The University of KwaZulu-Natal, South Africa
- University of the Western Cape, South Africa
- The University of Zambia (UNZA), Zambia
- CSIR's Natural Resources and the Environment (NRE) Unit, South Africa
- University of Malawi, Malawi
- University of Botswana, Botswana

In the activity presentations paragraphs later in the document, the activities are discussed in details while in the paragraphs below a short overview is given. The work and deliverables attended and of the CoE that are going to carry out the work we present the list below:

<b>TASK 1 JOINT LEARNING PROGRAM</b>		
<b>Phase 1</b>	<b>Event Type</b>	<b>LEAD TECH or HUB</b>
Kick Off Meeting	Meeting	
JLP.1.1: Survey on the requirements in Higher Education and within the trainings for practitioners in the water sector - <b>survey</b> (and report)	Country Survey	STELLENBOSCH UNIVERSITY (US) South Africa
JLP.1.2: Study on how the Centres of Excellence could better address sector expertise for consultancy and advocacy needs for the water sector development in the region - <b>study</b> (and report)	Assessment-Region	STELLENBOSCH UNIVERSITY (SU) South Africa
JLP.1.3: activities <b>preparation</b> of mechanisms for dialogue, <b>awareness raising</b> and <b>coaching</b> elements	Two Processes - definition	UNIVERSITY OF THE WESTERN CAPE (UWC) South Africa
JLP.1.4: activity <b>planning seminar</b> (seminar, report, proceedings and participants feedback)	Consultative Seminar-define next steps	UNIVERSITY OF BOTSWANA (UB) Botswana
JLP.1.5: activity <b>final design</b> of the seminars and trainings (report, training material)	Outcome from 1-4 above to define what/how - next.	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR) South Africa
<b>Phase 2</b>		
JLP.1.6: Activity a) <b>Organizing</b> and b) <b>Implementing</b> (training/seminars, organization & implementation report)	Training Seminars [up to 5 countries]	ALL
JLP.1.7: Activity ( <b>proceedings</b> and feedback material from the trainings/seminars)	Proceedings	STELLENBOSCH UNIVERSITY (SU) South Africa
JLP.1.8: Activity Regular <b>Reports</b> to AMCOW (TAC) and SADC.	Reporting	STELLENBOSCH UNIVERSITY (SU) South Africa



<b>TASK 2 KNOWLEDGE MANAGEMENT</b>		
KM 2.1 <b>Analysis</b> of AquaKnow users and policy makers	Survey Analysis /	INTERNATIONAL CENTRE FOR WATER ECONOMICS AND GOVERNANCE IN AFRICA (Mozambique)
KM 2.2 Activity Actions and channels for <b>dissemination</b> and dissemination material with report	Assessment-Region	UNIVERSITY OF ZAMBIA (UZM)  Zambia
KM 2.3 Activity Produce <b>Educational material, linked with AQUAKNOW platform and development of courses</b>	EDU Materials	UNIVERSITY OF KWA-ZULU NATAL (UKZN)  South Africa
KM 2.4 Activity <b>International Workshop</b>	Intl Workshop	UNIVERSITY OF MALAWI (MW)  Malawi
KM 2.5 Activity <b>E-conference</b> and the Proceedings of the E-Conference	E-Conference	STELLENBOSCH UNIVERSITY (SU)  South Africa
Contractual Reports	Contractual Reports	STELLENBOSCH UNIVERSITY (SU)  South Africa
FINAL REPORT	Contractual Report	ALL / STELLENBOSCH UNIVERSITY

### **4.3.2. Activities of the Western African Members of the network**

The coordinator of the Western Africa Network, nominated by NEPAD, is the Doctoral School of “Qualité et Usages de l’Eau” of the UCAD University of Senegal with Prof. Alioune Kane as responsible.

The other members of the network have already been selected by NEPAD and they are:

- Institut International d'ingénierie de l'eau et de l'environnement (2IE), Burkina Faso
- Le National Water Resource Institute of Kaduna (Nigeria)
- Université Benin City (Nigeria)
- Kwamé NKRUMAH University of Ghana

Work and deliverables attended and of the CoE that are going to carry out the work we present the list below (for a more detailed definition see the Activity part):

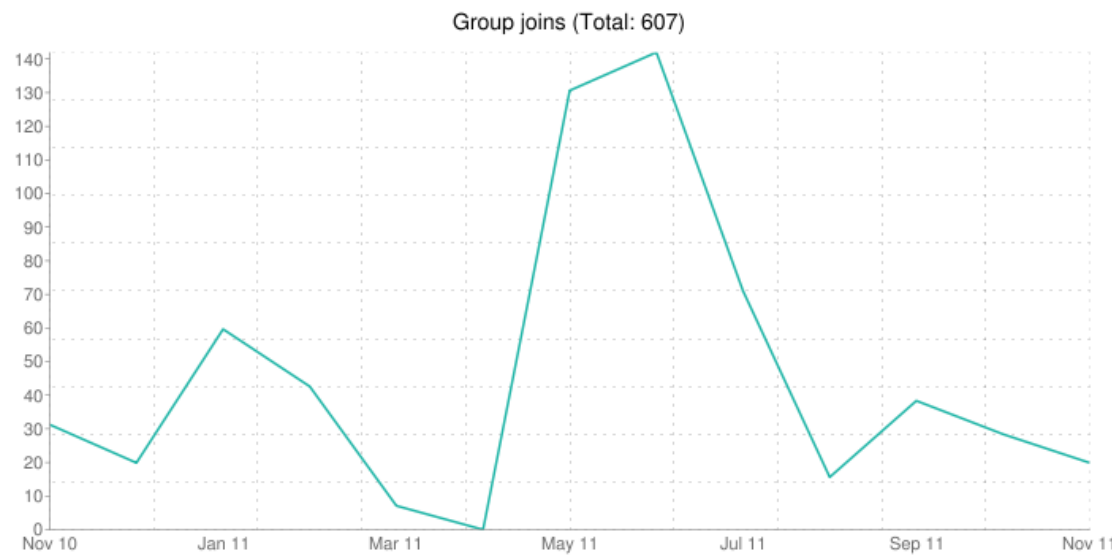
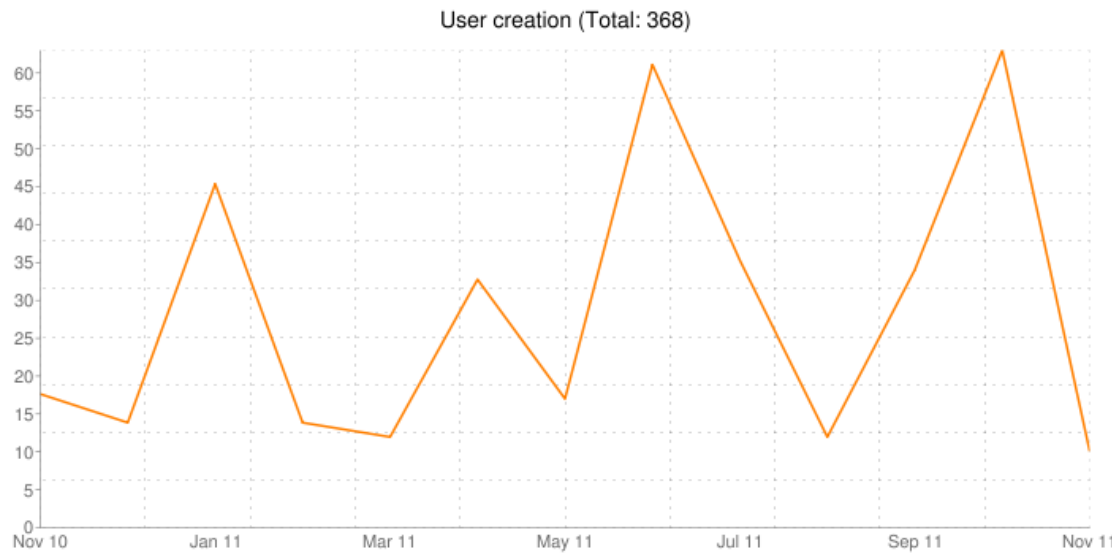
<b>TASK 1 JOINT LEARNING PROGRAM</b>	<b>LEAD COE</b>
Kick Off Meeting	UCAD
JLP.1.1: <b>survey</b>	UCAD
JLP.1.2: <b>study</b>	NWRI/UB
JLP.1.3: mechanisms for dialogue	2IE
JLP.1.4: <b>planning</b>	KNUST
JLP.1.5: <b>final design</b> of the seminars and trainings (report, training material)	UCAD
JLP.1.6: a) <b>Organizing</b> and b) <b>Implementing</b> training/seminars	ALL
JLP.1.7: <b>proceedings</b> and feedback from the trainings/seminar	UCAD
JLP.1.8: <b>Reports</b> to AMCOW and ECOWAS	ALL
<b>TASK 2 KNOWLEDGE MANAGEMENT</b>	
KM 2.1 <b>Analysis</b> of AquaKnow users and policy makers	KNUST
KM 2.2. Information and <b>dissemination</b> materials	2IE
KM 2.3 Generating <b>materials</b>	NWRI/UB
KM 2.4 <b>International Workshop</b>	UCAD
FINAL REPORT	ALL

#### **4.4. Knowledge management**

Concerning the support to the CoE in the framework of the knowledge management, the JRC focused on customising the WEB platform AquaKnow ([www.aquaknow.net](http://www.aquaknow.net)) to the needs and requirements of the CoE working groups. This concerns the content and the layout of the platform. A new version of the platform, in collaboration with the same EC project developing AquaKnow and answering to CoE needs was published in May 2011. The statistics for the AquaKnow site shows that the platform is being visited from many places in the world (175 countries) and the number of users increases every year. The total number of members registered at the site is around 700. Concerning the case of Sub-Saharan Africa, the

actual number of registered active members is around 200 (doubled in 2011). This high increasing rate is motivated by the fact that the platform is still young and that last year the activities of the 2 sub-networks of COE officially started.

During 2011 more than 368 users have been registered and joined different working groups, see the graphs below. It can be also observed that during meetings the number of users increases dramatically.





For an appropriate Reading of the statistics, Italy should be taken out since it is the headquarters of the JRC and host the AQUAKNOW servers.

#### **4.5. Linking with international partnership development**

Concerning the JRC support to the international partnership development with EU institutions, international initiatives and other donors, this has been quite successful with the new involvement of other possible donors into the NEPAD initiative.

The Gates foundation, the biggest foundation in the World for development cooperation, decided to fund the project through the Water Research Commission in South Africa, they oriented their support to activities aimed at developing research in the field of Sanitation. Activities are complementary to the EC project and are oriented toward the same direction of strengthening the network and linking research and policy making.

Other donors were interested, described in the first year report, but because of the financial crisis their funds are delayed.

It is important to underline that the Government of South African already supported the initiative with 3.000.000 South African Rands showing the ownership aspects of such an

initiative and decided to add up other 1.000.000 Rands funding the coordination of the network and giving a boost to the financial sustainability of the initiative.

One of the most important JRC achievements was the participation of the CoE (Western and Southern) to the official AMCOW Technical Advisory Committee (African Ministry Council on Water) and in the same event to the African Working Group of the EUWI in 2010 AND in Cape town (South Africa) with the participation of several African Ministers for Water Resources. The responsible of AMCOW-TAC and the Secretary General of AMCOW stated the importance of the support of the NEPAD COE network to the definition of African policies at international level in Water and Sanitation and in Water resources Management and worked together with the representatives of the CoE to define possible future collaborations (in annexe 5 the minutes of this meeting). The AMCOW-TAC re-affirmed the importance of the scientific and technical role to be played by the NEPAD African Centres of Excellence during the meeting of the EUWI African Working Group at the World Water Week 2010 in Stockholm.

This collaboration concretised with the participation of AMCOW to the CoE February workshop planned in Stellenbosch (as mentioned in the previous paragraph) with the aim of improving cooperation defining needs and activities.

#### **4.6. Participation to international research consortia**

As it happened in the first year of the project, the JRC involved the CoE in an international consortium of European and Latin American institutions submitting a 2M Euros proposal (200K Euros for the CoE) for an international research project to be funded by the EU FP7 (7<sup>th</sup> Framework Program for research and Development), the result of the selection will be given in July 2012. The project, called “SWITCH to Cities”, involved the development of new multi-stakeholder water resources management centred approach in developing countries. This activity gave visibility to the initiative and increased international contacts of the centres, it improved their experience in working between them and with other well known research institutions in the sector.

In order to increase visibility and partnership of the CoE the JRC planned for 2012 new initiatives for the dissemination such as the participation to the World Water Day in Marseille and the World Water Week in Stockholm.

## 4.7. Summary of the progress with the project indicators

This is a brief summary of the indicators included in the EC project document. Usually they are presented at the end of the project but under request of DG DEVCO, we give here just indicatively some additional information.

Name of the Indicator	Work Carried out
- N. of studies on regional needs in high education and practitioners trainings carried out	The studies on higher education and regional needs are the first activity to be carried out by the COE included in the JRC-COE Contract. This first activity by the COE is supposed to be concluded at the beginning of March 2012 with the submission of the first deliverable
- The number of courses given are adapted to needs identified following the studies	These courses are identified through the higher education and regional needs study above mentioned
- Number of contracts and missions made by the Centres for consultancy and advocacy	After the establishment of the networks the first contacts done for policy makers support were with AMCOW in November 2011 (in attachment the brief report). The COE of Southern Africa established various contacts with other donors through the network, in particular with the Gates foundation that funded them for research on sanitation.
- Number of studies on regional needs in research and research coordination in the water sector at regional level	Research coordination started already with the submission of a series of proposals to international donors such as the AU and the EU Framework Program, UK, etc. (see the list of project submitted below). Concerning the needs assessment, this will be part of the second deliverable of the COE-JRC contract.
- Participation of the Centres to national and regional forum with development partners	Through the JRC the COE became an external members of the EUWI Working group in Africa and started participating to annual AMCOW meetings (see also the list of meetings and workshops below)
- The numbers of applicants to the call for interest is launched the region with	This activity will be launched in some months (see calendars attached)

similar modalities as the JLP	
- Number of seminar in the sector per the country supported by Centres expertise	This activity will be launched in some months (see calendars attached)
- Quantity and quality of monthly updates of the EC guidelines "towards a sustainable water resources management"	A new version of the EC guidelines ( <a href="http://www.aquaknow.net/en/watertoolkit">http://www.aquaknow.net/en/watertoolkit</a> ) will be published in March 2012 and presented at the World Water Forum with the participation of the COE. This new version coordinated by the JRC (as main editor), saw the contributions of the COE as advisers and for their feedback.
- Number on-line Trainings based on sector needs designed and developed	This activity will be launched in some months (see calendars attached as part of the kick off report)
- Number of kinds of trainings developed oriented to different stakeholders	This activity will be launched in some months (see calendars attached as part of the kick off report)
- Frequentation of the AquaKnow (WKMP) on line platform for collaborative exchange	The number of members of the AquaKnow platform from sub-Saharan Africa doubled in 2011 (as detailed in the report)
- A trilateral seminar for exchange of water resources management experiences and best practices is organized with European and Chinese Centres of Excellence.	This activity will be held in September 2012
- Number of activities in the framework of the AquaKnow (WKMP) lead by the Centres of Excellence (seminars, meetings, e-conference, etc...).	two on line Working groups, one for western and one for southern Africa, started in the AquaKnow platform with all the representatives of the COE participating
- Quantity and quality of the training material related to the AquaKnow (WKMP)	This activity will be launched in some months (see calendars attached as part of the kick off report)

published and disseminated	
- Number of activities through the hub in the region (seminars and meetings, also at distance) organized for information exchange between the countries	see the list below

Here below a list of workshops and main meetings held, some of them not directly organised by the COE or for the project but relevant to it.

<b>Date</b>	<b>Name of the Workshop</b>	<b>Participants</b>
April 2010, Durban	- NEPAD Steering Committee meeting	COE, JRC, NEPAD
July 2010, Cape Town	- NEPAD Centres of Excellence - EUWI-AMCOW Coordination Meetings	NEPAD, AMCOW, JRC, COE, AU
November 2010, DAKAR	- ATELIER D'ELABORATION DU PLAN D'ACTION DE COE DU NEPAD	COE, JRC, NEPAD
February 2011, Cape Town	- Training on the Joint Learning Program, SWAP and sector development (24 participants, as in the annexed list of participants)	COE, JRC, NEPAD, SPLASH Project, UK DfID
November 2011, Ispra	- KO meeting of the COE-JRC Contract Southern Africa	COE, JRC
December 2011, Ouagadougou, Burkina	CREPA workshop, Enhancing knowledge in WASH sector in Africa	COE, many international research and cooperation agencies, African Universities, African governments
December 2011, Ispra	- KO meeting of the COE-JRC	COE, JRC



	Contract Western Africa	
February 2012, Dakar	- validating the first deliverable of the COE -JRC contract Western	COE
February 2012, Stellenbosch	- validating the first deliverable of the COE -JRC contract Southern	COE

As research and research coordination in the water sector at regional level to increase the impact of the Networks in regional development is one of the most expected indirect outcomes of the project, we present here a detailed list of the proposals jointly submitted by the COE networks with the technical support of JRC.

<b>Research Proposals submitted by the networks with the support of the JRC</b>	<b>Participants</b>	<b>Recipient</b>	<b>Status</b>
Water Ecosystem Services for Poverty Reduction	COE Western Africa, JRC, University of Liverpool, University of Cardiff, University of Winchester, UNDP, Saxion University, University of Buenos Aires	UK, Environmental and Research Departments, NERC	Approved but not funded because of limited resources
ACT4SSAWS: Using IWRM best practices to benefit Sub-Saharan Africa Water Security	COE Southern Africa, JRC as supporter associated following the official procedure of the call (letter of support)	African Union	Accepted
Improving research in microfiltration applied to water reuse	COE Southern Africa, JRC as supporter	Bill Gates Foundation, water Resource Commission	Accepted
Southern Africa Research Area in Water Science	COE Southern Africa, JRC as supporter	South Africa Department of Research	Accepted

## 5. Budget

The activities are implemented by the JRC, in part through the networks of CoE with a contractual agreement between the coordinator of each network and the JRC. The JRC is responsible for scientific and technical assistance to the network and for the overall project management. The JRC remains in any case the sole responsible of the implementation of the project.

The tentative distribution of the budget remains as in the first year report the following:

Item	Sub-activity	Total Activity
<b>Staff costs JRC &amp; marginal overheads costs</b>		<b>294,200.00</b>
<b>Web Designer &amp; Developer</b>		<b>26,600.00</b>
<b>Contract for Thematic coordination within both Networks for implementation of individual and joint network activities</b>		<b>207,200.00</b>
- Thematic support to joint activities	<b>100,000.00</b>	
- Thematic support to network coordinators	<b>107,200.00</b>	
<b>Contracts for 2 ACE Water Networks (1 Southern Africa + 1 Western Africa)</b>		<b>922,000.00</b>
- Activities implemented by the SA coordinators of the network	<b>500,000.00</b>	
Workshop and meeting with the Southern African region Network of African Centres of Excellence for Water and SPLASH, Stellenbosch 14-18/02/2011	50,000.00	
Service contract with the University of Stellenbosch as coordinator of the Southern African Network	450,000.00	
- Activities implemented by the WA coordinators of the network	<b>300,000.00</b>	
- Trainings of trainers, Workshops and Meetings for both networks	<b>122,000.00</b>	
<b>Evaluation &amp; Audit</b>		<b>50,000.00</b>

Grand Total 1,500,000.0

## **6. ANNEXES**

- Technical and Administrative annexes of the contract JRC - Southern African Network
- Technical and Administrative annexes of the contract JRC - Western African Network
- KO meetings report and detailed planning for the COE contracts
- Minutes of the meeting between the COE and AMCOW
- Final report and List of participants of the workshop for skills development (SWAP and Research Management) held in February 2011 in Stellenbosch

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## JRC Mission

As the Commission's in-house science service, the Joint Research Centre's mission is to provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle.

Working in close cooperation with policy Directorates-General, the JRC addresses key societal challenges while stimulating innovation through developing new methods, tools and standards, and sharing its know-how with the Member States, the scientific community and international partners.

*Serving society*  
*Stimulating innovation*  
*Supporting legislation*

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