

AFRICAN DEVELOPMENT BANK



Multinational – Africa:

**Programme for Infrastructure Development
in Africa
PIDA
(Transboundary Water Resources Study)**

Appraisal Report

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November 2009

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List of Acronyms

AAP	AU/NEPAD African Action Plan
ADB/AfDB	African Development Bank
AICD	African Infrastructure Country Diagnostic Study
AMCOW	African Ministers' Council on Water
ANBO	African Network of Basin Organisations
AU	African Union
AUC	African Union Commission
CAEC	Central African Economic Community
CEMAC	Economic and Monetary Community of Central Africa
CEN-SAD	Community of the Sahel-Saharan States
COMESA	Common Market for Eastern and Southern Africa
DfID	Department for International Development
EAC	East African Community
ECA	Economic Commission for Africa
ECOWAS	Economic Community for West African States
FAO	Food and Agriculture Organisation
ICA	Infrastructure Consortium for Africa
ICT	Information and Communication Technologies
IGAD	Intergovernmental Authority for Development
IsBD	Islamic Development Bank
LBO	Lake Basin Organisation
MDGs	Millennium Development Goals
MLTSF	Medium to Long-Term Strategic Framework
NEPAD	New Partnership for African Development
PPP	Public Private Partnership
REC	Regional Economic Community
RBO	River Basin Organisation
R/LBO	River/Lake Basin Organisation
SADC	Southern African Development Community
SC	Steering Committee
SSATP	Sub-Saharan Africa Transport Programme
STAP	Short Term Action Plan
TAH	Trans-African Highway
TC	Technical Committee
ToR	Terms of Reference
UEMOA	West African Economic and Monetary Union
UMA	Maghreb Arab Union
UNCTAD	United Nations Conference on Trade and Development
UNECA	United Nations Economic Commission for Africa
UNTACDA	United Nations Transport and Communications Decade for Africa

Project Information

Client information

Recipient	African Union Commission (AUC)
Executing Agency	African Development Bank (AfDB)

Financing Plan

AWF	EUR 1 272 011
AUC (EU)	EUR 1 523 857
NTCF	EUR 666 461
DfID	EUR 432 075
NEPAD-IPPF /ADF/IsDB	EUR 3 886 693

Total

EUR 7 781 097

Currency Equivalents

(October 2009)

1 UC = 1.082 Euro

1 Euro = 1.464 US \$

Timeframe (Key milestones)

Application	September 2009
Approval	November 2009
Effectiveness	February 2010
Last disbursement	June 2011
Completion	September 2011

Multinational – Africa: Programme for Infrastructure Development in Africa - PIDA (Transboundary Water Resources)

Logical framework

NARRATIVE SUMMARY HIERARCHY OF OBJECTIVE	EXPECTED RESULT	REACH	INDICATOR(S) AND SOURCE	TARGETS AND TIMEFRAME	RISKS /MITIGATION MEASURES
<p>Goal</p> <p>To foster socio-economic development through improved access to integrated infrastructure networks and services in Africa.</p>	<p>Impact:</p> <p>1. Improved human development index of the African continent.</p>	<p>The populations of Africa; Businesses; RECs/RBOs and National Governments.</p>	<p>Indicator</p> <ol style="list-style-type: none"> GDP per capita for the continent; Global Competiveness Index (GCI). <p>Source: UNDP Statistics; UNCTAD Statistics.</p>	<ol style="list-style-type: none"> GDP per capita increased from \$ 2,500 in 2007 to \$ 7,500 in 2025. GCI increased from 4.09 (North-Africa) and 3.29 (Sub-Saharan Africa) in 2007 to 4.47 (all of Africa) by 2025; 	<p>Risks Inadequate Peace, stability and good governance in the continent. Low Political commitment to regional integration.</p> <p>Mitigation Measures The AU peace-making mechanism and the NEPAD Peer Review mechanism for good governance will attenuate these risks.</p>
<p>Objectives</p> <p>To enable African decision-makers to:</p> <ul style="list-style-type: none"> Establish a strategic framework for the development of regional and continental Transboundary Water Resources (TWR) infrastructure based on a development vision, strategic objectives and sector policies; Establish a TWR infrastructure investment programme (short, medium and long term) around priorities established by Basin Organisations and Regional Economic Communities (RECs) Prepare an implementation strategy and processes including, a priority action plan. 	<p>Outcomes:</p> <ul style="list-style-type: none"> An effective global partnership for the bridging of the infrastructure gap in Africa put in place Improved development of regional infrastructure and services 	<p>The populations of Africa; Businesses; RECs/RBOs and National Government s.</p>	<p>Indicators</p> <ul style="list-style-type: none"> Investment flows into infrastructure in Africa; Level of development of potential in hydropower, irrigation and storage capacity. <p>Source: UNCTAD Statistics; ICA; water sector reports.</p>	<ul style="list-style-type: none"> Annual Bilateral and Multilateral investments in the water sector increased from £ 2.9 Bn in 2007 to £ 8.4 Bn by 2020; Developed hydropower potential increased from 7% in 2008 to 15% by 2020; irrigated cultivated land increased from 6% in 2008 to 12% in 2020; per capita water storage capacity increased from 200m³/yr in 2006 to 600m³/yr in 2020. 	<p>Risks Inadequate mobilization of resources and poor implementation of the recommended strategies by Regional and Continental decision makers and sector stakeholders.</p> <p>Mitigation Measures The study is designed with a focus on implementation strategy and optimum ownership of its results by policy-makers and sector stakeholders.</p>
<p>Study Components and Activities <i>(Transboundary Water Resources)</i></p> <p>Component 1: Diagnosis, Analysis and Draft Framework and Vision</p>	<p>Outputs</p> <ol style="list-style-type: none"> Draft framework and vision paper for TWR infrastructure development Diagnostic and 	<p>Policy and strategy stakeholders in Africa, REC,</p>	<p>Indicator</p> <ol style="list-style-type: none"> Availability of a validated Draft framework and vision paper for 	<ol style="list-style-type: none"> Draft framework and vision paper for TWR infrastructure development 2 months 	<p>Risks</p> <ol style="list-style-type: none"> Inadequate cooperation between the partners involved in the

<p><u>Activities:</u></p> <p>1.1 Preparation of a draft framework and vision paper for regional and continental TWR infrastructure development in Africa.</p> <p>1.2 Carry out a review and a situation analysis of:</p> <ul style="list-style-type: none"> o Regional and continental policies and strategies on TWR o Regional TWR infrastructure. <p>1.3 a) establish an outlook for the future for TWR infrastructure development;</p> <p>b) undertake an analysis of the choices and challenges of TWR development in the continent</p> <p>c) Prepare an outline programme for the development of regional and continental TWR infrastructure.</p> <p>Component 2: Draft Strategic Framework, infrastructure development programme and implementation strategy.</p> <p><u>Activities:</u></p> <p>2 Organise TWR sector and regional workshops to reach consensus on the results of Component 1;</p> <p>3 a) Formulate a draft strategic framework including sector policies;</p> <p>b) Formulate a draft TWR infrastructure development programme ;</p> <p>c) Formulate a draft implementation strategy and processes.</p> <p>Component 3: Securing ownership of the study results by stakeholders.</p> <p><u>Activities:</u></p> <p>4 Organise meetings with the continents policy decision-makers, Basin Organisations and the Regional Economic Communities (RECs) and other stakeholders to reach consensus on the results of Component 2;</p> <p>5 Prepare the Final Report of the Study, incorporating the remarks made by stakeholders in these meetings.</p> <p>6 Prepare a synthesized version of the Final Report of the Study.</p> <p>Component 4: Project Management</p> <p><u>Activities:</u></p> <p>7 Project Management Activities: Supervision of Consultant and the Panel of Experts, monitoring of the implementation of the study; preparing of quarterly progress reports and the project completion report.</p>	<p>analysis report, including an outline programme for the development of regional and continental TWR infrastructure.</p> <p>2. Report containing the Draft Strategic Framework, infrastructure development programme and implementation strategy prepared</p> <p>3. Final Report of the Study prepared following consensus and includes:</p> <p>3a. Strategic objectives and sector policies;</p> <p>3b. prioritized regional and continental infrastructure development programme;</p> <p>3c. Implementation strategy, including priority action plan and monitoring mechanism.</p> <p>4. Quarterly progress reports and project completion report prepared.</p>	<p>R/LBOs Consultants.</p>	<p>TWR infrastructure development.</p> <p>2. Availability of a validated diagnostic and analysis report including an outline programme for the development of regional and continent TWR infrastructure.</p> <p>3. Availability of a report containing the Draft Strategic Framework, infrastructure development programme and implementation strategy</p> <p>4. Availability of the Final Report of the Study after consensus reached on the outputs of the study.</p> <p>Availability of quarterly progress reports and the project completion report.</p>	<p>from study commencement.</p> <p>2. A validated diagnostic and analysis report including an outline programme available 8 months from study commencement.</p> <p>3. Report containing the Draft Strategic Framework, infrastructure development programme and implementation strategy, available 14 months from study commencement date.</p> <p>4. Final Report of the Study, after consensus reached on the outputs of the study, available 18 months from study commencement</p> <p>Quarterly progress reports prepared on time and the project completion report available 15 months from study commencement date.</p>	<p>implementation of the study.</p> <p><u>Mitigation Measures</u></p> <p>Appropriate measures are to be taken in the selection of the different members of the implementation team to ensure optimum cohesion and performance.</p>
<p>Funding: AWF €1 272 011; AUC (EU) €1 523 857; DfID €432 075 NTCF €666 461 IsDB/N-IPPF/ADF € 3 886 693 TOTAL € 7 781 097</p>			<p><i>Duration: 21 months</i></p>		

EXECUTIVE SUMMARY

Background: The lack of infrastructure in Africa is widely recognized by stakeholders and development partners of the continent. A note by the African Development Bank (AfDB) and the United Nations Economic Commission for Africa clearly sums up this deficit¹: access to electricity is only for 30% of the population – compared to 70 to 90% for other major zones of the developing world; transboundary water resources constitute approximately 80% of Africa’s freshwater resources - but only 3.8% of water resources have been developed for water supply, irrigation and hydropower use, and just about 6.4%² of cultivated land is irrigated. The major constraints to the development of infrastructure in the continent, which the proposed Programme for Infrastructure Development in Africa (PIDA) study will address, include incomplete information, inadequate causal analysis (determination of the causes for the delay in the development of regional and continental TWR infrastructure in Africa), lack of politically accepted and technically justified priorities and poor implementation of programmes and projects.

Objectives: The objectives of the study are to enable African decision-makers to: i) establish a strategic framework for the development of regional and continental Transboundary Water Resources (TWR) infrastructure based on a shared development vision, strategic objectives and sector policies; ii) establish a TWR infrastructure investment programme around priorities established by Basin Organisations and Regional Economic Communities (RECs); and iii) prepare an implementation strategy and processes including, a Priority Action Plan.

Description: The proposed study consists of three main components: i) Diagnosis, Analysis and Draft Framework and Vision of infrastructure development in Africa; ii) the development of a draft strategic framework, infrastructure development programme and implementation strategies, including a Priority Action Plan; and iii) securing the ownership of the study results through high-level meetings and workshops at the sector, regional and continental levels.

Cost and Financing: The study will have a duration of 21 months from Grant signature. The total cost of the study is estimated at € 7 781 097, consisting of four sector studies cost of €5 158 704 and the ownership process (workshops and meetings) as well as project management costs totaling € 2 622 393. The transboundary water resources sector studies component is to be financed by an AWF grant of € 1 272 011 or 16.35% of the total cost of the study. The energy, transportation and information & communication technology (ICT) sector studies, estimated at € 3 886 693 (49.95%) are to be financed jointly by grants from the NEPAD – Infrastructure Project Preparation Facility (IPPF), the African Development (ADF) and the Islamic Development Bank (IsDB). The ownership process (meetings and workshops) and the project management costs estimated at a total of € 2 622 393 or 33.70% of the global study cost will be financed by grants from the AUC/EU (€ 1 523 857) and the Nigerian Technical Cooperation Fund (NTCF) - € 666 461. The Panel of Experts costs, estimated at € 432 075 will be financed by the United Kingdom Department for International Development (DfID).

Justification: The study ties in well with the AWF strategy and falls under the Operational Area: “Strengthening Water Governance – Transboundary Water Resources Management”. The action will promote the joint development of shared waters in the areas of advocacy, partnerships and strategic development by facilitating political will and the development of legal and regulatory frameworks to improve the implementation of transboundary infrastructure programmes in the continent.

Recommendation: It is recommended that an AWF Grant not exceeding €1 272 011 be extended to the African Union Commission (AUC) for the purpose of implementing the study as described in this report.

¹ ‘Infrastructure Development and Regional Integration: Problems, Opportunities and Challenges’, Joint Note of the ADB and United Nations Economic Commission for Africa; 2006.

² FAO Water Report N°29 (2005 Aquastat survey)

1. BACKGROUND

1.1 *Origin of the Project*

1.1.1 Infrastructure plays a key role in socio-economic development and poverty reduction. The lack of infrastructure leads to high production and transaction costs, which reduce the competitiveness of businesses in a particular region. This poor competitiveness impedes the implementation of economic and social development policies. Furthermore, the lack of infrastructure makes the business environment less conducive, making it less attractive for foreign direct investment. Inadequate infrastructure thus results in reduced service options and quality available to the population, particularly the most vulnerable segments.

1.1.2 The lack of infrastructure in Africa is widely recognized by stakeholders and development partners of the continent. A note by the AfDB and the United Nations Economic Commission for Africa clearly sums up this deficit³: access to electricity is only for 30% of the population – compared to 70 to 90% for other major zones of the developing world; transboundary water resources constitute approximately 80% of Africa's freshwater resources - but only 3.8% of water resources have been developed for water supply, irrigation and hydropower use,; access to water and sanitation for 65% and 38% of the population respectively; the telecommunications penetration rate is only about 6% - compared to an average of 40% for other geographical zones in the developing world; and the road access rate is just 34% - compared to an average of 50% for other geographical zones. For the agriculture sector, a survey carried out in 2005 found out that only 6.4% of cultivated land is under irrigation⁴.

1.1.3 This infrastructure deficit places African countries (particularly those south of the Sahara) amongst the least competitive in the world. This is due to the fact that infrastructure is one of the most important factors in the determination of global economic competitiveness. The global competitiveness indices (GCIs), calculated by the World Economic Forum⁵, place Africa as the least competitive region of the developing world, with a GCI for Sub-Sahara Africa of 3.29, compared to a GCI of 4.47 for India, for example. The indices were based on basic requirements, efficiency and innovation in the regions assessed. The basic requirements assess the performance of institutions, infrastructure, macro-economy, health and primary education in the regions.

1.1.4 The Programme for Infrastructure Development in Africa (PIDA) was born in June 2008 through the merging of the NEPAD - Medium to Long Term Strategic Framework (MLTSF) Study, commenced in August 2006 and terminated in October 2007 due to poor Consultant performance and the Continental Policies and Master Plan Study, launched in 2005 by the African Union Commission (AUC) and the European Union (EU). This action was taken in order to avoid the duplication of efforts and to prepare a coherent continent-wide infrastructure development programme based on a shared vision and harmonized policies and strategies and thus facilitate dialogue with the development partners of the continent.

³ 'Infrastructure Development and Regional Integration: Problems, Opportunities and Challenges', Joint Note of the ADB and United Nations Economic Commission for Africa; 2006.

⁴ FAO Water Report N°29 (2005 Aquastat survey)

⁵ *The Africa Competitiveness Report 2007*, World Economic Forum, 2007

1.1.5 The PIDA study will cover four infrastructure sectors: energy, transport, information and communication technologies (ICT), and transboundary water resources.

1.1.6 The AUC has requested the support of the African Water Facility (AWF) for the financing of the transboundary water resources component of the PIDA study. This financial assistance will amongst other important outputs, enable the preparation of a consensual Priority Action Plan and a monitoring mechanism for the mobilisation of resources and the efficient implementation of priority regional and continental transboundary water resources infrastructure in the short-term.

1.2 Sectoral Priorities

1.2.1 There are 59 major transboundary river basins in Africa, which sometimes cross REC boundaries and cover 62% of the continent's surface area; and transboundary aquifer basins, on the other hand, number 38⁶. About 77% of the population of the continent obtain water resources for agriculture, domestic, industrial and other uses from these systems. In order to ensure proper governance in the exploitation and management of these resources, river and lake basin organizations, civil society organisations and some regional economic communities are making efforts to develop a shared vision and harmonize the legal and regulatory frameworks among the riparian countries. However, progress in the achievement of their objectives remains slow due to a number of constraints, including lack of capacity, inadequate funding and weak political will in some of the riparian countries.

1.2.2 Due to the centrality of water in socio-economic development, various initiatives have been launched to contribute to the realisation of the Africa Water Vision and the Declarations made by Heads of State and the African Ministers' Council on Water (AMCOW) such as the Abuja Ministerial Declaration (2002) on Water. The initiatives include the revised SADC protocol (2000) on shared water resources and management of Transboundary waters; the Nile Basin Initiative (1999); the TIGER Initiative (2002), which is aimed at closing the information gap in the African water sector; the EU Water Initiative (2002), which is a partnership between the EU and African, Caribbean and Pacific Countries; the African Water Facility (2004); the ECOWAS Permanent Framework for Co-ordination and Monitoring of Integrated Water Resources Management (2004); the Rural Water Supply and Sanitation Initiative (2005); the creation of River Basin Organisations (RBOs), which have an African network; the creation of the Infrastructure Consortium for Africa (ICA), which is active in mobilizing resources for the development of water resources; and the recent creation of a specialized commission on groundwater within the AMCOW.

1.2.3 Another major initiative is the adoption of the New Partnership for African Development (NEPAD) in 2001 by the African Union Summit as the regional framework for Africa's development. Within this framework, one of the major objectives of NEPAD is to promote infrastructure development as a driving force for Africa's integration. The NEPAD – Short Term Action Plan (STAP), launched in June 2002, reached 20 approved projects by 2005 with success stories including, amongst others, the setting up of the Nile Basin Initiative and the construction of the Mozambique – South Africa Gas Pipeline. The 2002 STAP also included 13 Water Sector projects to address five themes: creating an enabling environment for regional cooperation; support to development of national IWRM policies; meeting urgent water needs; improving water wisdom; strengthening the financial base for the desired water future. A recognition of the inadequate knowledge and cooperation on shared water resources issues resulted in a strong

⁶ German Technical Cooperation (GTZ) Survey on Donor Activity in transboundary water cooperation in Africa, 2004-2007.

recommendation to launch an Action Plan for “Transboundary Water Resources Management” (TWRM) with a strategic goal of strengthening the enabling environment for the effective cooperative management and development of Transboundary water resources and initiation of the implementation of prioritized programmes.

1.2.4 The African Union Commission (AUC), which is responsible for coordinating, harmonizing and providing leadership in the continent’s economic and social development and physical integration, has been instrumental in the federation of the various River and Lake Basin Authorities of the continent, under the aegis of the African Network of Basin Organisations. This measure is a step towards the harmonization of policies, strategies and plans across the continent to facilitate the development of transboundary water resources. In addition, the AUC, the African Development Bank (AfDB) and the NEPAD Secretariat, have established a coordination mechanism for the development of infrastructure in Africa. Through this mechanism, the different African stakeholders have a consultative framework among themselves and an instrument for dialogue and interaction with Africa’s development partners.

1.2.5 The AUC is also undertaking other initiatives aimed at improving the management of natural resources; some of these include the African Monitoring of the Environment for Sustainable Development (AMESD) Programme, the Climate for Development (Clim-Dev Africa) Programme, the Great Green Wall for the Sahara and Sahel Initiative (GGWSSI), the Programme of Action for the implementation of the African Regional Strategy on Disaster Risk Reduction, the Policy Harmonization in Transboundary Water Basins, Sustainable Land Management Programme; and the Comprehensive African Agriculture Development Programme (CAADP). The Bank has also been making efforts to promote water resources development in the continent with the preparation of strategies and plans, such as the Agricultural Water Development and Water Storage Enhancement Business Plan, approved in 2009.

1.2.6 The PIDA study, which was endorsed by the 12th Assembly of Heads of State and Government of the African Union in February 2009 due to its importance in addressing the socio-economic development of the continent, will be informed by a number of studies carried out recently at the country, basin, regional and continental levels. These include: i) the African Infrastructure Country Diagnosis (AICD) Study, implemented by the World Bank - AICD results could be repackaged into Basin or Regional Economic Community (REC) level TWR infrastructure briefs and serve as inputs into PIDA; ii) the AU/NEPAD African Action Plan, which primarily comprises priority programmes and projects with a high potential impact for accelerating regional integration in Africa, and which require co-ordination at the continental level; and iii) transboundary surface and groundwater studies carried out at basin and regional levels, including the Nile, Senegal, Gambia, Niger, Congo and lake Chad basins as well as in the East African Community (EAC), the Inter Governmental Authority for Development (IGAD), the Economic Community of West African States (ECOWAS), the Economic Community of Central African States (ECCAS) and the Southern African Development Community (SADC) sub-regions, to name but a few.

1.3 Problem Definition

1.3.1 The several challenges requiring joint efforts in transboundary water resources development and management in the continent include pollution from industrial facilities, illegal wastewater discharge, ground water pollution, water scarcity in many sub-regions and the impacts of climate change and variability. The achievement of the objectives of developing a shared vision and a common strategic framework in the continent in order to address the issues of water quality protection, sustainability of water quantity, water transportation, hydropower generation, flood control and the conservation of natural habitats and biodiversity remain

insufficient. About 20 functioning transboundary Basin Organisations have been created to cover the management of some of the 69 transboundary water basins in the continent, leaving a large majority of the basins without a shared development vision for an efficient management of their natural resources. In addition to the reduction in annual rainfall in many basins of the continent, high percentages of untreated effluent still flow into and pollute the natural environment, human activities continue to destroy water catchments, causing erosion and floods; the proliferation of invasive aquatic plants and the loss of biodiversity also remain major challenges in the continent.

1.3.2 Due to their “hidden” nature, the management of groundwater resources poses further specific challenges. Countries manage transboundary aquifer systems along administrative boundaries instead of along hydrogeological boundaries, leading to increasing deterioration of groundwater resources. In addition, the low development of monitoring networks and inadequate modelling of the behaviour of aquifers as well as the limited management capacity of concerned decision makers such as the basin organisations leads to a low coverage of the management issues relevant to the aquifer basins in their respective geographic areas. Scarcity of groundwater resources due to climate change is already noticeable in a number of aquifer basins. In addition, many of the continent’s aquifers suffer from overexploitation and quality degradation, which can lead to the impoverishment of the socio-economic contexts. Contrary to the considerable efforts that have been made in the governance of surface waters, the setting up of joint management mechanisms and organisations for the protection and management of shared aquifers lags far behind. Transboundary aquifer basin management is supported in only 6 out of the continent’s 38 transboundary aquifer basins, with very limited financial commitments from donors.⁷

1.3.3 There are several constraints to regional and continental TWR infrastructure development in Africa, which contribute to the infrastructure deficit and the poor economic competitiveness of the continent. The PIDA study will aim at addressing a number of these problems, which include: i) *incomplete information* - information on the TWR infrastructure deficit in the continent and its impacts on socio-economic development is incomplete; strategic information gaps will be identified and addressed under the study; ii) *inadequate causal analysis* - the determination of the causes for the delay in the development of regional and continental TWR infrastructure in Africa will be considered in order to have a more realistic prioritisation of investment programmes and projects, and to design a more effective implementation strategy and processes; iii) *lack of politically accepted and technically justified priorities* – the evident need for visibility, rationality and the setting of priorities for medium and long-term regional and continental TWR infrastructure development in a consultative, participatory and consensual manner will be addressed; and iv) *poor implementation* – the underlying factors of this constraint will be addressed in order to improve the efficiency of the implementation of TWR infrastructure programmes and projects in the continent.

1.3.4 The slow progress in regional and continental TWR infrastructure development and in the attainment of the objectives of Basin Organisations in Africa is caused by a number of difficulties, including more or less latent conflicts or political differences between nations, weak national political will, lack of financing, institutional inefficiencies, regulatory and technical inconsistencies across countries and regions, lack of human resources and skills, unsuitable and/or inefficient decision making processes and conflicting national and regional visions and strategies for development. The study will clarify the impact of these weaknesses and formulate recommendations for resolving them by undertaking a causal analysis based on a rigorous methodology which highlights the causal links between the instruments (political and

⁷ German Technical Cooperation (GTZ) Survey on Donor Activity in transboundary water cooperation in Africa, 2004-2007.

investment) and measures taken, the outcomes and the impacts obtained, and their contribution to the non achievement of the targeted objectives.

1.4 Beneficiaries and Stakeholders

1.4.1 The frontline beneficiaries of the study include the Basin Organisations and the Regional Economic Communities (REC) of the five sub-regions of the continent: North Africa (UMA, CEN-SAD); West Africa (ECOWAS, CEN-SAD); Central Africa (ECCAS), East Africa (COMES, EAC, IGAD), Southern Africa (COMESA, SADC). These Basin Organisations and RECs, working closely with their states and populations, will be responsible for the effective implementation of the results of the PIDA study in their respective sub-regions and basins.

1.4.2 The main stakeholders of the study are the following: the African Heads of State who need to boost economic and social development in the continent through a shared strategic vision and regional integration; the sponsors of PIDA (the AUC, NEPAD and the AfDB); the AU specialised institutions and other sector organisations with the mission of giving advice on policy formulation, strategy and programming; and the development partners of the continent.

1.4.3 Financial support for the study is also being provided by the Department for International Development (DfID) of the United Kingdom, the Nigerian Technical Cooperation Fund (NTCF), the European Union (EU), the Islamic Development Bank (IsDB) and from the NEPAD – Infrastructure Project Preparation Facility (IPPF).

1.5 Objectives of the Study

1.5.1 The objectives of the study are to enable African decision-makers to:

- Establish a strategic framework for the development of regional and continental Transboundary Water Resources (TWR) infrastructure based on a shared development vision, strategic objectives and sector policies;
- Establish a TWR infrastructure investment programme {short or Priority Action plan (2010-2015), medium (2016 – 2020) and long (2021 – 2030) term} around priorities established by Basin Organisations and Regional Economic Communities (RECs); these plans will include both physical TWR infrastructure implementation projects and interventions on the harmonisation of regulatory and administrative procedures across the continent.
- Prepare an implementation strategy and processes including, a priority action plan.

Transboundary Water Resources (TWR) infrastructures are shared to serve the development needs of riparian countries and even other countries in the region, and consist particularly of irrigation and hydropower water storage infrastructure.

1.5.2 The overall objectives of the study will be attained by addressing the constraints mentioned in §1.3.3 and the following specific objectives:

- Alignment of the long term perspective with the Africa Water Vision 2025;
- Ensuring water security to meet future increases in demand for water and enable the socio-economic development of the regions of the African continent;
- Enabling the equitable allocation of water resources among competing water uses for sustainable development;
- Equitable sharing of benefits arising from the shared basin resources;
- Adapting to and mitigating climate change impacts and variability in weather patterns;
- Enhancing regional cooperation by deploying the principles of Integrated Water Resource Management (IWRM) particularly for shared water resources through the R/LBOs and regional water protocols;

- Ensuring African Ministers Council of Water (AMCOW) fully supports the outputs;
- Environmental protection and management as advocated by IWRM principles.

1.6 Relevance for AWF intervention

1.6.1 The study ties in well with the AWF strategy and falls under the Operational Area: “Strengthening Water Governance – Transboundary Water Resources Management”. The action will promote the joint development of shared waters in the areas of advocacy, partnerships and strategic development by facilitating political will and the development of legal frameworks to improve the implementation of transboundary infrastructure programmes in the continent. For the groundwater sub-sector, which has greater challenges, the PIDA study will serve as a continent-wide platform to discuss the joint management of Africa’s transboundary aquifers, the impacts of climate change on groundwater resources and the establishment or the strengthening of monitoring and information systems.

1.6.2 AWF support will contribute towards the development of harmonized policies and strategies for resource mobilization for the effective implementation of the Priority Action Plan as well as the medium and the long-term strategies for transboundary water infrastructure development, to be prepared under the study and adopted by all stakeholders. The AWF support will equally enable the establishment of a shared vision and cooperation arrangements between riparian countries and regions in the continent and thereby reduce the risks of conflicts made more likely in the future by the threats posed by water scarcity and climate change and variability.

1.6.3 The diagnosis and analysis to be carried out under this study will determine the reasons for the low levels of achievement of the objectives set by basin organisations and regional economic communities as well as recommend solutions to the difficulties identified at these levels. The PIDA study will specifically provide the African Union (AU), which is leading efforts in transboundary infrastructure development at regional and continental levels, with a coherent continent-wide TWR development strategy and programmes based on a shared vision and policies and strategies harmonized across the continent. The AU requires these results to enable it engage in constructive dialogue with development partners of the continent for the development of regional and continental TWR infrastructure in Africa. In addition, the outputs of the PIDA study will be used by other stakeholders working in the mobilisation of resources for the development of water resources infrastructure in Africa, such as the ICA.

2. THE PROJECT

2.1 Impacts

2.1.1 The overall goal of the proposed intervention is to contribute to the fostering of socio-economic development through improved access to integrated infrastructure networks and services in Africa.

2.1.2 The expected long-term impact of the study is the improvement of the human development index of the African continent.

2.2 Outcomes

2.2.1 The main outcomes expected from this study are:

- The putting in place of an effective global partnership for the bridging of the TWR infrastructure gap in Africa; and

- The improvement in the development of regional TWR infrastructure and services in Africa.

2.2.2 The attainment of these outcomes will be evidenced by an increase in investment flows into the water sector infrastructure and an increase in the percentage of exploited hydropower and irrigation potential as well as the water storage capacity of the continent.

2.3 Outputs

2.3.1 The outputs of the PIDA study as a whole are detailed in the programme Concept Note. The outputs are the results of all the studies to be carried out for the four selected infrastructure sectors: Energy, Transportation, Information and Communication Technologies and Transboundary Water resources. The impacts and the outcomes of the PIDA will be achieved if the results of all these studies are effectively implemented in the short-term, medium-term and long-terms.

2.3.2 The outputs considered in this appraisal report relate to the transboundary water resources sector study and will be attained by taking into account the specific objectives outlined in section 1.5.2 of this appraisal report. The major outputs of the transboundary water resources study, arranged under 4 components, are the following:

Component 1: Diagnosis, Analysis and Draft Framework and Vision

Output 1a: A draft framework and vision paper for TWR.

Output 1b: Diagnostic and analysis report, including an outline programme for the development of regional and continental TWR infrastructure.

Component 2: Draft Strategic Framework, infrastructure development programme and implementation strategy.

Output 2: Report containing a Draft Strategic Framework, TWR infrastructure development programme and implementation strategy

Component 3: Securing ownership of the study results by stakeholders.

Output 3: Final Report of the Study prepared following consensus and includes:

3a: Strategic objectives and TWR sector policies;

3b: prioritized regional and continental TWR infrastructure development programme;

3c: TWR infrastructure implementation strategy, including a Priority Action Plan and a monitoring mechanism. Building a consensus among policy decision-makers around this Priority Action Plan and its management constitutes a key output of PIDA.

Component 4: Project Management

Output 4: Quarterly progress reports including financial management details and project completion report prepared.

2.4 Activities

2.4.1 The approach adopted in order to achieve the expected outputs of the study consists of the undertaking of the study and analysis activities by a consortium of sector specialised firms (the “Consultant” or “Consulting firm”), supported by a Panel of Experts. The Consulting firm will undertake the transboundary water resources sector study under PIDA, in accordance with

the Terms of Reference of the study, found in Annex 7. These teams will provide the main resources for the programme sponsors (AUC, NEPAD Secretariat and the AfDB) to work with African decision-makers in the formulation of the strategic framework, infrastructure development programme, and implementation strategies and processes.

2.4.2 Another aspect of the approach is the carrying of a number of activities of an ownership process designed to ensure the commitment of the continent's stakeholders to the outputs of the PIDA study as a whole. The ownership process, to be jointly managed by the AUC, NEPAD and the AfDB, aims at ensuring ownership by the key national and regional stakeholders (in particular the RECs and the R/LBO) of the analyses, conclusions and recommendations of the TWR sector studies.

2.4.3 The ownership process is considered vital to the achievement of the objective of a common strategy and a more effective development of the short, medium and long-term TWR infrastructure programme, including an implementation and monitoring/evaluation mechanism.

2.4.4 The activities of the transboundary water resources sector studies are considered hereunder, component by component:

Component 1: Diagnosis, Analysis and Draft Framework and Vision,

Activity 1.1: Preparation of a draft framework and vision papers for regional and continental transboundary water resources infrastructure development in Africa:

The Panel of Experts will provide a vision and high-level draft framework to establish the context for the Consultant's more detailed work. Their inputs will be provided in the form of papers for discussion at two workshops – the kick-off workshop at the end of the Inception phase, and in a workshop for the validation of the outputs of Component 1. The papers will cover: i) a vision for regional integration in Africa, together with the contribution of transboundary water resources infrastructure to this regional integration over a time horizon up to 2030 and ii) the key issues for the transboundary water resources sector in relation to the development of regional and continental infrastructure in Africa. The River and Lake Basin Organisations (R/LBO) of the sub-regions of Africa as well as the African Network of Basin Organisations will participate in these workshops.

Details of issues to be addressed in these papers are included in the Terms of Reference (ToR) of the Panel of Experts, founded in Annex 8.

Activity 1.2: Carry out reviews and a situation analysis

The Consulting firm will carry out reviews and situation analysis of the following:

- o Regional and continental TWR sector policies and strategies; including an assessment of the level of achievement of policy objectives as well as detailed causal analysis based on a rigorous methodology.
- o Regional transboundary water resources infrastructure; the analysis will consider existing infrastructure and infrastructure under execution or preparation.

Activity 1.3: the Consulting firm will undertake the following tasks under this activity:

- a) Establish an outlook for the future for transboundary water resources infrastructure development in Africa –this outlook will be based on the vision and draft framework prepared by the Panel of Experts;
- b) Undertake an analysis of the choices and challenges of transboundary water resources development in the continent – this should include the analysis of water sources and demand in

relation to water security as well as the setting of realistic objectives for the long term policies on transboundary water resources infrastructure development; and

c) Prepare an outline programme for the development and management of regional and continental TWR infrastructure to the horizon of 2030. The programme will provide details on physical investment projects and programmes by status; institutional and legal frameworks including sector policies; the relevant implementation stakeholders; estimated initial costs, quantifications and deadlines; as well as specific choice and decision-making issues.

The outputs of Activities 1.2 and 1.3 will be compiled into a report to be validated in a workshop to be organised under Component 2.

Component 2: Draft Strategic Framework, infrastructure development programme and implementation strategy.

The Consultant, in collaboration with the Panel of Experts and the Programme Sponsors, will undertake the following activities under this component:

Activity 2.1: Organise TWR sector and regional workshops to reach consensus on the results of Component 1; representatives of River and Lake Basin Organisations of the sub-regions of Africa as well as the African Network of Basin Organisations will participate in these workshops.

Activity 2.2: Formulate a draft strategic framework including sector policies for the development and management of transboundary water resources on the basis of the guidelines formulated in the workshops of Activity 1.1 and further analysis carried out to validate the assumptions adopted during the workshops.

Activity 2.3: Formulate a draft infrastructure development programme for the transboundary water sector in Africa – objective prioritisation criteria will be used to prioritise the projects and programmes as well as phase them into the short-term or Priority Action Plan (2010-2015), the Medium Term (2016 – 2020) and the Long Term (2021 – 2030) programmes. The consultant will ensure that socio-economic criteria are adequately taken into consideration in the prioritization of development interventions.

Activity 2.4: Formulate a draft implementation strategy and processes – the Consulting firm will provide details on the roles of the regional and continental entities and institutions in the implementation; mobilising regional and external financing and private sector participation; civil society participation and the definition of an implementation and process which will include capacity building and a monitoring mechanism.

All the output of the activities in Component 2 will be compiled into a report aimed at securing the ownership of the study results by stakeholders, through high-level meetings.

Component 3: Securing ownership of the study results by stakeholders.

Activity 3.1: Organise high-level meetings with the Regional Economic Communities (REC), the R/LBO from each sub-region of the continent and other stakeholders to reach consensus on the results of Component 2. These meetings will aim at initiating the internalisation of continental policy and strategy proposals, infrastructure development programmes, and implementation strategies and processes, including particularly the Priority Action Plan and recommendations on the monitoring mechanism.

Upon completion of the Studies, the conclusions of the Steering Committee, which will review all the results of the study, will be submitted to the African Union and the NEPAD authorities for endorsement and adoption.

Activity 3.2: Prepare the Final Report of the Study, incorporating the remarks made by stakeholders in the meetings.

Activity 3.3: Prepare a synthesized version of the Final Report of the Study – the consultant will equally prepare a synthesized version of the Final Report of the Study.

Activity 3.4: Develop an Africa Infrastructure database to support the implementation and monitoring processes of the study. This database will be developed distinctly from the sector studies by another consultant who will be procured under the study. The consultant will use the AICD data and other data existing sources as well as data collected under the study to fill identified data gaps to prepare a basin and REC level infrastructure database for the continent.

The objective of the database is to provide the parties involved in the implementation and monitoring of PIDA with a set of reference data regarding PIDA's design, content, recommendations and achievement of objectives. The database will be hosted provisionally by the OINF department of the Bank and will later be transferred to the AUC when the necessary resources would have been mobilised at the AUC to host it.

Component 4: Project Management

Activity 4: Project Management Activities to be carried out by the Implementation Unit of the study. These activities include: the supervision of Consultant and the Panel of Experts, the monitoring of the implementation of the study; preparing of quarterly progress reports including financial management and accounting details and the preparation of the project completion report.

2.5 Risks

2.5.1 The main risks that could prevent the implementation of the recommendations of this study and thus lead to a poor attainment of the goals and objectives of the PIDA programme include inadequate peace, stability and good governance in the continent. Furthermore, low political commitment to regional integration is a major threat to the implementation of regional policies and strategies and could be a real risk to the achievement of the socio-economic development goals aimed at under this study.

2.5.2 As a mitigation measure, the study is designed for the optimization of the ownership of its results by policy makers, through a series of workshops and meetings at basin, sector, regional and continental levels. The forum and platform created for dialogue and cooperation under the study will equally reduce the possibility of conflicts over the use and management of water resources in the continent, which could stall progress in the implementation of regional integration strategies and programmes. In addition, the AU/NEPAD peer review mechanism, aimed at encouraging good governance, will contribute to the mitigation of this risk.

2.6 Cost and Financing Plan

2.6.1 The total cost of the study is estimated at €7 781 097, consisting of the four-sector studies cost of €5 158 704 and the ownership process (workshops and meetings) and project management costs totaling € 2 522 393. The transboundary water resources sector studies component is to be financed by an AWF grant of €1 272 011 or 16.35% of the total cost of the study. The energy, transportation and information & communication technology (ICT) sector

studies estimated at € 3 951 696 (49.95%) are to be financed jointly by grants from the NEPAD – Infrastructure Project Preparation Facility (IPPF), the African Development Fund (ADF), the and the Islamic Development Bank (IsDB). The ownership process (meetings and workshops), audits and the project management costs estimated at a total of € 2 622 393 or 33.70% of the global study cost will be financed by grants from the AUC/EU (€ 1 523 857) and the Nigerian Technical Cooperation Fund (NTCF) - € 666 461. The Panel of Experts costs, estimated at € 432 075 will be financed by the United Kingdom Department for International Development (DfID). The estimated cost of the entire study, by components and by categories, is shown in Tables 2.1 and 2.2 respectively. The costs are based on current costs of undertaking similar activities in the continent as well as on the financial proposals obtained from consulting firms in the advanced procurement process engaged for this study. The detailed cost estimates are presented in Annex 2.

Table 2.1: Cost Estimates by Study Components (EUR) - Excluding Taxes

<i>Study Components</i>	<i>AWF (TWRM)</i>	<i>NEPAD- IPPF /ADF/ IsDB (Energy, Transport & ICT)</i>	<i>AUC/EU (meetings/ workshops, PM*)</i>	<i>NTCF (meetings/ workshops)</i>	<i>DfID (Panel of Experts)</i>	<i>Total</i>
<i>Component 1: Diagnosis, Analysis and Draft Framework & Vision</i>	464 244	1 255 324	-	-	246 900	1 966 468
<i>Component 2: Draft Strategic Framework, infrastructure development programme and implementation strategy.</i>	574 766	1 881 760	-	-	102 875	2 559 401
<i>Component 3: Securing ownership of the study results by stakeholders.</i>	172 430	564 528	706 654	634 725	61 725	2 140 062
<i>Component 4: Project Management Costs</i>	-	-	744 638	-	-	744 638
<i>Sub-total</i>	1 211 439	3 701 612	1 451 292	634 725	411 500	7 410 569
<i>Contingencies, 5% (physical 3%; financial 2%)</i>	60 572	185 081	72 565	31 736	20 575	370 528
<i>Total</i>	1 272 011	3 886 693	1 523 857	666 461	432 075	7 781 097
<i>Total (Rounded up)</i>						
<i>Percentages (%)</i>	16,35	49,95	19,58	8,57	5,55	100,0

*PM – Project Management Costs.

Table 2.2: Cost Estimates by Expenditure Categories (EUR ,000) - Excluding Taxes

Categories of Expenditure	AWF (TWRM)	NEPAD-IPPF /ADF/ IsDB (Energy, Transport & ICT)	AUC/EU (meetings/ workshops, PM*)	NTCF (meetings/ workshops)	DfID (Panel of Experts)	Total
Consulting Services	1 211 439	3 701 612				4 913 051
Miscellaneous Services (workshops, meetings, Audit)	-	-	1 451 292	634 725	411 500	2 497 517
Sub-total	1 211 439	3 701 612	1 451 292	634 725	411 500	7 410 569
Contingency (5%) (physical 3%; financial 2%)	60 572	185 081	72 565	31 736	20 575	370 528
Total	1 272 011	3 886 693	1 523 857	666 461	432 075	7 781 097

3 IMPLEMENTATION ARRANGEMENTS

3.1 Recipient

3.1.1 The African Union Commission (AUC) shall be the Recipient of the grant. The African Union Commission (AUC) is responsible for coordinating, harmonizing and providing leadership in the continent's economic and social development and physical integration. The development of continental sector policies by the AUC is based on the regional policies and master plans developed by the RECs and the specialised institutions of the African Union, including R/LBO. The AUC designated the Bank in February 2008 as the Executing Agency of the PIDA study. This role is consistent with the role of the Bank in the NEPAD-MLTSF Study, which has now been merged into the PIDA study. However, since the Bank is the trustee of the AWF Special Fund, the Bank's role as trustee (and therefore the legal donor of the AWF grant) and its function as the Executing Agency for the PIDA Study will be have to be separated and the Bank must act independently and objectively while executing each of these roles⁸.

3.1.2 The Executing Agency, which will host the Programme Management Team (PMT) of the study, is at the forefront of transboundary water sector infrastructure development policy and strategies in the continent. The Executing Agency also enjoys the support of the continents water sector stakeholders and development partners and has adequate capacity and experience to enable it to execute the study efficiently. The Bank will be responsible for the contractual, financial and administrative management of PIDA. It will thus be responsible for undertaking the procurement procedures, in conformity with its existing regulations as well as for budget management and disbursements.

3.2 Organization, management implementation of the study

3.2.1 The PIDA study will be jointly managed through a participatory organisational structure consisting of the AU Commission, the NEPAD Secretariat and the African Development Bank, which are jointly referred to as the programme sponsors.

⁸ See Annex 6 for details of the position of the Legal Department of the Bank on this issue.

3.2.2 The structure adopted for the management and monitoring of the study is shown in Annex 4 and includes a Steering Committee, a Technical Committee and the Executing Agency, within which is hosted the Programme Management Team. This governance structure of the study will be supported by a Bank-wide Inter-Departmental Oversight Committee, which will provide guidance on policy and operational implications on the Bank, as well as a Panel of Experts, which will assist in developing a vision and strategy for infrastructure development and integration for the continent. The organigramme of the Executing Agency, for the management of the PIDA study is shown in Annex 5.

3.2.3 The Steering Committee will be chaired by the AUC and will be the orientation and ultimate approval organ of the study. It will also give guidelines and resolve any inconsistencies as the study is implemented. The Committee will comprise representatives of the AMCOW, the ANBO, the AfDB, the NEPAD Secretariat, the RECs and the Economic Commission for Africa (ECA). Other stakeholders, such as development partners, will be invited as observers. The Programme Management Team will provide secretariat services for the Steering Committee. Upon completion of the Studies, the conclusions of the Steering Committee will be submitted to the African Union and NEPAD authorities for endorsement and adoption (Component 3).

3.2.4 The Technical Committee will play the role of a quality control organ in the implementation and the monitoring of the study. It will comprise experts representing the Basin Organisations of each of the 5 sub-regions of the Continent (see §1.4.1), designated by the AUC in consultation with the ANBO. Other members of the Technical Committee will comprise experts from the AUC, the NEPAD Secretariat, the AfDB, and the ECA as well as resource persons from specialized regional and international institutions selected by the AUC. This Committee will work under the chairmanship of the AfDB as a technical group, and will also be responsible for preparing the meetings of the Steering Committee.

3.2.5 The Programme Management Team (PMT) will operate under the overall oversight of the Manager of the ONRI.1 Division of the Bank, who will serve as a contact point for the Consultants during the study implementation and will co-ordinate all study execution issues with the programme sponsors. The PMT will undertake the technical and administrative management of the Programme. Other members of the PMT shall comprise a Programme Coordinator, who has already been appointed by the Bank and four sector experts, one for each sector, to be appointed by the AfDB, as well as four counterpart sector experts who have already been appointed by the AUC/NEPAD Secretariat. The Bank will appoint permanent staff or long-term consultants to serve in the Programme Management Team during the duration of the study. A procurement officer, already appointed by the AfDB and assisted by support staff, ensures the day-to-day management of the study.

3.2.6 The strategy adopted to ensure the achievement of the expected outputs of the study consists of the undertaking of the sector studies by a consortium of sector-specialised firms (the “Consultant” or “Consulting firm”), supported by the Panel of Experts. The Consulting firm will undertake the transboundary water resources sector study under PIDA, in accordance with the Terms of Reference of the study, found in Annex 7. The Consultant and the Panel of Experts will provide the main resources for the programme sponsors (AUC, NEPAD Secretariat and the AfDB) to work with African policy decision-makers in the formulation of the strategic framework, infrastructure development programme, and implementation strategies and processes for PIDA.

3.2.7 The PIDA Panel of Experts will consist of five high-level experts who will assist in developing a vision for the development of regional and continental infrastructure in Africa, and

in the identification of key issues in each sector. The aim of this Panel is to supplement and complement the work of the Consultants by providing a vision and high-level strategic framework for PIDA. The Panel will also provide high-level peer review of the Consultant's outputs at key points in the study to strengthen quality control, and help identify any essential issues that might have been overlooked or be a source of contention.

3.2.8 The implementation approach of the PIDA study also includes the carrying out of an ownership process, which is vital to the achievement of the objective of a common strategy and a more effective development of the short, medium and long-term infrastructure programme, including an implementation and monitoring/evaluation mechanism. A number of activities will be carried out under the ownership process in order to ensure the commitment of the continent's stakeholders to the outputs of the PIDA study as a whole. The ownership process, which will include the organisation of sector and regional workshops as well as high level meetings, will be jointly managed by the AUC, NEPAD and the AfDB and will aim at ensuring ownership by the key national and regional stakeholders (in particular the RECs and the R/LBOs) of the analyses, conclusions and recommendations of the studies.

3.3 Performance Plan

3.3.1 The performance indicators shown in Table 3.1 will be used in monitoring the attainment of the outputs of the study.

Table 3.1: Performance Plan

Outputs	Indicators	Targets and Timeframe
<p><u>Component 1</u></p> <p>1.1 Draft framework and vision paper for TWR.</p> <p>1.2 Diagnostic and analysis report, including an outline programme for the development of regional and continental infrastructure.</p>	<p>1.1 Availability of a draft framework and vision paper for TWR.</p> <p>1.2 Availability of a validated diagnostic and analysis report including an outline programme for the development of regional TWR infrastructure.</p>	<p>1.1 A draft framework and vision paper for TWR made available the consultant 2 months from study commencement.</p> <p>1.2 A validated diagnostic and analysis report including an outline programme available 8 months from study commencement</p>
<p><u>Component 2</u></p> <p>2. Report containing the Draft Strategic Framework, infrastructure development programme and implementation strategy prepared.</p>	<p>2. Availability of a report containing the Draft Strategic Framework, TWR infrastructure development programme and implementation strategy.</p>	<p>2. Report containing the Draft Strategic Framework, TWR infrastructure development programme and implementation strategy, available 14 months from study commencement date.</p>

<p><u>Component 3</u> 3. Final Report of the Study prepared following consensus and includes: 3.1 Strategic objectives and sector policies; 3.2. prioritized regional and continental infrastructure development programme; 3.3. Implementation strategy, including priority action plan and monitoring mechanism.</p>	<p>3. Availability of the Final Report of the Study after consensus reached on the final outputs of the study.</p>	<p>3. Final Report of the Study, after consensus reached on its final outputs, available 18 months from study commencement</p>
<p><u>Component 4</u> 4. Quarterly progress reports and project completion report prepared.</p>	<p>4. Availability of quarterly progress reports and the project completion report.</p>	<p>4. Quarterly progress reports prepared on time and the project completion report available 15 months from study commencement date.</p>

3.4 Implementation Schedule:

3.4.1 The study will be undertaken within a period of 18 months, after an estimated period of 3 months required for the activities leading up to grant effectiveness and for the finalisation of the procurement of the services of the Consulting firm, making a total duration of 21 months from Grant signature.

3.4.2 Advanced procurement activities have been undertaken by the PMT following the Bank's rules and procedures, starting with the issuance of the General Procurement Notice in July 2008. At the time of the preparation of this appraisal report, the Evaluation Report of the proposals received from consulting firms has been prepared and presented to the Purchasing Committee of the Bank, for approval.

3.4.3 The Procurement Department of the Bank approved all the documents issued at the different stages of the advanced procurement. The details of the activities already carried out under advanced for the procurement of the services of the Consulting Firm are given in Table 3.2

Table 3.2: Advanced procurement activities

<u>Activity</u>	<u>Timing</u>	<u>Status</u>
◆ Issue of GPN	July 2008	Completed
◆ Invitation for Prequalification	October 2008	Completed
◆ Evaluation of Prequal. submissions	February 2009	Completed
◆ Issue of RFP	April 2009	Completed
◆ Submission of Proposals	June 2009	Completed
◆ Evaluation of Proposals	July 2009	Completed
◆ Finalisation of Study resource mob	August 2009	Underway
◆ Validation of Evaluation Report by the Purchasing Committee	November 2009	Underway
◆ Negotiation and Award of Contract		Not started
◆ Study Inception		Not started
◆ Submission of Final Reports		Not started

3.4.4 The Consulting firm will submit an inception report and work plans to the Executing Agency for approval within two months of commencement of the study activities. After the approval of the Consulting firm’s plan of work, methods and tools, the timing for the starting and the completion of the different activities will be in accordance with the summary implementation schedule (Table 3.2.) The detailed Implementation Schedule is presented in Annex 3.

Table 3.1 Summary Activity implementation schedule

Activity	Duration in months																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Activities leading up to grant effectiveness and finalisation of Procurement of Consultancy Services	■																				
1.1 Preparation of draft framework and vision paper				■																	
1.2 Carry out reviews and a situation analysis				■																	
1.3 Establish an outlook for the future for TWR, analyse choice and prepare outline programme					■																
2. Prepare Draft Strategic Framework, infrastructure development programme and implementation strategy											■										
3. Consensus meetings and workshops as well as preparation of final Report of the Study												■		■		■		■		■	
Project Management Activities	■																				

3.5 Procurement Arrangements

3.5.1 The acquisition of consultancy services for the sector studies will be carried out in accordance with the Bank’s Rules and Procedures for the Use of Consultants using the relevant Bank Standard Bidding Documents. Procurement arrangements for the services required for the study are summarized in Table 3.3; the costs shown are based on the detailed cost estimate details given in Annexe 2.

Table 3.3 Summary of Procurement Arrangements (EUR – Excluding Taxes)

Procurement Categories	Shortlist	Other**	Total
<i>1. Sector Studies Services</i>			
1.1 Consultancy Services for the 4 sector studies	5 158 704		5 158 704
	(1 272 011)		(1 272 011)
<i>2. Miscellaneous Services</i>			
2.1 Auditing of programme	25 000		25 000
2.2 Technical Committee, Stakeholder Validation Workshops and Meetings.		1 108 448	1 108 448
		-	-
2.3 Database development	300 000		300 000
2.4 Panel of Experts		432 075	432 075
2.5 Editing/Translation	96 000		96 000
2.5 Project Management costs		660 870	660 870
Total Cost of Study	5 579 704	1 769 318	7 781 097
<i>Total AWF Grant</i>	<i>(1 272 011)</i>	<i>-</i>	<i>(1 272 011)</i>

The figures in brackets represent the amounts financed by the AWF;

** Other refers to DfID procedures for the procurement of the services of the Panel of Experts and direct procurement of services, considered as reimbursables, related to the organization of meetings and workshops.

3.5.2 Acquisition of consulting services from a consortium of sector-specialised firms is under processing, and a contract will be awarded through competition, following Short-List (SL) procedures. One such contract comprising diagnosis, analysis, preparation of a strategic framework, a prioritised infrastructure development programme and an implementation strategy including processes, amounting to € 5 158 704 is being procured utilizing the quality-based selection (QBS) process.

3.5.3 The services of an auditor will be procured through short-list procedures. One such contract amounting to €25 000 shall be procured utilizing the least cost selection (LCS) process.

3.5.4 The services of a consultant for the development of the Africa Infrastructure Database will be procured through short-list procedures. One such contract amounting to €300 000 shall be procured utilizing the quality and cost-based selection (QCBS) process.

3.5.5 Services for editing and translation of study documents estimated at €96 000, will be procured through short-list procedures, utilizing the quality and cost-based selection (QCBS) process.

3.5.6 Services related to the organisation of sector, regional and continental workshops and meetings estimated at €1 108 448 will be procured directly from the appropriate service providers during the course of the implementation of the study (airlines, hotels, per diems ...) by the Consultant and will be considered as reimbursables.

3.5.7 The services of consultants, sitting on the Panel of Experts, estimated at €432 075 will be procured through the DfID's procedures.

3.5.8 Miscellaneous expenditures falling under project management costs and estimated at € 660 870 will be carried out using the existing administrative and/or accounting procedures of the Bank, in the course of the implementation of project management activities (office supplies, airlines, hotels, per diems...), by the Programme Management Team.

3.5.9 For all consultancy contracts whose values are above UA 200,000 (€219,612), the Specific Procurement Notice (SPN) shall be advertised in the United Nations Development Business (UNDB) Online and on the Bank's Website as well as on an electronic portal with free access, selected by the Recipient.

3.5.10 *Procurement Plan:* The Executing Agency shall prepare and submit a Procurement Plan acceptable to the AWF before effectiveness, setting forth: (a) the particular contract for the consulting services, during the life of the study; (b) the proposed mode of procurement; and (c) the related AWF review procedures (prior or post review). The Executing Agency shall update the Procurement Plan annually or as needed throughout the duration of the study. Any revisions proposed to the Procurement Plan shall be furnished to the AWF for its prior approval. The Executing Agency shall implement the Procurement Plan in the manner in which it has been approved by the AWF.

3.6 Payment Arrangements

3.6.1 Payment of the consultant fees will be effected through the Direct Payment Method upon verification and certification of invoices by the PMT, in accordance with the Bank's disbursement rules and procedures.

3.7 Accounting and Audit Arrangements

3.7.1 The Executing Agency shall maintain adequate records to account for the receipt of grant funds and disbursement made in of payments for services rendered by the Consulting firm. The Recipient will equally ensure the custody of supporting documents and the preparation of Project Financial Statements (PFS), ready for audit reviews. The AWF shall arrange for the audit of PFS. Progress Reports shall include financial information.

3.8 Supervision, Monitoring, Evaluation and Reporting Arrangements

3.8.1 The Programme Management Team shall be responsible for the day to day supervision of the consultancy services and for liaising with the consultants to ensure timely production and delivery of the outputs of the study.

3.8.2 The Programme Technical Committee shall ensure the quality of reports/outputs delivered by the Consultants. These reports, prepared at various stages of the assignment, will be reviewed and validated by stakeholder at planned regional and sector workshops. These workshops will ensure that the outputs presented are acceptable before proceeding with further scheduled activities of the study.

3.8.3 Furthermore, the PIDA Programme has built-in a team of five independent Experts who will sit on the Panel of Experts and assist in reviewing the vision and the strategic framework for the infrastructure developments as well as identifying the key issues in each sector. The Panel will also provide high-level peer review of the consultants' outputs at key points in their assignment to help identify any essential issues that might have been overlooked or could be a source of contention.

3.8.4 The Executing Agency shall submit quarterly progress reports to the African Water Facility in a form to be agreed with all partners, and that clearly indicates the level of attainment of results and addresses any discrepancies from the targets set.

3.8.5 The Executing Agency shall prepare and submit a final report of implementation attesting to the completion of the study and showing lessons learnt from implementation.

4 PROJECT BENEFITS

4.1 Effectiveness and Efficiency

4.1.1 The experience and the capacity of the Executing Agency, the AfDB, will ensure that the outputs of the study are effectively attained. This capacity is further complemented in the implementation of the study by the monitoring and control measures included in the study, such as the infrastructure database and the Panel of Experts. The independent panel of highly qualified sector experts will control the quality of the results of the study and thus improve the level of attainment of its objectives. The design of the study includes a methodical diagnosis and analysis of the underlying problems hampering the development of infrastructure in Africa as well as the reaching of consensus on the findings and the proposed strategies to resolve the difficulties. This approach ensures the effective attainment of the objectives of the study in the long run.

4.1.2 The selection method adopted for the procurement of the services of the Consulting firm, which considers only the quality of the consultant leads to the selection of a consultant of the highest quality for the implementation of the study. This strategy is expected to result to an efficient and timely implementation of the study and the achievement of quality outputs.

4.1.3 The subsequent implementation of the recommendations of the study, which aim at improving regional and continental transboundary water resources infrastructure, will increase the economic competitiveness of Africa, water and food security and thereby bring with it great benefits of poverty reduction and improvement of living conditions to the populations of Africa.

4.2 Viability

4.2.1 The financial and human resources required for the successful implementation of the study have already been mobilised to a great extent. This, together with the organisational and management capacity of the Executing Agency as well as the support of the other sponsors of the programme, namely the AUC and the NEPAD secretariat improves the chances of implementing the study successfully.

4.2.2 The participatory approach adopted in the management of the study, jointly by the AUC, the NEPAD Secretariat and the AfDB as well as the requirement to obtain the validation of the results of the study at key stages by the main policy stakeholders of the continent is designed to improve the chances of a successful implementation of the study.

4.3 Sustainability

4.3.1 Measures taken in the study to ameliorate the technical sustainability of the outputs expected from the study include putting emphasis on the quality of the Consulting firm that will implement the sector studies and including a Bank-wide Inter-Departmental Oversight Committee, which is an added control to improve the technical quality of the results of the study for greater sustainability. The institutional sustainability of the outputs and the outcomes of the study are guaranteed by the status of the grant Recipient, the AUC and that of the Executing Agency, the AfDB.

4.3.2 The strategy adopted in the study design to obtain the endorsement and the adoption of the results of the study at the highest level in the continent, namely at the AU and the NEPAD will improve the level of commitment of the continent's leaders to implementing the recommendations of the study. This measure will lead to a high level of achievement of the expected impacts of the study, since the AUC is required to monitor the implementation of the outputs of the study and report regularly to the Heads of State and Government Summit of the AU.

4.3.3 The environmental and social sustainability of the study will be partly ensured by the Executing Agency, which promotes the mainstreaming of environmental and social considerations in all its interventions. The Bank's experts who will review the outputs of the study will ensure environmental and social issues have been adequately addressed in accordance with its well-developed policies and strategies on gender, the environment and climate change. The participatory approach adopted in the monitoring and the implementation of the study, which includes the validation of its results and recommendations by the River and Lake Basin Organisations (R/LBOs) will also improve the environmental and social sustainability of the outputs of the study. The R/LBOs uphold and promote the application of integrated water resources management principles at transboundary level and their contribution will thus improve the sustainability of the outputs of the study.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

5.1.1 The PIDA study will contribute to addressing one of the greatest impediments to the development of Africa, which is the continent's low economic competitiveness, a direct result of

its high infrastructure deficits and low regional integration. Through the study, a continent-wide vision and strategic framework, a prioritized continental infrastructure development programme and implementation strategy, including a Priority Action Plan, will be developed. These strategies and programmes will guide future interactions with Africa's development partners willing to support regional and continental infrastructure development.

5.1.2 The implementation of the transboundary water resources infrastructure projects to be prepared under the Priority Action Plan, such as dam development projects for hydropower generation, irrigation and increased water storage capacity for the continent, will contribute to improve the competitiveness of the continent and the livelihood of its people. The expected impacts of the study include an improvement in the continent's human development index.

5.2 Recommendations

5.2.1 It is recommended that an AWF grant not exceeding € 1 272 011 be extended to the African Union Commission, for the purpose of implementing the study as described in this report, subject to the following specific conditions:

5.2.2 Conditions precedent to entry into force of the Grant Protocol Agreement and First Disbursement:

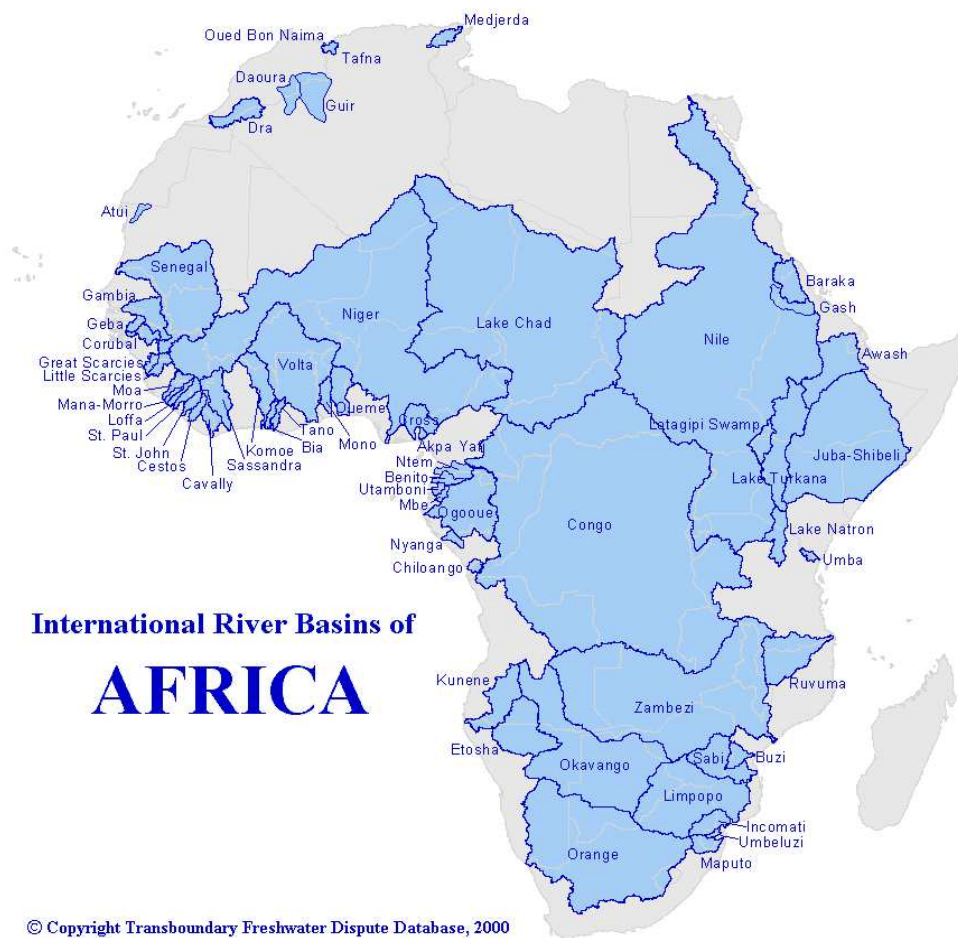
The Grant shall enter into force upon its signature. The First Disbursement of the Grant shall be conditional upon the fulfilment of the following conditions:

The grant Recipient shall provide evidence that:

- a) all the financial resources required for the implementation of the study as presented in this Appraisal Report have been committed by the respective donors;
- b) a Steering Committee chaired by the AUC and comprising representatives of AMCOW, ANBO, the AfDB, the NEPAD Secretariat, RECs and the ECA has been set up (§3.2.3); and
- c) a Technical Committee comprising experts representing the Basin Organisations of each of the 5 sub-regions of the Continent (§3.2.4), the AUC, the NEPAD Secretariat, the ECA and the AfDB as well as resource persons from specialized regional and international institutions selected by the AUC.

ANNEXES

Annex 1: International River Basins Map of Africa



Disclaimer

This map was provided by the African Development Bank exclusively for the use of the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the Bank and its members any judgment concerning the legal status of a territory nor any approval or acceptance of these borders.

Annex 2: Detailed Cost Estimates

	mm = Man-Months; LS=Lumpsum					Sources of Financing (€)				
Item N°	Description	Units	Q'ty	Unit Cost (€)	Total Cost (€)	AWF	N-IPPF /ADF/ IsDB	AUC/EU	NTCF	DfID
	Component 1: <i>Diagnosis, Analysis and Draft Framework & Vision</i>									
1	Programme Leader	mm	4,6	22 259	101 279	35 448	65 831			
2	Institutional and development economist	mm	2,8	16 596	46 469	16 264	30 205			
3	Environmentalist	mm	1,1	16 694	17 529	6 135	11 394			
4	Legal Advisor	mm	1,4	20 990	29 385	10 285	19 100			
5	Infrastructure Economist	mm	2,5	18 061	44 249	15 487	28 762			
6	Monitoring Expert	mm	1,4	17 670	24 739	8 659	16 080			
7	Project Finance Expert	mm	1,8	19 330	33 828	11 840	21 988			
8	Social/Gender Expert	mm	1,1	16 792	17 632	6 171	11 461			
9	Trade / Customs Expert	mm	1,1	19 526	20 502	7 176	13 326			
10	Transport Corridors Expert	mm	1,4	20 355	28 497	-	28 497			
11	Logistics/Multimodal Expert	mm	1,1	19 428	20 399	-	20 399			
12	Leader - Energy	mm	4,2	21 673	91 028	-	91 028			
13	Strategist - Energy	mm	2,5	22 161	54 294	-	54 294			
14	Energy Programme Expert	mm	3,5	18 550	64 923	-	64 923			
15	Energy Model Expert	mm	2,5	18 940	46 403	-	46 403			
16	Leader - Transport	mm	4,2	19 526	82 008	-	82 008			
17	Strategist - Transport	mm	2,1	21 283	44 694	-	44 694			
18	Road Transport Programme Expert	mm	1,4	17 719	24 807	-	24 807			
19	Rail Transport Programme Expert	mm	1,8	18 061	31 607	-	31 607			
20	Sea Transport Programme Expert	mm	1,4	17 573	24 603	-	24 603			

21	Air Transport Programme Expert	mm	1,1	18 159	19 067	-	19 067			
22	Transport Model Expert	mm	1,8	21 380	37 415	-	37 415			
23	Leader Transboundary Water	mm	4,2	18 940	79 548	79 548	-			
24	Strategist Transboundary Water	mm	1,8	18 061	31 607	31 607	-			
25	Hydropower Programme Expert	mm	1,4	17 964	25 149	25 149	-			
26	Transboundary Ground water Prog Expert	mm	1,1	17 964	18 862	18 862	-			
27	Transboundary Water Supply Prog Expert	mm	0,7	17 964	12 575	12 575	-			
28	Transboundary Irrigation Water Prog Expert	mm	1,1	17 964	18 862	18 862	-	-		
29	Transboundary Water Model Expert	mm	1,4	17 573	24 603	24 603	-	-		
30	Leader ICT	mm	4,2	20 502	86 108	-	86 108	-		
31	Strategist ICT	mm	1,4	19 526	27 336	-	27 336	-		
32	ICT Programme Expert	mm	1,8	19 037	33 315	-	33 315	-		
33	ICT Model Expert	mm	1,4	19 526	27 336	-	27 336	-		
34	Support Personnel Pool - Short-term	mm	1,8	18 061	31 607	10 114	21 493			
35	Out-of-pocket Expenses*	LS	0,35	978 438	342 453	109 585	232 868			
36	Miscellaneous Expenses*	LS	0,35	156 714	54 850	15 875	38 975			
	<i>Sub-total Component 1 - Excl Contingency</i>			-	<i>1 719 568</i>	<i>464 244</i>	<i>1 255 324</i>	-	-	-
	Contingency 5% (2% price; 3% physical)	%	5	-	85 978	23 212	62 766	-	-	-
	Sub-Total Component 1			-	1 805 546	487 456	1 318 091	-	-	-
				-						
	Component 2: Draft Strategic Framework, infrastructure development programme and implementation strategy.									
1	Programme Leader	mm	6,5	22 259	144 684	36 171	108 513			

2	Institutional and development economist	mm	4	16 596	66 385	16 596	49 789			
3	Environmentalist	mm	1,5	16 694	25 041	6 260	18 781			
4	Legal Advisor	mm	2	20 990	41 979	10 495	31 484			
5	Infrastructure Economist	mm	3,5	18 061	63 213	15 803	47 410			
6	Monitoring Expert	mm	2	17 670	35 341	8 835	26 506			
7	Project Finance Expert	mm	2,5	19 330	48 326	12 082	36 245			
8	Social/Gender Expert	mm	1,5	16 792	25 189	6 297	18 891			
9	Trade / Customs Expert	mm	1,5	19 526	29 289	7 322	21 966			
10	Transport Corridors Expert	mm	2	20 355	40 710	-	40 710			
11	Logistics/Multimodal Expert	mm	1,5	19 428	29 141	-	29 141			
12	Leader - Energy	mm	6	21 673	130 040	-	130 040			
13	Strategist - Energy	mm	3,5	22 161	77 563	-	77 563			
14	Energy Programme Expert	mm	5	18 550	92 748	-	92 748			
15	Energy Model Expert	mm	3,5	18 940	66 290	-	66 290			
16	Leader - Transport	mm	6	19 526	117 154	-	117 154			
17	Strategist - Transport	mm	3	21 283	63 849	-	63 849			
18	Road Transport Programme Expert	mm	2	17 719	35 438	-	35 438			
19	Rail Transport Programme Expert	mm	2,5	18 061	45 152	-	45 152			
20	Sea Transport Programme Expert	mm	2	17 573	35 147	-	35 147			
21	Air Transport Programme Expert	mm	1,5	18 159	27 239	-	27 239			
22	Transport Model Expert	mm	2,5	21 380	53 450	-	53 450			
23	Leader Transboundary Water	mm	6	18 940	113 640	113 640	-			
24	Strategist Transboundary Water	mm	2,5	18 061	45 152	45 152	-			
25	Hydropower Programme Expert	mm	2	17 964	35 928	35 928	-			
26	Transboundary Ground water Prog Expert	mm	1,5	17 964	26 946	26 946	-			

27	Transboundary Water Supply Prog Expert	mm	1	17 964	17 964	17 964	-			
28	Transboundary Irrigation Water Prog Expert	mm	1,5	17 964	26 946	26 946	-			
29	Transboundary Water Model Expert	mm	2	17 573	35 147	35 147	-			
30	Leader ICT	mm	6	20 502	123 011	-	123 011			
31	Strategist ICT	mm	2	19 526	39 051	-	39 051			
32	ICT Programme Expert	mm	2,5	19 037	47 593	-	47 593			
33	ICT Model Expert	mm	2	19 526	39 051	-	39 051			
34	Support Personnel Pool - Short-term	mm	2,5	18 061	45 152	11 288	33 864			
35	Out-of-pocket Expenses*	LS	0,5	978 438	489 219	122 305	366 914			
36	Miscellaneous Expenses*	LS	0,5	156 714	78 357	19 589	58 768			
	<i>Sub-total Component 2 - Excl Contingency</i>			-	2 456 526	574 766	1 881 760	-	-	-
	Contingency 5% (2% price; 3% physical)	%	5	-	122 826	28 738	94 088	-	-	-
	Sub-Total Component 2			-	2 579 352	603 504	1 975 848	-	-	-
				-						
	Component 3: Securing ownership of the study results by stakeholders.			-						
1	Programme Leader	mm	2	22 259	43 405	10 851	32 554			
2	Institutional and development economist	mm	1,2	16 596	19 915	4 979	14 937			
3	Environmentalist	mm	0,5	16 694	7 512	1 878	5 634			
4	Legal Advisor	mm	0,6	20 990	12 594	3 148	9 445			
5	Infrastructure Economist	mm	1,1	18 061	18 964	4 741	14 223			
6	Monitoring Expert	mm	0,6	17 670	10 602	2 651	7 952			
7	Project Finance Expert	mm	0,8	19 330	14 498	3 624	10 873			
8	Social/Gender Expert	mm	0,5	16 792	7 557	1 889	5 667			
9	Trade / Customs Expert	mm	0,5	19 526	8 787	2 197	6 590			
10	Transport Corridors Expert	mm	0,6	20 355	12 213	-	12 213			
11	Logistics/Multimodal Expert	mm	0,5	19 428	8 742	-	8 742			

12	Leader - Energy	mm	1,8	21 673	39 012	-	39 012			
13	Strategist - Energy	mm	1,1	22 161	23 269	-	23 269			
14	Energy Programme Expert	mm	1,5	18 550	27 824	-	27 824			
15	Energy Model Expert	mm	1,1	18 940	19 887	-	19 887			
16	Leader - Transport	mm	1,8	19 526	35 146	-	35 146			
17	Strategist - Transport	mm	0,9	21 283	19 155	-	19 155			
18	Road Transport Programme Expert	mm	0,6	17 719	10 631	-	10 631			
19	Rail Transport Programme Expert	mm	0,8	18 061	13 546	-	13 546			
20	Sea Transport Programme Expert	mm	0,6	17 573	10 544	-	10 544			
21	Air Transport Programme Expert	mm	0,5	18 159	8 172	-	8 172			
22	Transport Model Expert	mm	0,8	21 380	16 035	-	16 035			
23	Leader Transboundary Water	mm	1,8	18 940	34 092	34 092	-			
24	Strategist Transboundary Water	mm	0,8	18 061	13 546	13 546	-			
25	Hydropower Programme Expert	mm	0,6	17 964	10 778	10 778	-			
26	Transboundary Ground water Prog Expert	mm	0,5	17 964	8 084	8 084	-			
27	Transboundary Water Supply Prog Expert	mm	0,3	17 964	5 389	5 389	-			
28	Transboundary Irrigation Water Prog Expert	mm	0,5	17 964	8 084	8 084	-			
29	Transboundary Water Model Expert	mm	0,6	17 573	10 544	10 544	-			
30	Leader ICT	mm	1,8	20 502	36 903	-	36 903			
31	Strategist ICT	mm	0,6	19 526	11 715	-	11 715			
32	ICT Programme Expert	mm	0,8	19 037	14 278	-	14 278			
33	ICT Model Expert	mm	0,6	19 526	11 715	-	11 715			
34	Support Personnel Pool - Short-term	mm	0,8	18 061	13 546	3 386	10 159			
35	Out-of-pocket Expenses*	LS	0,15	978 438	146 766	36 691	110 074			

36	Miscellaneous Expenses*	LS	0,15	156 714	23 507	5 877	17 630			
	Validation workshops - Sector and Regional	LS	1	634 725	634 725	-	-		634 725	
	Technical Committee Meetings	LS	1	312 808	312 808	-	-	312 808		
	International Panel of Experts	LS	1	411 500	411 500	-	-			411 500
	Africa Infrastructure Database development	LS	1	285 714	285 714	-	-	285 714		
	RBO and ANBO Regional and Continental Meetings*	LS	1	108 132	108 132	-	-	108 132		
	<i>Sub-total Component 3 - Excl Contingency</i>			-	2 489 837	172 430	564 528	706 654	634 725	411 500
	Contingency 5% (2% price; 3% physical)	%	5	-	124 492	8 621	28 226	35 333	31 736	20 575
	Sub-Total Component 3			-	2 614 329	181 051	592 754	741 987	666 461	432 075
				-						
	Component 4: Project Management			-						
	Project Management Team Expenditures	LS	1	629 400	629 400			629 400		
	Editing/Translation	LS	1	91 429	91 429			91 429		
	Auditing Services	LS	1	23 810	23 810		-	23 810		
	<i>Sub-total Component 4 - Excl Contingency</i>				744 638	-	-	744 638	-	-
	Contingency 5% (2% price; 3% physical)	%	5		37 232	-	-	37 232	-	-
	Sub-Total Component 4				781 870	-	-	781 870	-	-
	Total Cost Excluding Contingencies				7 410 569	1 211 439	3 701 612	1 451 292	634 725	411 500
	Contingencies 5% (2% price; 3% physical)		5		370 528	60 572	185 081	72 565	31 736	20 575
	Total Cost Including Contingencies				7 781 097	1 272 011	3 886 693	1 523 857	666 461	432 075
	Percentages (%)				100	16,3	50,0	19,6	8,6	5,6

* See details hereafter

*Technical Committee				
Assumptions				
No of meetings/ sector	3	Duration	1	
Tickets	1500	Per Diem	200	
Contingency	5%	Travel time	3	
Support Staff fees and Sundry and Contingency maintained from MLTSF				
ADB Travel and Per Diem covered by Departmental Funds				
Participants	Energy	Transport	ICT	Water
AUC	1	1	1	1
NEPAD	1			1
ADB				
SI	2	2	2	2
UNECA				
RECs	3	3	3	3
Total persons	7	6	6	7
Travel	10500	9000	9000	10500
Per diem	5600	4800	4800	5600
Support Staff	3000	3000	3000	3000
Sundry	3000	3000	3000	3000
Contingency	1105	990	990	1105
Meeting Total	23205	20790	20790	23205
TOTAL	263970			

*Validation Workshop				
Assumptions	Duration	2	Ticket	1500
	Travel Time	3	Per Diem	200
1 senior person per REC				
Participants	Energy	Transport	ICT	Water
AUC	1	1	1	1
ADB	1	1	1	1
RECs	8	8	8	8
L/RBO				10
SI	2	2	2	2
NEPAD	1	1	1	1
UNECA	1	1	1	1
Total Persons	14	14	14	24
Travel	21000	21000	21000	21000
Per Diem	14000	14000	14000	14000
Support Staff	3000	3000	3000	3000
Sundry	3000	3000	3000	3000
Contingency	2050	2050	2050	2050
Workshop Total	43050	43050	43050	43050
Total	172200			

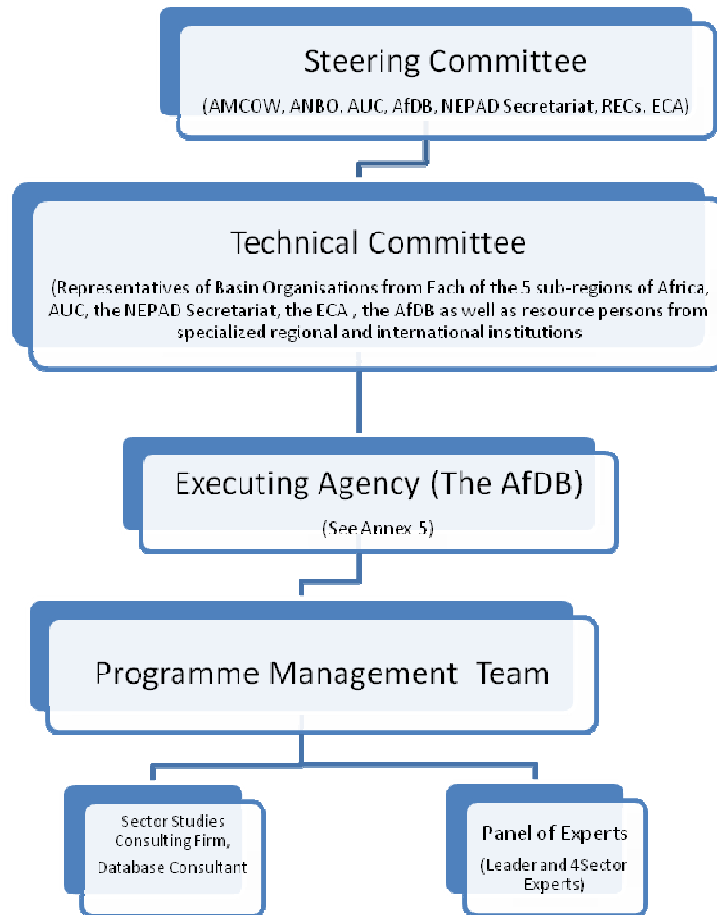
*OUT-OF-POCKET EXPENSES DETAILS					
N°	Nomenclature	Unit	Q'ty	U.Price (€)	Total (€)
1	Return flights between Europe and Tunis	Trip	93	500	46 500
2	Return flights between North - America and Tunis	Trip	30	1 200	36 000
3	Return flights between Europe & Northern half of Africa; and Intra-Africa	Trip	70	1 500	105 000
4	Return flights between Europe & Southern half of Africa	Trip	42	2 000	84 000
5	Housing Allowance for long term experts	month	70	1 000	70 000
6	Per diem Category 1	day	2071	180	372 780
7	Per diem Category 2	day	1069	120	128 280
8	Local Transportation Costs (Rent of cars)	month	14	5 700	79 800
9	Office Rents	month	14	3 000	42 000
10	Clarial Assistance (office support staff)	month	14	4 500	63 000
Total					1 027 360

N°	Nomenclature	Unit	Q'ty	U.Price (€)	Total (€)
1	Office and data processing equipment including software	Lumpsum	1	25 950	25 950
2	Communications costs	month	14	400	5 600
3	Consummables	month	14	500	7 000
4	Vehicle operation	month	14	500	7 000
5	Visas, permits, administrative costs	Lumpsum	1	3 000	3 000
6	Service charge for seminars	Lumpsum	1	60 000	60 000
7	Costs of logistics support in African locations	Lumpsum	1	56 000	56 000
Total					164 550

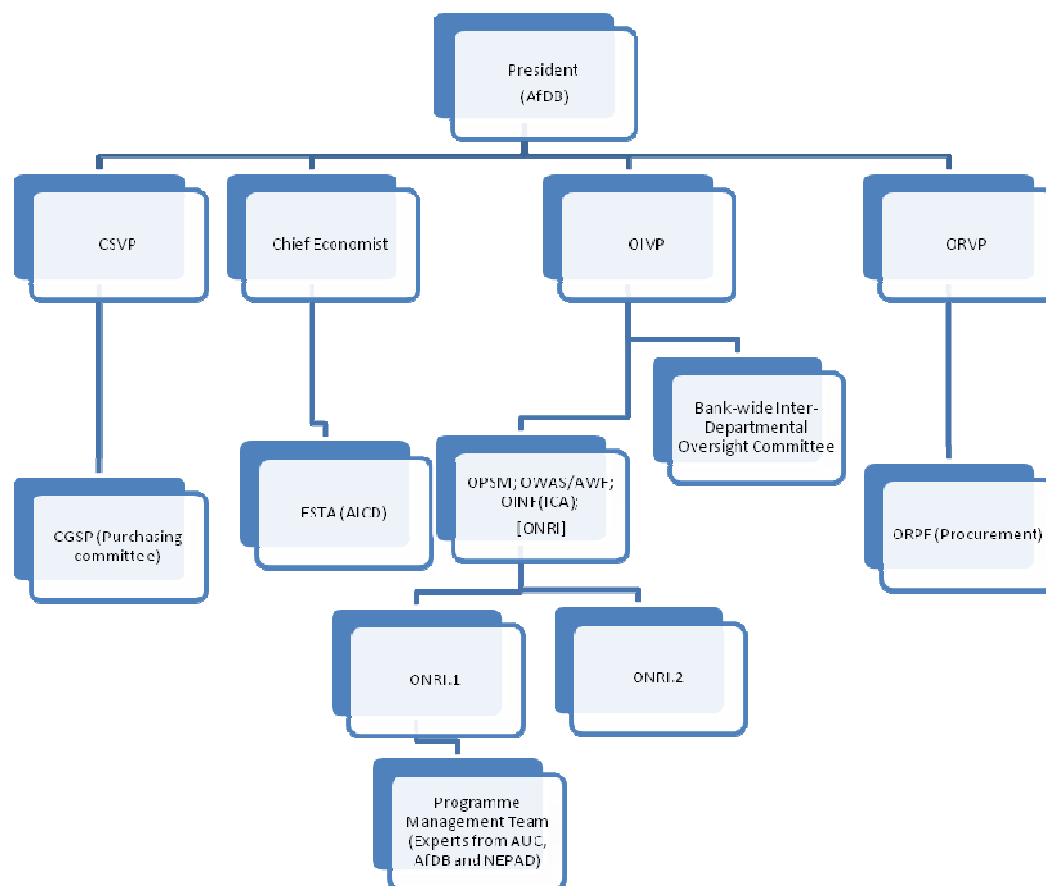
Annex 3: Implementation Schedule

Activity	Duration in months																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
<i>Activities leading up to grant effectiveness and finalisation of Procurement of Consultancy Services</i>	■																				
1.1 Preparation of draft framework and vision paper				■																	
1.2 Carry out reviews and a situation analysis								■													
1.3 Establish an outlook for the future for TWR, analyse choices and prepare outline programme						■															
2. Prepare Draft Strategic Framework, infrastructure development programme and implementation strategy												■									
3.1 Consensus meetings and workshops with stakeholders						■						■							■		
3.2 Review and finalisation of Report on Draft Strategic Framework, infrastructure development programme and implementation strategy															■	■	■	■	■	■	■
3.3 Synthesis and preparation of recommendations																			■		
3.1 High-level meetings with RECs and R/LBO																				■	
3.4 Develop an Africa Infrastructure database to support the implementation and monitoring processes of the study												■									
Panel of Experts Meetings						■						■							■		
4. Project Management Activities	■																				

Annex 4: PIDA Management Structure



ANNEX 5: PIDA EXECUTING AGENCY ORGANIGRAMME



Notes:

AICD	Africa Infrastructure Country Diagnostics Study
CSVP	Institutional Services Vice-presidency
ESTA	Statistics Department
OINF	Infrastructure Department
OIVP	Operations III Vice-Presidency (Infrastructure, Private Sector, Regional Integration)
OINRI	NEPAD and Regional Integration Department
OPSM	Operational Policy and Standards Department
ORVP	Operations I Vice-Presidency (Country Programmes, Regional and Policy)
OSVP	Operations II Vice-Presidency (Sector Operations)
OWAS	Water and Sanitation Department

ANNEX 6: Position of the Legal Department on the Bank's Double Role in PIDA

From: ONEN, STEVEN

Sent: Tuesday, September 22, 2009 11:50 AM

To: TSIKATA, DOTSE

Cc: TADESSE, ALMAZ; WOUDENEH, TEFERA; AJJO, MICAH

Subject: PIDA Project (Use of NEPAD-IPPF and African Water Facility Resources)

Dotse,

On Thursday 17 September 2009 I attended a meeting chaired by Mr. Afrika, at which the above subject was discussed.

There is a financing gap of about Euro 3.8 million for the PIDA project (replacement/successor of the terminated MLTFS project), which is proposed to be filled by financing from the resources of NEPAD-IPPF and the AWF Special Funds. The two Special Funds are managed by the ADB as their trustee. PIDA is a project promoted by the African Union Commission, the NEPAD Secretariat and the ADB. ADB is the Executing Agency for PIDA. The question that the meeting of 17 September requested GECL to examine and advise on is who should be the proper Recipient of the NEPAD-IPPF and AWF grant funds, given that ADB is the trustee of the funds (and therefore the legal grantor) while it is also simultaneously the executing agency for PIDA.

As discussed briefly this morning I have examined the legal instruments establishing both Special Funds as well as the respective Operational Procedures of the funds, and I am satisfied that PIDA as a project would qualify for funding under both Special Funds. Since the Bank is the trustee of the two Special Funds, however, it is important to try and separate the Bank's role as trustee (and therefore the legal donor of the grants) from its function as the executing agency for the PIDA project. Therefore, I would support the suggestion made during last week's meeting that the grants should be made by ADB (as trustee of the Special Funds) to the African Union Commission which would then transfer the grant funds to ADB as executing agency for PIDA. Given the double role that ADB will play in this transaction, the appraisal documentation for the grants should clearly disclose to the approving authorities the fact that ADB will be playing these two separate roles but will act independently and objectively while executing each of the roles. Under the instruments establishing the two Special Funds, supervision of the operations carried out with the resources of the two funds is the exclusive responsibility of the Bank. While this might seem to coincide well with the Bank's role as the executing agency for PIDA, supervision on behalf of the donors to the Special Funds on the one hand, and execution of the PIDA project on behalf of the AU Commission and the NEPAD Secretariat on the other hand, might imply that the Bank would be supervising itself. This explains the importance of full disclosure by the Bank and commitment to independence and objectivity as mentioned above.

Subject to your concurrence, the client departments concerned with this matter would be advised accordingly.

Thank you.

Steven ONEN

ANNEX 7: Transboundary Water Resources Component Terms of Reference

Programme for Infrastructure Development in Africa

(PIDA)

**Sector-specific Terms of Reference for
Transboundary Water Resources Sector**

Prepared by



African Union



African Development Bank Group



NEPAD

ACRONYMS

ADB	African Development Bank
AICD	African Infrastructure Country Diagnostic Study
AMCOW	African Ministers Council on Water
ANBO	African Network of Basin Organizations
AU	African Union
AUC	African Union Commission
AWF	Africa Water Facility
CEN-SAD	Community of the Sahel-Saharan States
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
ECCAS	Economic Community for Central African States
ECOWAS	Economic Community for West African States
FAO	Food & Agriculture Organization
GWP	Global Water Partnership
ICA	Infrastructure Consortium for Africa
IFAD	International Fund for Agriculture Development
IFPRI	International Food Policy Research Institute
IGAD	Intergovernmental Authority for Development
IWMI	International Water Management Institute
IWRM	Integrated Water Resources Management
L/RBO's	Lake and River Basin Organizations
MDGs	Millennium Development Goals
NEPAD	New Partnership for African Development
PIDA	Programme for Infrastructure Development in Africa
PPP	Public Private Partnership
RBO	River Basin Organization
REC	Regional Economic Community
RWSSI	Rural Water Supply and Sanitation Initiative
SADC	Southern African Development Community
SC	Steering Committee
STAP	Short Term Action Plan
TC	Technical Committee
ToR	Terms of Reference
TWRM	Transboundary Water Resources Management
UMA	Maghreb Arab Union
UNECA	United Nations Economic Commission for Africa

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These sector-specific terms of reference for the Transboundary Water Resources sector should be read in conjunction with the General Terms of Reference for the study. These ToRs supplement the General ToRs in terms of certain specific aspects of the study which are more clearly dealt with in a sector-specific document. Similar sector-specific ToRs have been prepared for the other three sectors.

Context of the Study –Transboundary Water Resources Sector

The Transboundary Water Resources Sector in Africa

The Transboundary water resources sector in Africa, covering both surface water and groundwater, presents opportunities for regional cooperation and the development and management of water resources to support national and regional socio-economic development. The sector faces significant contemporary challenges including ensuring water security to support sustainable socio-economic development; mitigating the impacts of and adapting to climate change; mitigating the impacts of variable weather patterns; attaining the water related MDGs; ensuring equity and sustainability in the utilisation of water resources; and ensuring environmental sustainability. The challenges are compounded by water resources being unevenly distributed both temporally and spatially; and the expectation that climate change will have a significant impact on rainfall patterns and the distribution of the resources resulting in higher frequency and intensity of extreme weather events. Additionally, the growing populations, improving living standards and development pressures lead to an overall increase on the demand for water resources. Current levels of water withdrawal are low with 3.8% of water resources developed for water supply, irrigation and hydropower use. Only 7% of Africa's hydropower has been developed while the irrigated areas cover about 6% of the total cultivated land. The average per capita storage in Africa is about 50m³ compared to 3,500m³ per person in Europe, and over 6,000 m³ in USA. It is essential to build the water infrastructure assets and increase water storage capacity in Africa for poverty reduction and sustainable socio-economic development.

Transboundary water resources constitute approximately 80% of Africa's freshwater resources. The basins cover 61% of the surface area in which 77% of the human population live. There are over 60 shared rivers and aquifers demarcated as basins, which sometimes cross REC boundaries. Emphasis is placed on their equitable and sustainable utilization through cooperation among the riparian states to maximize benefit sharing. Cooperation is needed to advance trans-boundary regulation of rivers against floods and droughts, groundwater management and protecting watersheds and wetlands. Cooperation, coupled with trans-boundary benefit-sharing, allows countries to leverage the productive potential of their shared rivers, lakes and aquifers, including locating economic activities where they are most efficient. African governments have responded by creating a number of new Lake and River Basin Organizations (L/RBO), building on the positive experiences on the continent such in the Senegal, Niger and Nile River Basins, and in the SADC region. But more needs to be done in terms of creating new cooperation frameworks and strengthening existing ones.

The centrality of the water sector to socio-economic development cannot be overemphasised. Building on the national focus of the water resources management plans, the development of transboundary water resources is necessary to achieve targets in health, food security, water security, energy, transport, industrial development, education and the fight against HIV and AIDS. Furthermore the largely undeveloped, or sub-optimal (uncoordinated) infrastructure, potentially exposes the economy of riparian countries to water stress and scarcity. Cooperation in the development and management of the shared resources is essential to gain win-win benefits.

The management of transboundary water resources is one of the messages of the shared African Water Vision 2025⁹, "an Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation and the environment". Various initiatives have been launched to contribute to the realisation of the vision and Declarations made by Heads of State and the AMCOW such as the Abuja Ministerial Declaration (2002) on Water - a key to Sustainable Development; the Sirte Declaration (2004) on the challenges of implementing integrated and sustainable development on agriculture and water in Africa; the Declaration of Johannesburg (2007) on water for development and the fight against poverty; the Ministerial Declaration ending the First African Water Week (2008) that focused on "Accelerating Water

⁹ Africa Water Vision 2025 (AU, ADB, ECA, 2000)

Security for socio-economic development of Africa” and the Heads of State Sharm El-Sheikh Commitments for Accelerating the Achievement of Water and Sanitation Goals in Africa (2008). The declarations create awareness; symbolise political commitment and also aim to ensure an enabling regulatory and institutional framework in the management of water resources and implementation of the action plans.

The initiatives include the revised SADC protocol (1998) on shared water resources and management of Transboundary waters; the Nile Basin Initiative (1999); the TIGER Initiative (2002), which is aimed at closing the information gap in the African water sector; the EU Water Initiative (2002), which is a partnership between the EU and African, Caribbean and Pacific Countries; the African Water Facility (2004); the ECOWAS Permanent Framework for Co-ordination and Monitoring of Integrated Water Resources Management (2004); the Rural Water Supply and Sanitation Initiative (2005) and the creation of River Basin Organisations (RBOs), which have an African network. RBOs are agencies for cooperative management and development of water resources.

The RBOs' objectives include ensuring the protection, management and equitable sharing of the water resources in the basin and build on the principles of Integrated Water Resources Management (IWRM). According to the AU's guidelines for establishing a cooperative framework agreement for the integrated management of transboundary basins (2007), the factors that determine the performance and effectiveness of these organisations include the commitment of the riparian states, the focus on socio-economic development, the focus and technical precision of their objectives, the number of states in the basin, the support from external agencies and the emphasis placed on the processes involved in the development of infrastructure beyond mere planning. Some rationalisation is important in the establishment of RBOs particularly as they cross RECs e.g. the Congo Basin. Additionally in the institutional arrangements within the African continent the RBOs and Lake Basin Organisations are encouraged to be members of the African Network of Basin Organisations (ANBO). The ANBO is a technical advisory body of AMCOW on transboundary water management. AMCOW is in turn linked to the AU. In a parallel institutional structure, the RECs are the building blocks of regional integration for the AU. These institutional arrangements present opportunities and challenges in transboundary water resources management.

The initiatives in the water sector relate to other sectors as elaborated by the central role of the water sector in socio-economic development. The different sectors of industry, agriculture, domestic use, energy, navigation, and transport are consequently considered as demand drivers, taking into account other NEPAD initiatives in agriculture - the “Comprehensive Africa Agriculture Development Programme (CAADP)”, NEPAD's energy initiatives to develop fully the energy resources of the continent through regional cooperation and NEPAD's environmental initiative that supports sustainable management of transboundary water resources through capacity enhancement of RECs and countries.

PIDA is preceded by the Short Term Action Plan (STAP). The STAP is a definitive list of ongoing and planned priority projects conceived and formulated by African stakeholders to fast track meaningful development and integration of the continent through renewed partnership with Africa's development partners. The 2002 STAP had 13 Water Sector projects to address five themes: creating an enabling environment for regional cooperation; support to development of national IWRM policies; meeting urgent water needs; improving water wisdom; strengthening the financial base for the desired water future. A recognition of the inadequate knowledge and cooperation on shared water resources issues resulted in a strong recommendation to launch an Action Plan for “Transboundary Water Resources Management” (TWRM) with a strategic goal of strengthening the enabling environment for the effective cooperative management and development of Transboundary water resources and initiation of the implementation of prioritized programmes. A portfolio of 24 projects resulted from the Action Plan mainly focused on selected shared basins namely: Niger and Senegal in West Africa, Nile in Eastern Africa, Congo and Lake Chad in Central Africa and, Zambezi and Okavango in Southern Africa.

The STAP Reviews and studies conducted by other reputable organizations will be part of the literature that will inform the study. The findings from the relevant studies conducted, and related publications by entities such as the IWMI (Transboundary water management), the World Bank (AICD and water security studies) the ADB (RWSSI and meeting MDG targets), GWP (IWRM), the FAO, IFAD and IFPRI (agricultural water use) and the ICA (financing infrastructure), will be beneficial and time saving. Annex I gives an indicative list of sector organisations, and Annex II gives a list of reference documents.

The Scope and Specific Objective of the Study for the Transboundary Water Sector

The transboundary water sector will only be considered to the extent that there are aspects of a regional nature, primarily through links with storage and multipurpose use, agriculture (irrigation), energy (hydro power), transport (lakes and rivers), drought and flooding and environmental management. Water supply and sanitation is considered to be covered within the scope of national and local actions. Issues that are within the scope of national or local level actions will only be considered in as much as the impact of such actions are felt at

transboundary level. In terms of the coverage of water basins, the study will start with the basins covered by the NEPAD¹⁰ STAP.

Within these sub-sectoral limits, the study will cover an assessment of existing policies and strategies relevant for infrastructure development, physical infrastructure, and the regulatory and institutional frameworks to optimise the management of the resources, as well as the outlook for the future. The study also covers the requirements, gaps and justification for the significant investment for the development of the resources and options for maximising shared benefits or minimising costs.

The General ToRs define the scope and objectives of the overall study. Sector-specific objectives to be taken into account in the case of the transboundary water sector include:

- Alignment of the long term perspective with the Africa Water Vision 2025
- Ensuring water security to meet future increases in demand for water and enable the socio-economic development of the regions of the African continent
- Enabling the equitable allocation of water resources among competing water uses for sustainable development
- Equitable sharing of benefits arising from the shared basin resources
- Adapting to and mitigating climate change impacts and variability in weather patterns
- Enhancing regional cooperation by deploying the principles of Integrated Water Resource Management (IWRM) particularly for shared water resources through the L/RBOs and regional water protocols
- Ensuring African Ministers Council of Water (AMCOW) fully supports the outputs
- Environmental protection and management as advocated by IWRM principles.

The initial points of contact for the transboundary water sector are the L/RBOs where an analysis of the existing policies will extend to proposals for their operational optimisation. This will include recommendations on the number of L/RBOs to be created within the horizon provided. The regulatory and institutional aspects emerging from the L/RBOs, particularly the overlap and potential multiplicity of policies, and the national level should be taken into account with regard to harmonization or realignment. A reference framework is expected to be established by the Consultant to promote the harmonisation of the national and regional policies.

The Transboundary Water sector study will follow the key steps set out in the General ToRs. These sector-specific ToRs focus only on the scope of work in Phases I and II of the study. The Inception phase and Phase III are covered in the General ToRs.

Description of tasks under Phases I and II

Phase I : Diagnosis and in depth Analysis

The General ToRs describe the Inception Phase and the kick-off workshop which provide an essential lead-in to the Phase I work. In particular:

- The Consultant will already have made contact with stakeholders to identify the nature and scope of existing information sources, so that gaps that need to be filled can be more precisely identified; and
- The kick-off meeting will have established a vision and macro framework to inform the Consultant's assumptions and projections (see task B.1. below).

¹⁰ Refer to NEPAD STAP for Transboundary Water Resources, NEPAD, ADB, March 2005

The tasks that are described below are not necessarily sequential, and some of the tasks may overlap in terms of timescales.

A. Review and Situation Analysis.

The Consultant shall conduct a two-fold review of: (i) regional and continental transboundary water resources development and management policies and strategies; and (ii) development of regional transboundary water infrastructure (in operation, under implementation or planned), as well as associated services.

A.1. Regional and Continental Policies

This review will be an evaluation of regional policies implemented to date. It will address as precisely as possible the following questions:

- What is the scope of existing regional and continental policies?
- To what extent have the policy objectives been achieved?
- What are the limiting factors that impede the achievement of these objectives?

The work plan will be constituted by two distinct levels of analysis:

- a. **Statement concerning the level of achievement of policy objectives.** The analytical framework should specify (i) the manner in which the Consultant intends to assess the level of achievement of each of the policy objectives (econometric methods, utilization of indicators and other analytical approaches) (ii) indicators used for the evaluation; and (iii) the sources of information and documentation which the Consultant plans to use. In order to facilitate comparative analysis and maintain consistency, selected indicators will also be used in the projection and the establishment of the outlook for the future mentioned below.
- b. **Causal Analysis.** This level of analysis will concern the reasons and factors ('the constraints') which limited the level of achievement of the policy objectives. The Consultant's analytical framework will describe the manner in which the causal analysis will be carried out¹¹. The Consultant's detailed analysis in this evaluation will be informed, among other things, by international references and quantitative data, and illustrated by analyses of specific successful ('success stories') or unsuccessful ('failure stories') measures.

The causal analysis is especially important in identifying the reasons for delays, conflicts and failures. The results of this analysis should feed into both the prioritisation of projects and programmes, and into the implementation strategies and processes. The results of the 'Revision of the AU/NEPAD African Action Plan' study, and the 'Implementation progress review of the NEPAD STAP' study should provide a useful starting point, but the Consultant should build on these and other studies to develop a sound analytical framework that links the causal analysis with the strategic framework and infrastructure development programme. To the extent that the harmonization of regulatory frameworks and administrative procedures, and other "soft interventions", are constraining factors, the Consultant's recommendations and proposals must address these issues.

The output of this task will form part of the Phase I report (see B.3. below).

A.2. Regional infrastructure for Transboundary Water resources

This second part of the review will analyse existing regional and continental infrastructure and associated services, those under implementation and those that are in the pipeline. It will essentially address the following objectives:

- Contribute to the review of regional and continental policies mentioned above;
- Determine the potential for improving the performance of the existing infrastructures for longer term development prospects;
- Assessment and identification of regional infrastructure needs over the longer time frame;

¹¹ The Programme Concept Note provides some methodological indications for reference on a possible analytical framework (annex 1).

- Formulate the measures to be taken to improve the efficiency of implementation of programmes for the development of regional infrastructures; and
- Enrich the Client's information base.

The analysis will be guided by the status of projects considered.

- a. **Existing Infrastructures.** The analysis will partly cover existing regional infrastructures. The Consultant shall take into account and build on existing or ongoing studies, in particular those listed in Annex II. This analysis will aim at : (i) assessing the contribution of these infrastructures to reaching policy objectives; (ii) highlighting how various factors constrain the efficiency of these infrastructures (e.g. the planning and quality of physical infrastructure, the quality of the institutional and regulatory environment, the structure of infrastructure services markets); (iii) determining the potential for improving the efficiency of these infrastructures and the role they could play in the future; and (iv) drawing lessons from the construction and operation of these infrastructures. The infrastructures to be analysed will be chosen so as to respond in the best possible way to the objectives of the proposed analysis; based in particular on the following criteria (i) the potential of the concerned infrastructure to serve as a regional multipurpose water source with relevance to the development prospects mentioned above; and (ii) the representativeness of such infrastructure for the analysis of factors of inefficiency and, consequently, the formulation of corrective measures. The Consultant's proposal will indicate the main infrastructures envisaged for the analysis, as well as the scope and proposed analytical approach.
- b. **Infrastructures under execution or preparation.** The Consultant shall perform the following tasks:
 - b.1. **Making an inventory of all projects under implementation and preparation.** The inventory will be based on documentation provided by the Client and the Consultant's own investigations. The Consultant shall prepare a sheet ('project sheet') for each of the projects using a format that will be agreed upon with the Client during the discussion of the work plan presented in the proposal. For purely illustrative purposes, a sample format (which the Consultant is invited to comment on and review) is presented in Annex III. The Consultant shall submit the project sheets in an electronic medium and in the form of an Excel or Access file, to be agreed with the Client. The Consultant shall also provide a project brief along with the sheets, to be included in the Phase I report, which will: (i) indicate the sources of information and specify, as appropriate, the items of information; and (ii) summarize the situation of all of these projects (costs, nature, regions, status, etc.).
 - b.2. **Detailed analysis of a set of projects.** The objective of this analysis will be to highlight the level of efficiency of implementation of regional infrastructure programmes and the nature of limiting factors. The analysis will cover, among others: (i) the possible gaps between budgets and initial and present schedules; (ii) the factors causing such gaps; (iii) the conditions of coordination and decision-making on the key parameters of these projects (technical structure, planning, budget, role of various stakeholders in implementation); (iv) any other factor that impacted the efficiency of the process of preparation and/or implementation of the infrastructure concerned. This task should thus help learn lessons from the conditions of preparation and implementation of the projects considered. For the execution of this task, the Consultant could consult works conducted on the STAP and the evaluations of its implementation, as well as other ongoing studies mentioned in Annex II. The set of projects will be agreed upon between the Consultant and the Client and should prioritise a minimum of five projects including at least some projects retained as flagship projects in the STAP that are under preparation or implementation.

The output of this task will form part of the Phase I report (see B.3. below).

B. Establishment of the outlook for the future and identification of challenges

The objective of this stage is to establish the outlook for the future for the development of regional transboundary water resources infrastructures by 2030¹² and assess the challenges that the regions and the continent will have to face in the sector. Such an outlook should serve as a basis for the formulation of realistic long-term objectives, to be targeted by policies and programmes at the continental level in order to anchor infrastructure development into regional integration and trade co-operation in Africa.

¹² In view of the long term time frame required for relasing the benefits of transboundary cooperation, the consultant may propose another horizon with justification

The Consultant should consider carefully the extent to which the models already developed by the AICD team can be utilised to establish the outlook for the future. They might, for example, be valuable for developing different outlook scenarios guided by political priorities.

B.1. Establishment of an outlook for the future

Vision: As set out in the General ToRs, the Panel of Experts will present, for discussion at the kick-off workshop, a preliminary draft of a Vision and Framework paper. The purpose of this paper is to provide an initial view of a macro framework, and a vision for regional integration in Africa together with the contribution of each infrastructure sector to this regional integration. The outcome of these discussions¹³ should be used by the Consultant as a starting point for assumptions and projections of the outlook for the future.

Validation workshop: The Consultant's projections of the outlook for the future will take place in two stages. First, the Consultant will develop their parameters and assumptions for the projections, and produce a methodological brief for discussion at a workshop which is expected to take place around 12 weeks after the commencement of work. The Consultant shall deliver their methodological brief a week earlier. The workshop will be organized by the Client and Consultant, and will bring together stakeholders (especially the RECs, L/RBOs and AU specialized institutions/Sector Organizations) and resource persons ('external experts'). The purpose of the workshop will be to discuss the methodological note, and validate the assumptions and parameters to guide the final projections. The second stage will take place after the workshop, and will involve the finalisation of the Consultant's projections for the Phase I report.

Horizons. The projections will be established for the periods 2010-2020 and 2021-2030¹⁴. Year 2007 is envisaged as the reference year, provided that data required for the analysis could be collected in a satisfactory way. In lieu of this, the Consultant may indicate an alternative in their proposal and justify it. Should the work require an analysis of past trends, the period 1998-2007 shall be considered.

The assumptions and methodology: The Consultant shall be particularly cautious in preparing the assumptions for the establishment of the outlook for the development of regional infrastructures, as well as the methodology to be used. The Consultant's methodological brief will analyse the following points:

- a. **The Factors.** The Consultant shall identify and analyse the "dominant" factors that are likely to determine the trends of regional and continental infrastructure supply and demand by 2030 for the definition of basic assumptions and parameters on which the outlook for the future will be established. For example, such factors may include:
 - Endogenous factors such as the development visions, and paths of different parts of the continent, the demand centres associated with the population increases, urbanisation and the socio-economic development based on the exploitation of natural resources and regional integration.
 - Exogenous factors such as emanating from the international discourse on environmental management, international agreements on water resources management, climate change and variable weather patterns.
- b. **Quantified assumptions and parameters** through which the results of the analysis of the aforementioned factors can be reflected.
- c. **Forecast Methodology.** The Consultant shall propose and justify the most appropriate methodology for establishing the outlook for the future. This could be based on the formulation of scenarios, in which case the choice of the scenarios to be retained should be justified in relation to the analysis of trend factors and the study objectives. The Consultant shall describe **precisely** the forecast and analysis models and other tools to be used.

Formulation of the outlook for the future: On the basis of the validated assumptions and parameters, the Consultant shall make projections of potential regional and continental water needs (including the demand centres, volumes required and potential sources for the required resources). The output of this task will form part of the Phase I report (see B.3. below).

¹³ This outcome will either emerge in the form of a consensus between the Panel of Experts, the consultants, and the Client; or, in the event that no consensus emerges, the final decisions will be made by the Client.

¹⁴ Ibid

B.2. Analysis of choices and challenges

The water sources and demand in view of water security. The Consultant will analyse the possible options for sources of water taking into account the demand scenarios based on simulated growth in the various sectors such as agriculture, energy and transport that are directly dependent on the availability of water resources. This analysis will also consider the likely impact of climate variability and changes, and the measures that should be integrated within the framework of the overall solution.

Analysis and assessment of the outlook for the future. The Consultant shall highlight and analyse the compliance of development prospects with policy objectives; analysing possible conflicts, trade-offs and alignments to be carried out between objective priorities of regional transboundary water infrastructure and improvement of the associated services. The Consultant shall carry out a comprehensive economic analysis of the outlook for the future in terms of the volume of investment and the contribution to the development of the regions and the continent.

Objective Setting. The Consultant shall propose a number of realistic objectives that African decision makers could set for their long term regional and continental infrastructure development policies in the transboundary water sector. In so doing the Consultant shall formulate realistic assumptions on the level of resources that could be available for supporting the development of physical assets in the transboundary water sector. These objectives shall be established on the basis of relevant indicators that reflect the outlook for the future and challenges identified in the preceding analysis. In the elaboration of their proposals the Consultant will take into account the objectives of the Africa Water Vision 2025.

The output of this task will form part of the Phase I report (see B.3. below).

B.3. Preparation of an outline programme for the development of regional and continental physical infrastructures

From (i) the review of regional and continental infrastructures and (ii) the formulation of the outlook for the future, the Consultant shall present an outline infrastructure development programme for the development and management of transboundary water resources to the 2030 horizon, in which the following shall be highlighted:

- Investment projects by status (under execution, in current pipeline, new idea);
- Institutional and legal framework (including sector policies) and other soft interventions that are required;
- Relevant implementation stakeholders;
- First cost quantifications and estimated deadlines;
- Specific choice and decision-making issues, in particular regarding projects for which bankability is uncertain

The output of this task, together with the outputs of tasks A.1., A.2., B.1. and B.2, will form the Phase I report, which should be delivered to the Client 20 weeks after the commencement of work.

Phase II: Formulation of a preliminary draft strategic framework, infrastructure development programme, and implementation strategy for the transboundary water sector

The aim of this phase is to help reach, through a sustained participatory and consultative process, and on the basis of previous studies, a consensus on the essential elements of a regional and continental transboundary water resources strategic framework (including sector policies), infrastructure development programme, and implementation strategy and processes. The key issues that should be addressed include (but are not limited to):

- The institutional and regulatory frameworks and their possible harmonization

- How the institutional arrangements within the African continent relate the L/RBOs to the RECs ,and how are they in turn linked to the AU
- The challenges presented by environmental and climate change and possible mitigation measures
- The financing requirement, gaps, mechanisms and options available
- Opportunities available for private sector participation and incentives to stimulate participation
- The availability of human resources
- The allocation of water resources to competing uses and users.

A core component of this phase will be the holding of a series of sector workshops involving all key stakeholders. The aim of the workshops will be to develop proposals based on outlines prepared by the Consultant. The services of the Consultant for this phase are described below.

Preparation and holding of sector workshops

Structure of the workshops. In close collaboration with the Client, the Consultant shall agree the number of workshops to be held, and the organisations to be invited to each workshop. The main workshops will be with the RECs, AMCOW, and L/RBOs, but there may also be a need to consult with other stakeholders at a continental level, such as the NEPAD Head of States and Government Implementation Committee. The Consultant will also advise the Client on measures and programmes most efficiently addressed at continental level.

Preparation of briefs for the workshops. In close collaboration with the Client, the Consultant shall prepare briefs to contribute to the workshop discussions. Such briefs, prepared on the basis of the Phase I report, will be specific to each region. They will include summaries of:

- The conclusions of reviews of regional policies and the implementation of infrastructure development programmes;
- The conclusions of projections of needs in regional transboundary water resources infrastructure and associated services, and an analysis of coherence with sector policies and economic guidelines;
- A set of recommendations aimed at strengthening regional and continental policies on transboundary water resources infrastructure and associated services development and management;
- The issues that should be addressed in the strategic framework for transboundary water resources, both to prioritise projects and programmes, and to ensure successful implementation;
- Outlines of specific regional infrastructure development programmes for transboundary water resources management, including analyses of new projects; and
- Outlines of an implementation strategy and processes.

Briefs for the preparation of the sector workshops will be delivered to the Client 5 weeks after Phase I validation.

Participation in and/or facilitation of workshops. The Consultant shall assist the Client in preparing, organizing and implementing the workshops by:

- Proposing the structures of workshops (notably plenary and regional sessions) and a method of facilitation. Such proposals will be discussed and validated with the Client;
- Preparing the detailed agenda;
- Presenting briefs, and taking part in workshop proceedings, especially by clarifying the assumptions chosen during discussions and further analyses to be made consequently;
- Contributing to workshop proceedings, especially by ensuring that discussions effectively lead to the formulation of conclusions relevant to the strategic framework (including sector policies), infrastructure development programme, and implementation strategy and processes;
- Playing the role of the facilitator and/or advising the Client on such a role in order to structure the conduct of the workshops and summarize the various conclusions.

At the end of the workshops, the Consultant shall prepare a report highlighting: (i) the guidelines formulated by participants on the strategic framework/sector policies, infrastructure development programme, and implementation strategy and processes; (ii) the agreed appropriate levels at which the measures and initiatives should be undertaken: continental or regional; (iii) the interfaces between the regional and continental levels on which to undertake these measures and initiatives (iv) issues on which participants could not reach a consensus, and (v) additional analyses brought forward and necessary for the consolidation of results.

Reports on the sector workshops will be delivered to the Client within 1 week of each workshop being completed.

Formulation of a preliminary draft strategic framework (including sector policies)

The Consultant shall:

- Carry out additional analyses needed to validate assumptions adopted during the workshops;
- Assist the Client to address issues on which agreement was not reached during the workshops;
- Review and if necessary reformulate the strategic objectives and sector policies taking into account the outcome of the workshops;
- Finalize a preliminary draft of an African transboundary water resources strategic framework (including sector policies) on the basis of the guidelines formulated by the workshops and further analyses as necessary;
- Outline the measures and other propositions where a consensus was not reached.

The strategic framework (including sector policies) will provide the basis on which the infrastructure development programme can be developed, as well as addressing the issues relating to successful implementation. The framework should set out clear criteria for prioritising both transboundary water basins and programmes within those basins, having due regard to any existing criteria being applied in the choice of water resources development programmes, or used to prioritize programmes and projects.

The output of this task will form part of the Phase II report.

Formulation of a preliminary draft infrastructure development programme

The preliminary draft infrastructure development programme will be phased into the short term (2010-2015), medium term (2016-2020) and long term (2021-2030). It will include options and their rationale as may be necessary. The programme will stem from the strategic framework (including sector policies), and particularly: (i) the establishment of the outlook for the future, and the identification of strategic objectives and policies for the sector, and (ii) the strategic guidelines and criteria formulated during the workshops, especially for the prioritisation of projects and programmes.

Technical and political processes need to go hand in hand in arriving at agreement on a set of prioritized transboundary water infrastructure projects, based on sound technical and consensus-based proposals. Since the process of identifying, assessing and agreeing on a set of priority projects requires substantial negotiation and buy-in at a political level, the Consultant should carefully consider options for the level of detail that is feasible. One option may be to establish a set of agreed core principles at a continental level, and promote policy development at a regional level.

This task will necessitate the following analyses:

- The coherence of projects and programmes with the policy and strategic objectives of the sector.
- Preliminary assessments of the financial and economic viability of projects/programmes to provide an initial criterion for their prioritisation.
- Refinement of the prioritisation criteria to include other relevant factors including (but not limited to): (i) the contribution of each project/programme to the attainment of objectives; (ii) the stage of development of each programme (according to defined milestones); (iii) an assessment of "soft interventions" such as the difficulties of harmonising regulatory frameworks and administrative procedures; (iv) the prospects for financing.
- Role of stakeholders in programme implementation, together with human resource availability and capacity building requirements..

- The need for complementary policy, institutional, or regulatory measures required to enable efficient and fruitful implementation.
- Potential environmental impact.
- Other risks and challenges to implementation.

The output of this task will form part of the Phase II report.

Formulation of a preliminary draft implementation strategy and processes

The Consultant shall prepare a preliminary draft implementation strategy and processes, based on analyses of the potential barriers to implementation. The successful implementation of the infrastructure development programme will depend on building a consensus among all stakeholders around a realistic platform of measures and projects. The implementation strategy and processes will involve the development of priority measures, resources and tools to support the successful implementation of PIDA, including:

- a. **Priority actions to be undertaken in the period 2010-2015** in terms of both physical investments and associated measures required to secure successful implementation (e.g. policy, institutional, regulatory, financial, legal). This set of actions shall form the Priority Action Plan, which will replace the NEPAD STAP, and should be designed in a form to be a roll-over action plan.
- b. **Respective roles of regional and continental entities and institutions** in the implementation of the Priority Action Plan, and more generally in the preparation and implementation of further investment programmes as well as in the elaboration and application of regional and continental policies. The study will review all institutional arrangements that affect the development and delivery of infrastructure services at the regional and continental levels, and will make recommendations on how they could be modified to improve infrastructure services. The recommendations will draw on the causal analysis undertaken in Phase 1.
- c. How the regional and continental policies, entities and institutions could contribute to resolving **the issue of financing proposed investments and their sustainability**, covering both construction and operation and maintenance of the infrastructure.
- d. **Mobilizing regional and external financing and private sector participation.** The study will address the mobilization of funding within the region, and from development partners and the private sector. The existing situation will be evaluated, and projections made of the likely financial resource envelopes for regional infrastructure projects, based on an analysis of past trends and other relevant factors. It is desirable to produce scenarios of future financial resources within which development projects and programmes can be prioritised. These projections should be based on realistic assumptions, and, as far as possible, innovative ways of finding solutions to these recurrent issues. The Consultant will propose measures likely to help mobilise private sector participation in infrastructure, and strengthen cooperation with international development partners.
- e. **Civil society participation** in the preparation and implementation of proposed measures in terms of policies as well as physical investments. In this context, the Consultant shall propose communication and dissemination measures that regional and continental entities and institutions shall undertake in order to enhance civil society participation.
- f. **Defining an implementation and monitoring process:** This involves proposing to stakeholders, the mechanisms and tools to: (i) review and update over time the strategic framework and infrastructure development programme; and (ii) actively manage the roll-over Priority Action Plan. With respect to the action plan, this will mainly consist of knowing how to initiate and complete an action, as well as how to monitor the progress of the action. This process will include:
 - * **Capacity building:** The formulation of recommendations for the institutional capacity building of continental and regional entities responsible for monitoring, coordinating and managing the implementation of the agreed measures and actions (while implementation of the recommendations will be the direct responsibility of the entities concerned, and will be carried out outside this study).
 - * **Monitoring mechanism.** Starting from the work already done to design the NEPAD Project Management System (NPMS), and the upgrading of this system under MLTSF, the Consultant will assess the adequacy of the present data base as an effective monitoring mechanism, and formulate observations, comments and recommendations on its upgrading to the extent that this

is assessed to be necessary. The final design and implementation of any improved monitoring mechanism will be carried out separately from this study.

The output of this task will form part of the Phase II report. The full report Phase II report will be delivered to the Client 24 weeks after Phase I validation, and will contain:

- Preliminary draft strategic framework (including sector policies)
- Preliminary draft infrastructure development programme
- Preliminary draft implementation strategy and processes.

INDICATIVE LIST OF SECTOR ORGANISATIONS

- | | |
|--------------|---|
| 1. AFUR | African Forum for Utility Regulators |
| 2. AMCOW | African Ministers' Council on Water |
| 3. ANBO | African Network of Basin Organisations |
| 4. CICOS | International Commission of Congo-Oubangui-Sangha Basin |
| 5. GWP | Global Water Partnership (African Chapters) |
| 6. IHA | International Hydropower Association (based in UK) |
| 7. IWMI | International Water Management Institute (Pretoria) |
| 8. LCBC | Lake Chad Basin Commission |
| 9. L/RBO's | Lake / River Basin Organizations |
| 10. NBA | Niger Basin Authority |
| 11. NBI | Nile Basin Initiative |
| 12. OBK | Kagera River Basin Organization |
| 13. OKACOM | Okavango River Basin Commission |
| 14. OMVG | Gambia River Basin Organisation |
| 15. OMVS | Senegal River Basin Organisation |
| 16. ORASECOM | Orange-Senqu River Basin Commission |
| 17. RBO's | River Basin Organizations |
| 18. UNEP | United Nations Environment Programme (Dams and Development Project) |
| 19. VBA | Volta Basin Authority |
| 20. ZAMCOM | Zambezi River Basin Commission |

LIST OF REFERENCE DOCUMENTS

In order to inform the study, the Consultant shall research any other available information on the topic either from institutions working on Africa (RECs, UNECA, World Bank, etc.), from other regions, or from the web.

Documents related to the NEPAD infrastructure programme

- 1 CAADP Documents

Africa Infrastructure Country Diagnosis

The Africa Infrastructure Country Diagnostic (AICD) is a project designed to expand the world's knowledge of physical infrastructure in Africa. AICD will provide a baseline against which future improvements in infrastructure services can be measured, making it possible to monitor the results achieved from donor support.

Background papers

	Date of posting on AICD site
<i>General</i>	
Fiscal costs of infrastructure	
Access, affordability and alternatives (household survey)	February 2008
Unit costs of infrastructure	
<i>Investment Needs Studies</i>	
Irrigation	
Water resources	
<i>State of the Sector Reviews</i>	
Irrigation	
River basin management	Phase II
Urban infrastructure	Phase II
Water resources	March 2008

Working Papers

	Topic	Authors	Date of posting on AICD site
Infrastructure and Growth in Africa	Macro/ Growth	Calderon	February 2008
Making Sense of Sub-Saharan Africa's Infrastructure Endowment: A Benchmarking Approach	Macro/ B'mkg	Yepes/ Pierce/ Foster	February 2008
Building Sector Concerns into Macro-Economic Financial Programming: Lessons from Senegal and Uganda	Macro/ fiscal	Estache/ Munoz	March 2008
Impact of Infrastructure Spending in Sub-Saharan Africa: A CGE Modelling Approach	Macro/ fiscal	Perrault/Savard	March 2008
Fiscal Costs of Infrastructure Provision: A Practitioner's Guide	Macro/ Fiscal	Briceno	
Water Reforms in Senegal: A Micro-Macro Analysis of the Effects on Poverty and Distribution	Water/ Impact	Boccanfuso/ Estache/Savard	March 2008
Impact of Infrastructure Constraints on Firm Productivity in Africa	Micro/ PSD	Escribano/ Guasch	March 2008

Potential for Local Private Finance of Infrastructure in Africa	Finance/PSD	Manroth/ Irving/Carter
Water Tariffs and the Poor: Case Studies from Sub-Saharan Africa	Water/ Poverty	Wodon/Banerjee
Crop Production and Road Connectivity in Sub-Saharan Africa: A Spatial Analysis	Roads/ PSD	Dorosh
The Role of Small Scale Independent Providers of Water in Urban Areas in Sub-Saharan Africa	Water/ SDV	Keener
A Tale of Three Cities: Understanding Differences in Provision of Modern Services	Urban	Gulyani/Talukdar

Web Tools

	Date of posting on AICD site
<i>On-line interactive databases</i>	
Fiscal costs of infrastructure	
Household survey data	
Irrigation sector performance indicators	
River basin management sector performance indicators	Phase II
Urban infrastructure sector performance indicators	Phase II
Water resources sector performance indicators	
<i>On-line interactive simulation models</i>	
Investment needs for irrigation	
Investment needs for power	
Investment needs for water resources	
<i>GIS Africa infrastructure atlas</i>	

Other documents relevant to the Transboundary Water Resources Sector

- 1 Africa Water Vision 2025, AU, ADB, ECA, 2000
- 2 Short Term Action Plan (STAP) analysis & measures to accelerate its implementation, Water Sector,, MLTSF Part I, 2007 (Discussion Paper)
- 3 Infrastructure Development Gap, MLTSF Study Part 1, 2007 (Provisional Document)
- 4 African Water Development Report, UN-Water Africa & AMCOW, 2006
- 5 Transboundary River/ Lake Basin Water Development in Africa: Prospects, Problems and Achievements (UNECA, 2000)
- 6 The Rural Water and Sanitation Initiative Launching Documents (2005)
- 7 TIGER Initiative Strategic Document and Implementation Plan (2005)
- 8 Instrument establishing the Africa Water Facility (2004)
- 9 Africa Environment Outlook – Past present and Future perspectives (UNEP, 2002)
- 10 State of the Environment in Africa (UNECA)
- 11 Reports on Irrigation in Africa (FAO)
- 12 Reports by MDG Task Force on Environmental Sustainability
- 13 Reports by MDG Task Force on Water and Sanitation
- 14 Outcomes and Recommendations of the Pan African Implementation and Partnership Conference (UNECA, 2004)
- 15 Ministerial Declaration of the Hague Conference on Water security in the 21st Century
- 16 Abuja Ministerial Declaration on Water - a key to Sustainable Development in Africa

- 17 Sirte Declaration on the challenges of implementing integrated and sustainable development on agriculture and water in Africa
- 18 Declaration of Johannesburg on water for development and the fight against poverty
- 19 Ministerial Declaration of the First African Water Week 2008
- 20 The EU Water Initiative Launching documents (2002)
- 21 L'Initiative Canadienne (PAWD), Programme for Water Development in Africa (GWP, UNDP 2005)
- 22 G8 Africa Action Plan and Transboundary Water Management
- 23 Guidelines for establishing a cooperative framework agreement for the integrated management of Transboundary basins (AU 2007)
- 24 Sharm El-Sheikh Commitments for Accelerating the Achievement of Water and Sanitation Goals in Africa (2008)
- 25 Dams and Development – A new framework for decision making (2000), World Commission on Dams

Indicative format for project record sheet

1	Project number (according to NPMS referencing system as far as possible)
2	Title
3	Funding requirement - Pre-implementation (USD)
4	Funding requirement - Implementation (USD)
5	Sector (Transboundary Water resources, etc.)
6	NEPAD Priority
7	Beneficiaries
8	Implementation stage (last stage/milestone reached, date, and narrative description)
9	RECs involved (leader and other RECs/other regional organisations involved)
10	Countries
11	Next stages/milestones scheduled dates (incl. Start and end dates)
12	Background
13	Expected Results (outputs, outcomes, impact)
14	Regional significance
15	Project assumptions and risks
16	Role of key players
17	PPP viability
18	Private sector involvement
19	Implementing agency
20	Project type (physical project, capacity building, other soft intervention)
21	Project manager (contact details)
22	Site Manager (contact details)

ANNEX 8: Panel of Experts Terms of Reference

Programme for Infrastructure Development in Africa

(PIDA)

Terms of Reference

Panel of Experts

Prepared by



African Union



African Development Bank Group



NEPAD

ACRONYMS

ADB	African Development Bank
AICD	African Infrastructure Country Diagnostic Study
AU	African Union
AUC	African Union Commission
CEN-SAD	Community of the Sahel-Saharan States
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
ECA	Economic Commission for Africa
ECCAS	Economic Community for Central African States
ECOWAS	Economic Community for West African States
ICT	Information and Communication Technologies
IGAD	Intergovernmental Authority for Development
MDGs	Millennium Development Goals
MLTSF	Medium to Long Term Strategic Framework
NEPAD	New Partnership for African Development
PIDA	Programme for Infrastructure Development in Africa
REC	Regional Economic Community
SADC	Southern African Development Community
SC	Steering Committee
STAP	Short Term Action Plan
TC	Technical Committee
TOR	Terms of Reference
UMA	Maghreb Arab Union

PROGRAMME FOR INFRASTRUCTURE DEVELOPMENT IN AFRICA

TERMS OF REFERENCE FOR THE PANEL OF EXPERTS

A. Context

1. The African Union Commission (AUC), NEPAD Secretariat, and African Development Bank (ADB) are jointly leading an initiative named the Programme for infrastructure development in Africa (PIDA), and are the “programme sponsors”. The overarching **objective of PIDA** is to facilitate increased regional integration in Africa through improved regional and continental infrastructure. More specifically PIDA will:

- (i) Establish a strategic framework for the development of regional and continental infrastructure in four sectors (Energy, Transport, Information and Communication Technologies (ICT), and Transboundary Water Resources), based on a development vision for Africa, strategic objectives and sector policies;
- (ii) Establish a prioritised infrastructure development programme over a time horizon up to 2030 using the strategic framework; and
- (iii) Prepare an implementation strategy and processes, including in particular a priority action plan.

2. **PIDA’s scope** is transport (air, sea, river and lake, lagoon, rail, and road), energy (electricity, gas, petroleum products and renewable energy), ICT, and transboundary water resources (primarily irrigation, hydropower, and lake and rivers transport), and deals with the regional and continental aspects of these sectors only. All national aspects (including physical infrastructure, national policies, institutional and regulatory frameworks, technical standards and benchmarks) will only be considered if they have an impact on, or could be affected by, the regional and continental aspects. The timeframe is up to 2030, phased as follows: 2010-2015 for the short-term and priority action plan, 2016-2020 for the medium-term, and 2021-2030 for the long-term.

3. The **key stakeholders** in PIDA, and their main expectations from PIDA, are:

- **African Heads of State:** who want to have a strategic vision of regional integration in Africa, and how regional and continental infrastructure can contribute to the implementation of this vision to boost economic and social development.
- **Programme sponsors** (i.e. AUC, NEPAD and ADB): who want a strategic framework that will provide a solid base for prioritising, harmonising and implementing effective regional and continental infrastructure projects and programmes.
- **RECs:** who want to have implementable regional projects and programmes that will secure buy-in from their member states, and will contribute to the economic and social development of their region with support from development partners and the private sector.
- **AU specialized institutions and other sector organizations:** which were formed to give advice on issues such as policy formulation, strategy and programming.
- **Development partners:** who want soundly prepared and articulated projects and programmes, that have been prioritised on rational criteria, and have the necessary political support for speedy implementation.

4. PIDA is structured in a way that enables the maximum participation and consultation of the different centres of decision making. PIDA will be implemented by the RECs, working closely with their member states and AU specialized institutions and sector organisations. RECs are therefore the lynchpins in implementation, being responsible for both overall implementation, and securing the cooperation of member states.

5. PIDA is based on a two-pronged approach:

- (i) **Studies and Analyses** to be conducted by a consortium of consultancy firms (the “Consultant”).
- (ii) **Ownership Process** which will include: a consultative process during the main analytical work of the Consultant; followed by a series of high level meetings involving the AUC, NEPAD Secretariat and ADB, aiming to secure ownership of the findings and recommendations of the studies by key regional bodies that will be involved in implementing PIDA (especially the RECs).

6. The work of the Consultant will be conducted in four stages:

(i) **Inception phase:** during which the Consultant will make contact with stakeholders to identify the nature and scope of existing information sources, so that gaps that need to be filled can be more precisely identified. After 6 weeks the Consultant will produce an Inception Report refining their initial proposals for undertaking the assignment. This Report will be discussed at a kick-off workshop to be held a week after the Inception Report is produced. The Panel of Experts will participate in this kick-off workshop (see below).

(ii) **Phase I:** diagnosis and analysis, which will include both a review of the current situation and projections of the outlook for the future. Around 12 weeks into the study, there will be a workshop to discuss and validate the Consultant's parameters and assumptions for their projections, at which the Panel of Experts will again participate.

(iii) **Phase II:** the development of a draft strategic framework/sector policies, infrastructure development programme, and implementation strategy and processes, which will be undertaken in a participatory manner including a series of workshops with key stakeholders. The Panel of Experts will participate in at least some of these workshops.

(iv) **Phase III:** a series of high level meetings to secure ownership of the study's findings and conclusions, followed by the finalization of the Consultant's reports.

7. Further information on both PIDA and the scope of work of the Consultant can be found in the Consultant's TOR that are attached.

B. The Client and Scope of work of the Panel of Experts

8.1 The ADB is the Client and the Executing Agency and is the institution responsible for the contractual, financial and administrative management of PIDA. It is responsible in particular, for procurement procedures, in conformity with its existing regulations, budget management and disbursements.

8.2 The Bank, represented by the NEPAD Division Manager is the single representative of the Programme sponsors, and shall be in charge of relationships with the Consultant for the Sector Studies and Panel of Experts on all matters involving study content.

8.3 The main role of the Panel of Experts is to supplement and complement the work of the Consultant primarily by (i) providing a vision and high level strategic framework for PIDA, together with (ii) high level peer review of the Consultant's main outputs. The experts may also be asked for ad hoc advice on various issues relating to PIDA.

Vision and high level strategic framework

9. The experts will provide a vision and high level strategic framework to establish the context for the Consultant's more detailed work. The services of the Panel of Experts will bring independent perspectives external to programme management and its control organs. These inputs will be provided in the form of papers for discussion at two workshops – the kick-off workshop at the end of the Inception phase, and the Validation workshop in Phase I. The papers will cover :

- A vision for regional integration in Africa, together with the contribution of each infrastructure sector to this regional integration over a time horizon up to 2030.
- The key issues for each of the four sectors in relation to the development of regional and continental infrastructure development in Africa.

10. Issues that might be addressed in the papers include :

- Identification of key issues relating to: regional and continental infrastructure development in Africa for each of the four sectors; the potential contribution of infrastructure to African integration objectives; the constraints encountered in infrastructure development in its integrative role; and any lessons that can be learned from experience in other continents.
- The major factors that are likely to determine Africa's potential needs for regional and continental infrastructure up to 2030, e.g. growth paths, demographics, technological trends, emergence of development poles in Africa and the world, changes in international transport routes, economic trends, impact of climate change.

- The major infrastructure development challenges (regional and continental) in terms of land-locked countries, economic integration, growth, and poverty reduction.
- The challenges that regional and continental African stakeholders must overcome in order to implement a bold regional and continental infrastructure development policy, e.g. enabling environment; financing; budgets and trade-offs between national, regional and continental projects; the role of supranational bodies, sector governance.

11. The papers will be developed in two stages. First, initial views will be provided on: a vision for regional integration in Africa together with a macro framework for the Consultant's projections of the outlook for the future; and identification of the key issues in each sector in relation to the sector's contribution to regional integration. These papers will be prepared in time for discussion at the kick-off workshop. The Consultant will then use the outcome of these discussions in the preparation of parameters and assumptions for their projections, and in their diagnosis and analysis of each sector. The outcome of the kick-off discussions will either emerge in the form of a consensus between the Panel of Experts, the Consultant, and ADB, or, in the event that no consensus emerges, the final decisions will be made by ADB in its capacity as the Client.

12. Following the kick-off workshop, the Panel of Experts will liaise with the Consultant and ADB to identify those areas and issues where further advice and assistance is required from the Panel. Final papers on the vision and high level strategic framework will be presented for discussion at the Validation workshop in Phase I. The Panel will then amend these papers as necessary in the light of comments and decisions made at the Validation workshop.

Peer review

13. The Panel will also provide high level peer review of the Consultant's outputs at key points in the Consultant's study. These peer reviews will focus on issues of substance and methodology, and the key issues treated in the documents. They will seek to enrich the Consultant's work through additional relevant information, and draw attention to points needing closer consideration or further reflection. The Panel will not be expected to make detailed comments on the documents, nor verify the figures contained therein.

14. The documents¹⁵ that will be submitted for peer review will include:

- Methodological brief on the establishment of the outlook for the future;
- Phase I report;
- Briefs for the preparation of sector workshops;
- Phase II report.

15. The expert's comments will be submitted ten (10) calendar days following the receipt of the peer review documents.

16. The Panel will participate in at least some of the Phase II sector workshops that will specify the outlines of infrastructure sector policies and development programmes. Again the purpose is to enrich the discussions. The individual experts may also be asked to help moderate some of the workshop sessions.

C. Expertise required

17. The Panel is expected to comprise five renowned experts, but there may be six depending on the expertise of each. More specifically, the Panel is expected to cover the following areas of expertise:

- A **development economist**, who will be an expert in regional integration, the issues that relate to the development of a strategic vision for successful regional integration, and more specifically how infrastructure can contribute to this vision. African experience is desirable.
- **Four sector experts**, who will all be renowned experts in each of the four sectors included in PIDA. They should have in-depth experience of Africa and of the key issues in their sector of specialism, especially at a regional and continental level.

¹⁵ See the list of deliverables in Section 5 of the Terms of Reference for the Consultant.

D. Service Provision Modalities

18. Each expert will be engaged separately, but the Panel will be expected to work as a team. For the purposes of coordinating the work of the Panel, a team leader will be appointed. The development economist is likely to be the team leader since he/she will have a cross-sectoral role.

19. The ADB has been appointed by the programme sponsors as the Executing Agency for PIDA. In this role the ADB will form a programme management team, led by a programme manager, to coordinate all the activities of PIDA and to supervise the work of both the Consultant and the Panel of Experts. The Panel will therefore report to the programme manager on all matters. Further information on the governance arrangements for PIDA is included in Section 3 of the Consultant's General ToR.

20. The services of the Panel are estimated to require around 200 person-days. Each expert is likely to be required to make three visits for the workshops referred to above.