



THE AFRICA-EU PARTNERSHIP
LE PARTENARIAT AFRIQUE-UE



Technical Assistance to the African Union – Infrastructure Support Mechanism (TA to AU/ISM)

Project No. PANAF/2019/408-347

DRAFT FINAL REPORT

Short-term Mission N^oXX: Name of the ToR

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A project implemented byDT
GLOBAL International Europe



This project is funded by the
European Union

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LISTS OF ACRONYMS

AU	African Union
AUC	African Union Commission
AfDB	African Development Bank
AFCAC	African Civil Aviation Commission
AFD	French Development Agency
AFI	African Indian Ocean Region
AFISNET	AFI Region Satellite Telecommunications Network
AFRAA	African Airlines Association
AMU	Arab Maghreb Union
APIRG	AFI Planning and Implementation Regional Group
ASECNA	Agency for the Safety of Aerial Navigation in Africa and Madagascar
AUDA-NEPAD	African Union Development Agency -NEPAD
BOT	Build – Own - Operate and Transfer
CBN	Continental Business Network
CCI	Cross-cutting Issues
CEN-SAD	Community of Sahel–Saharan States
CIDA	Canadian International Development Agency
CISA	Continental ICT Strategy for Africa
CJEC	Court of Justice of the European Communities
COMESA	Common Market for Eastern and Southern Africa
DCA	Department of Civil Aviation
DIE	Department of Infrastructure and Energy
EAC	East African Community
ECA	United Nations Economic Commission for Africa
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
ECGD	Export Credits Guaranteed Department
EDF	European Development Fund

EES	European Economic Space
EGNOS	European Geostationary Navigation Overlay Service
EIB	European Investment Bank
EU	European Union
EUD	European Union Delegation
EUEI PDF	European Union Energy Initiative Partnership Dialogue Facility
FIR	Flight Information Region
FTAA	Free Trade Area of the Americas
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDS	Global Distribution Systems
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
IATA	International Air Transport Association
IBRD	International Bank for Reconstruction and Development
ICAO	International Civil Aviation Organization
ICC	International Chamber of Commerce
ICT	Information Communications Technology
IDA	International Development Association
IFC	International Financial Corporation
IGAD	Intergovernmental Authority on Development
IOSA	IATA Operational Safety Audit
ISM	Infrastructure Support Mechanism
IsDB	Islamic Development Bank
JAES	Joint Africa EU Strategy
JAES SM	Joint Africa EU Strategy Support Mechanism
KE	Key Expert
M&E	Monitoring and Evaluation
MAG	Multi-stakeholder Advisory Group
MFN	Most Favoured Nation Clause

NEPAD	New Partnership for Africa's Development
NKE	Non-Key Expert
OCDE	Organization for Economic Cooperation and Development
ODA	Overseas Development Administration (Great Britain)
OECD	Overseas Economic Cooperation Fund (Japan)
PANAF	Pan African Programme
PIDA	Programme for Infrastructure Development for Africa
PIDA MTR	PIDA Mid-Term Review
PIDA PAP	PIDA Priority Action Plan
PPF	Project Preparation Facility
PPP	Public Private Partnership
PQL	PIDA Quality Label
REC	Regional Economic Communities
RGI	Reference Group on Infrastructure
SAATM	Single African Air Transport Market
SADC	Southern African Development Community
SAP	Structural Adjustment Program
SDF	Saudi Development Fund
SDG	Sustainable Development Goal
SDM	Service Delivery Mechanism
SIDA	Swedish International Development Authority
STE	Short Term Expert
TA	Technical Assistance
TAF	Technical Assistance Facility
ToR	Term of Reference
TA to AU/ISM	Technical Assistance to the African Union / Infrastructure Support Mechanism
TAT	Technical Assistance Team
UACC	Upper Area Control Centres
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program

UNECA	United Nation Economic Commission for Africa
UNTACDA	United Nations Transport and Communication Decade in Africa
USTDA	US Trade and Development Agency
WAEMU	West African Economic and Monetary Union
WTO	World Tourism Organization
WTO	World Trade Organization
YD	Yamoussoukro Decision

1. Mission framework

PIDA-PAP2 envisages to package infrastructure projects for possible financing under various modalities. The infrastructure sectors include ICT, transport, transboundary water, and energy. Lack of road safety, low spatial railway density, poor and expensive air transport infrastructure and poorly equipped ports call for due investments to bring these transport modalities to acceptable standards. The investments pursue development corridor approach. The investments are spread over all regional economic communities (RECs). The infrastructure investment projects are expected to alleviate poverty, promote trade, and encourage connectivity and ultimate result in the realization of an economic integration in 2063.

The overall objective of the assignment is to help improving access to integrated regional and continental infrastructure networks in the fields of transboundary water. The purpose of the assignment is enhance policy dialogue and support coordination and cooperation between the AU and the EU within a continent-wide infrastructure approach, by aligning programming strategies to create the regional infrastructure promoting continental interconnection with an adequate properly identified, selected and prioritized, project pipeline.

The main objective of the assignment is to hire to provide water resources expertise to the PIDA PAP 2 process taking place during the course 2020-2021. This will be achieved through a combination of response to queries by emails and coaching to the regional PIDA PAP 2 project developers at the level of the RECs and their constituent Member States (MS), technical contribution in the implementation strategy and some on-going activities within the department.

The scope of the work is illustrated hereunder:

- contribute to the PIDA project preparation, selection and screening processes in support of the ISM-TA mandate, the development of the PIDA PAP 2 implementation strategy
- Participation in and contribution to the specific sectoral aspects of the PIDA PAP 2 by providing assistance to Member states and RECs to improve the quality of projects and alignment with PIDA PAP2 criteria.
- Effective participation in the PIDA PAP 2 project screening and selection processes by responding to specific request made by Task force members and partner Institutions
- Inputs on Water component of the PIDA Market and Demand Study
- Advise and Assist in the implementation of PIDA Mid-Term Review recommendations
- Identification of key sectorial activities from the STC Action plans and their implementation
- Contribution in the organisation of PIDA PAP 2 workshops and meetings: conceptualisation, active participation, and reporting

Expected results of the assignment are:

- Contribution to the specific sectoral aspects of the PIDA PAP 2 by providing assistance to Member states and RECs to improve the quality of projects and alignment with PIDA PAP 2 criteria.
- Effective participation in the PIDA PAP 2 project screening and selection processes by responding to specific request made by Task force members and partner Institutions
- Inputs on Water component of the PIDA Market and Demand Study

- Advise and Assist in the implementation of PIDA Mid-Term Review recommendations
- Identification of key sectorial activities from the STC Action plans and their implementation
- Contribution in the organisation of PIDA PAP 2 workshops and meetings
- A draft final report on the assignment.
- A final report.

The duration of the assignment is forty working days. It is stated that the assignment will be based in Addis Ababa, Ethiopia. However, the assignment has been carried out from home due to the COVID-19 virus pandemic.

The term of reference is attached in Annex 1.

2. Data on stakeholders and beneficiaries

The direct beneficiaries are the Department of Infrastructure and Energy, African Union Commission (AUC), AUA-NEPAD, RECs and MS. The African Union headquarter is in Addis Ababa, The Federal Democratic Republic of Ethiopia. The Constitutive Act of African Union was adopted on 11th July 2000 in Lome, Togo. Specialised Technical Committees have been established according to Article 14 of the Constitutive Act of African Union which includes transport and communications and energy committees. The function of transport and communications committee includes preparation of projects and programmes, coordination and harmonisation, follow up of projects implementation, and submit reports to the Council on the implementation of the projects and programmes. AUA-NEPAD is the African Union agency for development which is based in South Africa. AUA-NEPAD works closely with African Union in implementing PIDA programmes and other programmes.

The African Union recognises eight regional economic communities which are Arab Maghreb Union (AMU), Common Market for Eastern and Southern Africa (COMESA), Community of Sahel and Saharan States (CEN-SAD), East Africa Community (EAC), Economic Community for Central African States (ECCAS), Economic Community of Western African States (ECOWAS), Inter-Governmental Authority Development (IGAD) and Southern Africa Development Community (SADC). The RECs mandate is to develop the ICT and enhance the cooperation, coordination and harmonisation of the ICT policy and regulatory framework in line with their establishing agreements and treaties. RECs work closely with the African Union and development partner such as European Union, African Development Bank (AfDB), World Bank, European Investment Bank and German Development Bank. The table below gives more details about RECs. The policy organs of the RECs include the summit of Heads of States and Governments, Council of Ministers, and other ministerial and technical committees. Each REC has a Secretariat headed by an Executive Secretary appointed by the Council of Ministers. The Council of Ministers manage all the REC programmes and activity through the Secretariat including its budget. Table1 shows information on the regional economic communities (RECs).

Table 1: Details on RECs and their mandate

REC	Place of HQ	Number of Member States	Legal basis for Decision /Directive / Regulation
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AMU	Rabat, Morocco	5	Article three of the treaty establishing AMU
COMESA	Lusaka, Zambia	19	ARTICLE 8, The Authority decisions and directive are binding on all Member States and other organs. In Article 9, the regulations, directives and decisions of the Council of Ministers taken shall be binding on the member States.
CEN-SAD	Tripoli, Libya	29	
EAC	Arusha, Tanzania	6	MSs obligations are to develop harmonised standards and regulatory laws, rules, procedures and practices as stated in article 89. According to articles 11 and 14 of the Treaty establishing EAC, The Summit of Heads of State and Government and the Executive Council adopts regulations, directives and decisions
ECCAS	Libreville Gabon	• 10	According to articles 11 and 15 of the establishing treaty the Conference of Heads of State and Government and the Council of Ministers have a decision power The General Assembly adopts decisions and directives and the Council adopts regulations.
ECOWAS	Abuja, Nigeria	15	ECOWAS Treaty calls for the harmonisation and co-ordination of national policies and the promotion of integration programmes as in article 3. The Authority makes binding decisions on MSs while the Council of Ministers makes binding regulations according to articles 9 and 12 respectively. The decisions and regulations shall automatically enter into force sixty (60) days after the date of their publication in the Official Journal of the Community. Article 32 calls on having common policies, laws and regulations.
IGAD	Djibouti, Republic of Djibouti	8	According to articles 10 and 11 of IGAD establishing agreement the Authority can make decisions and directive and also the Council of Ministers
SADC	Gaborone, Botswana	16	The Summit of Heads of State and Government, the Council of Ministers and the Integrated Committee of Ministers have a decision-making power. The Authority decisions are binding according to article 10.

There are fifty four African countries who are members of the African Union. In each African country there is a ministry responsible for the development of Water Resources, Irrigation and

Energy. Moreover, most of the member countries established river basin organisations, catchment boards etc in line with IWRM principles to manage the water resources.

The African Development bank identified eighty international river basins and 38 transboundary groundwater aquifer basins. The transboundary river basins include among others Congo river basin, Gambia river basin, Icomaputo river basin, Juba-Shabelle river basin, Komati river basin, Kunene River basin, Lake Chad River Basin, Lake Victoria river basin, Limpopo River basin, Niger River basin, Nile river basin, Okavango River Basin, Orange river basin, Ruvuma River Basin, Senegal River basin, Volta River Basin and Zambezi river basin. The relation of RECs and River Basin Organisation is horizontal, and they cooperate on identification and financing of water resources projects.

The General arrangement of institutes responsible for the management of water resources in any give country was discussed in the harmonization of legal framework and policies of transboundary water during the course of undertaking this consultancy and is illustrated hereunder.

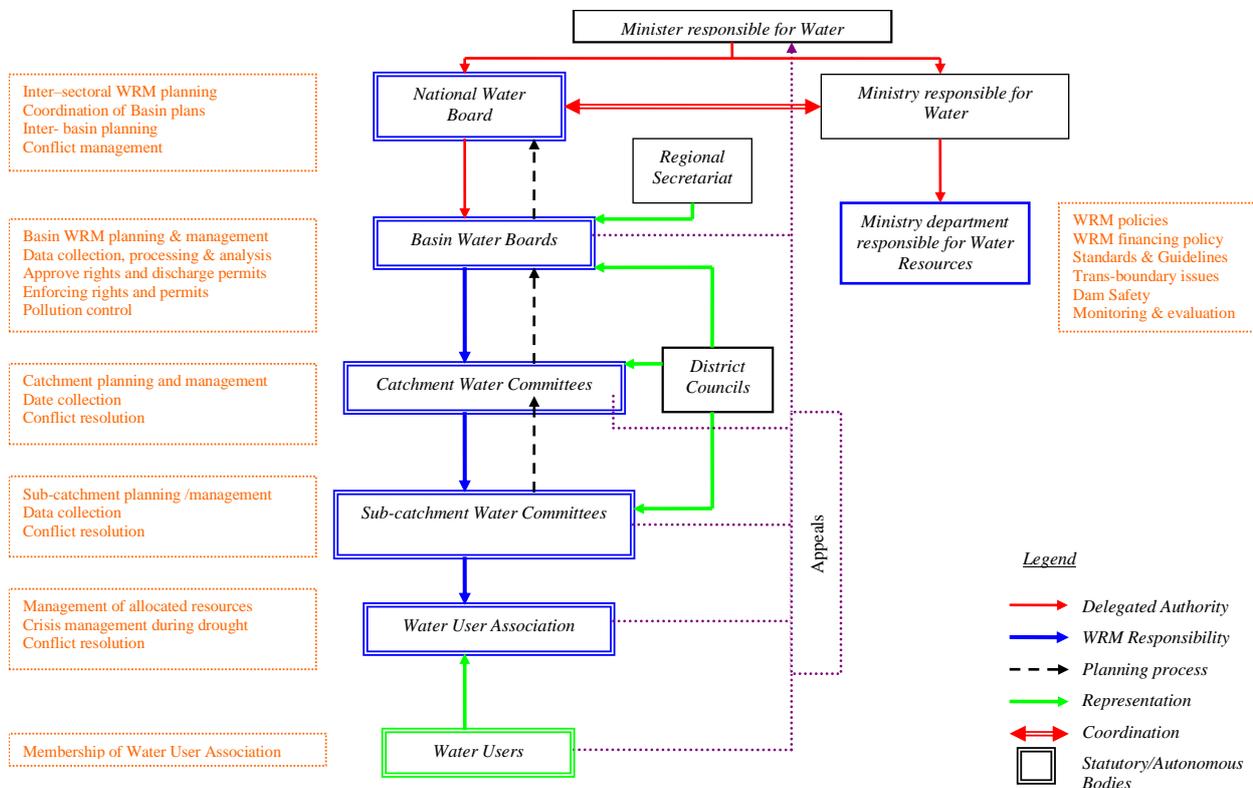


Figure 1 Sample Institutional Framework in any african country for management of Water Resources

European Union is the main partner for the African Union and its Member States for development. EU has regional and continental support as well as has a national envelope support according to the agreements signed between them. EU currently is implementing the 11 EDF which followed the implementation of the 10 EDF. The European Development fund covers all the economic sectors including infrastructure and peace and security. The German development agency (GIZ) also works with African countries by providing technical and financial support. GIZ is currently supporting PIDA.

The African Development Bank is a partner to African Union and its member States. It is formed by African countries and they have shares in it. Its main objective is to contribute and promote

the African countries economic and social development and regional integration. AfDB works with AUC, AUA-NEPAD, RECs and Member States in developing infrastructure especially water resources through African Water Facility. It had Water resources projects and programmes with a number of line ministries and river basin organisations. AfDB also has projects on trade, statistics, regional integration and other economic sectors. It has established facilities to fast track the development such as NEPAD-IPPF, ICA and private sector investment window.

3. Mission specific context

During the mission , the main activities include among others:

- Reviewed MTR and MDS Working Papers;
- Contribution to TAT Working Paper on “The Harmonization of Regional and Continental Infrastructure Regulatory Frameworks” ;
- Participation in PIDA thematic webinars;
- Project screening;
- Estimation of number of Jobs for projects which are shortlisted using Job Creation Tool;
- Prepare a report on harmonization of water policies and regulatory frameworks and
- Contribution to AfcFTA working paper.

The venue for the assignment was in Addis Ababa but the consultant never visited the AU premises as the Consultant was working from home. The medium of communication were e-mail messages, whatsapp messages, and zoom meetings.

The consultant had the privilege of reviewing and commenting on various outputs from Consultants procured by the Client which include MDS papers and financing infrastructure. The consultant attended a number of webinars on various issues. The expert studied, analysed and reviewed the work done in the development of the PIDA PAP 2 which included selection criteria, screening and identifications of projects, market and demand study, financing plan and implementation strategy as well as responded to queries from MSs, RECs and taskforce members. Secondly, the consultant responded to queries from regional economic communities (RECs) and their Member States (MSs) related to the project’s development and alignment. There was discussion on projects identification, selection, and screening process, MDS, financing of infrastructure and implementation strategy with AUC, AUDA-NEPAD, AfDB and RECs.

NKE stakeholders webinar meetings have enhanced the team work spirit which impacted positively on the quality of the deliverables. There was challenge on the quality of internet services at times. The COVID-19 pandemic did not allow face-to-face meetings.

4. Activities description

The NKE water expert reviewed a number of documents/presentations forwarded to him by the Team Leader. These include:

- ISM – Terms of Reference.
- Opportunities and Challenges in Transboundary Water Infrastructure Financing.

- Progress on the commitments of the 2008 Heads of State Summit on Water and Sanitation
- Kigali Action Plan on Accelerating Water and Sanitation Goals.
- Raising the Profile of Water in the JAES;
- Framework for Irrigation Development and Agricultural Water Management in the context of PIDA transboundary water infrastructure.
- PIDA-PAP 2 Sectoral Webinar on Transboundary Water Infrastructure.
- Implementation of Transboundary Water in the PIDA: Experiences, lessons and challenges.
- Working paper 1 - Current Infrastructure landscape; and
- Working Paper 2 - Demand Modelling and Analysis

The NKE Water expert participated in various virtual meetings the list of which is give hereunder:

S/N	Date	Theme
1	9 th of May, 2020	Interview
2	19 th of May, 2020	Q&A session dedicated to ENGLISH SPEAKING focal points
3	20 th of May, 2020	Regional Session with ECOWAS members
4	21 st of May, 2020	Thematic Session on the water sector PART II
5	29 th of May, 2020	Meeting of the NKE Water Expert with PIDA PAP2 task force
6	2 nd of June, 2020	Regional Session for IGAD on presentation of IRIMP
7	2 nd of June, 2020	Regional Session for French speaking countries of the Northern Region
8	3 rd of June, 2020	Regional Session for SADC member states
9	4 th of June 2020	Regional Session for English Speaking countries of the Northern Region
10	9 th of June, 2020	Thematic session on financing PIDA PAP2 projects

The NKE Water Expert also familiarised himself with the user interface of PIDA PAP 2 project submission portal. The expert also commented on four of the transboundary water resources projects submitted.

The NKE Water Expert was given a task to provide an assistance on Harmonization of Regional and Continental Policies and programmes across the four PIDA sectors. The NKE water expert prepared and submitted a concept paper on the theme and elaborated on river basins, IWRM, cross cutting issues and challenges in the transboundary water sector, Based on this concept, the NKE Water expert is now preparing a report on Harmonization of Regional and Continental Water Policies.

The NKE Water expert provided comments on working paper 1 which narrates the current infrastructure landscape especially the transboundary water section. He also put forth comments on Working Paper 3 – Demand Modelling and Analysis relevant to his expertise on water supply demand forecasting and cereal production projection.

The NKE water expert has been now introduced to the focal points of the RECs. The focal points have started requesting support in the preparation of projects for PIDA PAP 2 submission. Mr. Fred of IGAD sent four projects requesting for assistance in the preparation of transboundary water projects. LCBC focal point also sent four projects and the expert went through these

projects and provided his comments. CIC also submitted one project to which a comment has been provided.

The Consultant provided support to IGAD in preparation of Project Portfolio for four projects and submitted them on PIDA-PAP 2 portal. The expert provided support to Lake Chad basin in preparation of Project portfolio and gave them guidance in collaboration with AUDA-NEPAD expert. The expert provided support to CIC in delivering project portfolio to PIDA PAP2.

The activities carried out have been summarised in table 2 below.

Table 2: Activities carried out

Activity carried out	Implementation	Expected results	Beneficiaries	Comments
Projects alignment with the evaluation criteria and missing information	<ul style="list-style-type: none"> - inputs during the presentation of projects by RECs and MSs such as -Online comments on the projects improvement and missing information 	Support Member States and RECs to improve the quality of projects and alignment	<ul style="list-style-type: none"> -AMU to submit ICT projects -EAC to complete Rwanda project missing information -ECCAS -Kenya -Sudan 	Delivered
Projects screening and selection process including estimation of jobs created by each projects	<ul style="list-style-type: none"> -Active participation during the presentation of projects by RECs and MSs by region -Identification of missing information to suit the evaluation criteria -classification of projects into soft and physical ones. -screening, reviewing and estimating the financing information for each project for job creation - Job evaluation for each project -Liaising with AUC, SADC, Nigeria and Sudan on RIXP, Data centres and submarine cables job creation -Prepare and submit job creation and evaluation report to taskforce 	Effective participation in the PIDA PAP 2 project screening and selection processes by responding to specific request made by Task force members and partner Institutions	AUC , AUDA-NEPAD, RECs and MSs	Delivered
Support to PIDA MDS	<ul style="list-style-type: none"> - Active participation in the webinar meeting on MDS-demand forecast 	Contribution to ICT component of the PIDA Market and Demand Study	AUC and AUDA-NEPAD	Delivered

	-Comments on MDS papers - Comments on MDS report1 -paper on ICT demand forecast			
Support to MTR	Comments on the MTR	Advise in the implementation of PIDA Mid-Term Review recommendations	AUC and AUDA-NEPAD	Delivered
Implementation of STC action plan	-Input to the paper on corona virus input -Digitalisation paper and smart integrated infrastructure	Identification of key sectorial activities from the STC Action plans and their implementation	AUC and AUDA-NEPAD	Delivered
<ul style="list-style-type: none"> Support to PIDA PAP2 meetings and workshops 	<ul style="list-style-type: none"> -Participation with effective contribution during webinar meetings on financing infrastructure, MDS, digitalisation, projects discussion by regions and job creation and evaluation. -I made presentation for the digitalisation webinar meeting <ul style="list-style-type: none"> -effective participation in the final workshop 	Contribution in the organisation of PIDA PAP 2 workshops and meetings: conceptualisation, active participation and reporting	<ul style="list-style-type: none"> RECs, MSs, AUC, AUDA-NEPAD 	<ul style="list-style-type: none"> Delivered

I participated in the PIDA continental validation workshops which held on 5th November 2020. The objective of the workshop is to present the results and projects priority list to Member States and RECs focal points. The workshop will validate the prioritized list of projects.

There are more details on the major activities which are as follows:

4.1 REVIEW OF PIDA MTR

The mid-term review of PIDA PAP Phase 1 gave insight into the coverage of transboundary water projects during the same phase. Only nine projects were submitted during phase 1 and it was difficult to a robust interpretation of the effectiveness of PIDA PAP 1 interventions. In order to increase the number of TWR projects in the PIDA PAP process, an MoU was signed between the AUDA/NEPAD and the GWP Southern Africa Office to improve the delivery of projects in the TWR sector. Moreover, the current consultant was hired to assist RECs, River Basin Organisations etc in the delivery of TWR projects.

MTR report highlighted challenges related to TWR projects. One among them is the reluctance to charge full costs of management. O&M of the infrastructure and costs for delivery. Which are critical conditions for bankable investments in water. It was also reported that it is a challenge to establish PPP, as the investors associate and perceive water development with higher political risk.

The highest risk posing sustainability issue to TWR projects has been identified to be climate change. Moreover, population increase, land degradation and urbanization also lead encroachment of highly critical catchments, lakes and river systems.

Five projects are found to viable for funding. These projects are at various level of development from prefeasibility to project financing.

4.2 PIDA MARKET DEMAND STUDY

Paper 2: Demand Modelling and analysis

As stated in the paper the main objective of this Working Paper is to project the overall continental infrastructure demand (by sector) for the years 2020-2030. The scenarios for the modelling are determined based on economic growth and urbanization analysis, growth poles, and demand centres, taking into consideration key continental policies, initiatives, and trends, among others, as well as views and opinions gained from key stakeholders. The data used is from 2006 to 2016. It is better to use data from 2010 up to 2018.

The TWR Infrastructures are characterised by multipurpose dams, irrigation projects and inland river /water ports. The distribution of these infrastructures in Central, East, North, Southern and Northern Africa are discussed in the report. Currently, 1605 large multipurpose dams, 59 inland ports and more than 73 million hectares of irrigation exist in Africa as per the report. The trend in investment on TWR infrastructures is influenced by climate change and demographic pressure. PIDA responds to these challenges by planning various projects such as multipurpose dams, water transfer projects etc. Demand for TWR infrastructure has been forecasted using regression models in such way that water consumption and cereal consumption outlook for 2030 was computed. The assumption is that water consumption will increase by 3.2% annually until 2030 and cereal consumption will also grown by 6.2% annually. Under climate change scenario, the water consumption will increase by 3.4% whereas cereal consumption increases by 6.5% annually. As per these assertions, the infrastructure investment needs were computed. The irrigation investment needs to meet cereal consumption varies from 3.4 Billion USD to 5.5 Billion USD whereas the water supply investment needs vary from 32.9 Million USD to 56.5 Million USD.

4.3 WORKING PAPER 4: CAPACITY ASSESSMENT AND CAPACITY BUILDING

The aim of the paper is to assess the project delivery performance of implementing agencies through the project cycle, map capacity/skills gaps, and assess the extent to which the four key outcomes of PIDA-PAP are achieved.

The paper stated the project implementation phases as planning, development, financing, contracting, implementation and monitoring. It defined the roles of the stakeholders and proposed capacity building activities for each phase.

Training activities in PIDA PAP 1 were organized for member states stakeholders such as the training for the Zambia-Tanzania-Kenya electricity interconnectors (ZTK).

It is important that the capacity building activities focuses on AUDA-NEOAD, RECs and MSs. More activities can be proposed such as risk management and mitigations for all member states especially the countries coming out of war where they can use Africa Trade Insurance (ATI) for insuring policy risk.

The paper has not taken into account capacity building for enabling environment which is very important for easing the process of implementation and attracting investors

It is important that the main objectives of the capacity building programme to implement the projects efficiently and effectively as well as ensuring transfer of technology and knowledge to the nationals. The cost of infrastructure development in Africa is very high compared with other continents. Infrastructure materials and labour are imported which raise the cost of infrastructure development. The transfer of technology and knowledge will assist in smooth implementation with minimum cost and ensure efficient and effective operation and management of infrastructure which will increase the project life-cycle and ensure sustainability. Therefore, it is essential to ensure technology transfer by participating in the project implementations and by training events. Such capacity building activities should include engineering SMEs and consulting firms as well as the project main stakeholders.

4.4 IMPLEMENTATION RISKS AND MITIGATION STRATEGY

TWR Projects requires right of way, permission and may be compensation for some people affected by the space taken up for the construction of dams , irrigation plots etc. Regulations are required to facilitate obtaining these permissions without causing major delay for the project construction. It is recommendable to provide examples of good enabling environment for projects development and operation.

Currency convertibility and inflation have to be detailed especially for the TWR projects. Because many projects involve the procurement of electrotechnical equipment such as turbines, generators, pumps , etc , the projects suffer from these risks of project implementations delays and hence revenue generation. It will be good if the project examples given demonstrate the structuring, financial close, risk and risk mitigations

Infrastructure cost is high in Africa due to lack of capacity to construct, test and commission. The capacity of the local contractor, consultancy service providers, and constructing companies have to be enhanced in many ways such as involvement in project development. Using this way, the transfer of technology and knowledge will be ensured which will reduce the cost of the infrastructure development, operation and maintenance.

The types of financing for TWR projects have to be stated. The project financing can be expanded to include demonstration of Infrastructure projects structuring and financial close by providing examples of projects.

The monitoring unit work has to include planning, design, and specifications stages as well as expand the work to include evaluation process.

It is recommended that:

1. The method used in the Market and Demand Study (MDS) has to change for TWR sector by using phased growth rates for water consumption and cereal consumption which will be more realistic;
2. Provide examples of projects structure, financing close and risks identification and mitigation;
3. Train Member States and RECs on identifications and mitigation of risks, contract negotiation, financial analysis and preparation and construction of projects.

4.4 PIDA PAP 2 PROJECT SCREENING AND SELECTION

The TWRM projects are smart, environmentally friendly, create more jobs, women has a significant share of Jobs in the sector and contribute to balance development between rural and urban areas. The TWRM projects are less attractive to revenue generation and hence the projects may not attract private sector investment.

In PIDA PAP2, there are 34 projects submitted. The projects are at various levels of implementation. These projects cover multipurpose dam development, irrigation, water supply, water transfer, fisheries etc. Five existing and 29 planned projects are submitted. The projects are shared by two or more countries. Most of the projects are submitted by River basin organizations. The project implementations cost ranges from USD 1 Million to 2.69 Billion USD.

Projects have been screened using various criteria. The consultant participation in the estimation of Jobs created by each project using the JCT tool developed by GIZ/NEPAD and his experience. It is recommended that the JCT tool should be upgraded to cover most of the TWR sub-sectors.

4.5 WORKING PAPER ON HARMONISATION OF REGIONAL SECTORAL LEGISLATIVE AND REGULATORY FRAMEWORKS

The report summarises the principles of harmonisation of legal frameworks and policies to create enabling environment for PIDA PAP 2 projects. It covered sectoral issues, regional cooperation in water resources management, institutional framework and implications on PIDA PAP 2 projects. The report summarised the principles and importance of stakeholder participation during the implementation of the projects. Policy formulation process and conceptual policy frameworks are covered including policy structure.

The policy structure harmonization and alignment at continental level is devised to address issues which include constitutional provisions, economic integration from the use of transboundary water

resources, water resources and inter-sectoral cooperation, communication and collaboration, conflict management mechanisms, benefit sharing and equity considerations, water for socio-economic development, development and management of water resources by river basin approach, Integrated water resources planning approach, water conservation and demand management approach, development of dams, water permits authorization, water allocation for environment/sustaining aquatic ecosystems, addressing alien invasive species, Water source protection, climate change, water quality monitoring and assessment, water quality standards, water pollution standards, water pollution control, protection from floods and droughts, prediction, planning and management of natural disasters, provision for dam safety management, data collection and information management, data quality control, data and information exchange, water quality monitoring and assessment, water related research and technological development, Institutional arrangements at national and regional levels, Monitoring and evaluation systems. Mechanisms for stakeholder participation at regional and national levels, existing capacities for water resources management at national level, Gender mainstreaming in water resources management, demand-driven water sector research and technology development, sharing of research finding and information and Sources of funds and financial sustainability for water resources management.

Harmonisation of national policies and legislations should include among others Signing of MoU by Partner States , Adoption of Regional Harmonized Water Policy, adoption of Regional Harmonized Water Law, agreeing on institutional framework for transboundary water resources management, developing and agreeing on data sharing protocol(s) (e.g. NBI and EAC protocols), developing detailed capacity building needs assessment and preparing capacity building plan , developing and agreeing on Monitoring and Evaluation system/plan for policy implementation, Identification of and agreeing on transboundary water resources monitoring stations (river flow gauging, groundwater, meteorological, water quality, pollution, early warning systems), agreeing on and establishing on regional database, and regional database centre and agreeing on WRM Centres of Excellence at AU level.

The stakeholder participation and capacity building discussed participation and capacity development, gender mainstreaming, capacity building and training and R&D.

Finally, implementation channels of PIDA PAP 2 are discussed if policies are not harmonized and guidelines for its implementation of harmonization are outlined.

5. Conclusions and recommendations

The Programme for Infrastructure Development in Africa (PIDA) is a flagship programme for the development of infrastructure in transport, energy, ICT and transboundary water resources in the African continent. It is a long-term programme that is implemented through a ten-year programming cycle under the PIDA/PAP where the second cycle that is under development is PIDA/PAP2 with its implementation scheduled to commence in 2021.

The Technical Assistance (TA) to the AU/ISM has supported the African Union in addressing the challenges arising from deficits in Transboundary Water resources. These deficits have been acknowledged to be critical constraints stalling economic development in Africa. The TA facilitated in building the capacities of African policy makers, regulators, the private sector, civil society, and technical community in policy and regulatory issues.

The consultant

- Participated in review of MTR and MDS Working Papers and contribute to its improvement in facilitating the PIDA PA 2 projects;
- reviewed the Working Paper on “The Harmonization of Regional and Continental Infrastructure Regulatory Frameworks” and submitted constructive comments;
- participated PIDA thematic webinars and constituted constructively during the meeting.
- Carried out Project screening.
- Estimation of number of Jobs for projects which are shortlisted using Job Creation Tool;
- Prepare a report on harmonization of water policies and regulatory frameworks and
- Contributed to AfcFTA working paper.

It is highly recommended that RECs work in close cooperation with River Basin Organisation in PIDA PAP 2 project preparations and implementations.

6. Evaluation of mission results

The mission implemented activities are in line with the activities in the TOR. Some results are implemented or will be implemented in the short term. The NKE expert actively participated in webinar meetings, projects alignment, the indicators for the water demand forecast, average annual job creation and reviewing of the job creation toolkit.

The mission was very successful in the fact that the number of TWR projects submitted increased from 9 to 39. The mission supported IGAD, Lake Chad Basin Authority etc in preparation of PIDA PAPA 2 TWR projects for submission.

7. Annexes

TERMS OF REFERENCE (TORs): NKE WATER

Summary

<i>Programme Name</i>	EU-funded Technical Assistance to the African Union - Infrastructure Support Mechanism (TA to AU/ISM)
<i>Programme Number</i>	PANAF/2019/408-347
<i>Project Name</i>	NKE Water to support the Programme for Infrastructure and Development in Africa (PIDA) PAP 2
<i>Project Number</i>	A2.1.4
<i>Justification = concerned Output (1-6)</i>	TA to AU/ISM - Contract Output 2 A2.1
<i>Description of Project</i>	PIDA NKE Water Expert
<i>Contracting Party</i>	TA to AU/ISM - DT-Global
<i>Funded by</i>	EU
<i>Programme Management</i>	AUC/DIE

Background

The Programme for Infrastructural Development in Africa (PIDA) is the AU's overarching strategic framework for infrastructural development in Africa.

PIDA is founded upon and is purposely synergistic with regional and continental master plans as well as other work undertaken by the AU and its partner agencies such as the African Union Development Agency (AUDA-NEPAD), the African Development Bank (AfDB) the Regional economic communities (RECs) and their respective member states (MS).

PIDA has identified the following time-bound plans with specifically selected and prioritised projects to address the infrastructure deficits. These are the short term (2012-20), the medium-term (2021-2030) and long-term (2031-2040) action plans.

The next decade of infrastructural development in Africa under PIDA will be guided by the medium-term Priority Action Plan PIDA-PAP 2, whose essential focus is regional and continental integration and connectivity with regard to regional infrastructure in the four PIDA sectors (energy, transboundary water, transport and ICT) in all its 5 geographical regions Africa (North, West, East, South and Central) for the period 2021-2030."

The 2nd Ordinary Session of the AU Specialized Technical Committee on Transport, Transcontinental and Interregional Infrastructure, Energy, and Tourism, STC TTIET 14-18 April, 2018, Cairo, Egypt, adopted a 2019-2021 Action Plan in view of accelerating the implementation of the PIDA PAP 2 process and of elaborating a new list of projects for the phase 2 (2021-2030).

Three (3) decisions were adopted:

- Definition of criteria for selection of new infrastructure projects: a consultant was hired to present a report reviewed by Validation Workshops including the one in Addis Ababa from 13-14 November, 2019;
- Elaboration of a feasibility study on ongoing, market analysis and demand study 2020.
- Organization of 7 PIDA training workshops in collaboration with Member States, RECs, institutions (AUC, AUDA-NEPAD, AfDB, UNECA. donors and partners, in view of bringing all members states and RECs to a common level of understanding of the selection criteria.

In addition, the 5th PIDA Week held in Cairo, Egypt, from 23-29 November 2019, supported the above STC decisions and formulated, inter alia, some recommendations, such as:

- All the economic sectors shall be considered through a multi sector approach of infrastructure development as framed in the PIDA PAP 2 Integrated Corridor approach.
- RECs and Member States should put in place training programmes and support implementation of the regulatory frameworks through regional technical meetings.
- There is need to develop Key Performance Indicators (KPIs) for renewable energy SMEs, renewable energy systems, the share of renewable energy in total energy consumption, and the number of African companies providing support to renewable energy to African national markets.
- Capacity building for PIDA Stakeholders in the energy, water and transport sectors plays an important role in their ability to deliver and contribute to the programme;
- Private sector investment in African infrastructure is still very low. Inputs from the ICA report can be used to guide the 5% Agenda of AUDA-NEPAD so that it can reach its target of 5% of African pension funds invested in infrastructure.
- Identify risks and mitigating measures to be incorporated into project design for real risk and also for perceived risks; and,
- Design an integrated Infrastructure Partnership Strategy within PIDA PAP 2 to be submitted for consideration to the African Ministers (STC responsible for infrastructure) and Heads of State and Government.

The EU has a long-standing and successful tradition to support infrastructure development in Africa, contributing to the implementation of the PIDA at various levels (continental, regional and national) through various instruments and methods, in particular un-locking and de-risking investments in the scope of the EU External Investment Plan (EIP). The EU also contributes directly to the PIDA PAP2 process (together with other partners such as Germany/GIZ) through different instruments, among them a "Technical Assistance to the African Union- Infrastructure Support Mechanism (TA to AU/ISM)", with a team of key experts (based at AUC, AUDA-NEPAD and AFCAC) and a pool of non-experts. This assignment is part of the contributions in the scope of this Technical Assistance.

Assignment Objectives

The main objective of the assignment is to hire a Water Expert to provide specific sectoral expertise to the PIDA PAP 2 process taking place during the course 2020-2021.

This will be achieved through a combination of response to queries by emails and coaching to the regional PIDA PAP 2 project developers at the level of the RECs and their constituent Member States (MS), technical contribution in the implementation strategy and some on-going activities within the department.

Project Purpose

The purpose of the TA to AU/ISM is "to enhance policy dialogue and support coordination and cooperation between the AU and the EU within a continent-wide infrastructure approach, by aligning programming strategies to create the regional infrastructure promoting continental interconnection with an adequate properly identified, selected and prioritized, project pipeline".

The EU-funded TA to AU/ISM on behalf of the AUC Department of Infrastructure and Energy (AUC-DIE) is now requesting the services of a Water Sector Expert for the PIDA PAP 2 process who will contribute to the PIDA project preparation, selection and screening processes in support of the ISM-TA mandate, the development of the PIDA PAP 2 implementation strategy

Expected Outputs and Deliverables

1. Participation in and contribution to the specific sectoral aspects of the PIDA PAP 2 by providing assistance to Member states and RECs to improve the quality of projects and alignment with PIDA PAP2 criteria.
2. Effective participation in the PIDA PAP 2 project screening and selection processes by responding to specific request made by Task force members and partner Institutions
3. Inputs on Water component of the PIDA Market and Demand Study
4. Advise and Assist in the implementation of PIDA Mid-Term Review recommendations
5. Identification of key sectorial activities from the STC Action plans and their implementation
6. Contribution in the organisation of PIDA PAP 2 workshops and meetings: conceptualisation, active participation and reporting
7. A draft final report on the assignment.
8. A final report.

Scope of Tasks

Desk research, direct coaching through workshop training and video conferencing of the relevant regional and MS-level level PIDA- PAP 2 project development and preparation processes taking into account the key selection criteria being used in the PIDA PAP 2 process at the level of the RECs and the MS. These selection criteria include the following:

Economic and financial impact

All projects must incorporate the following criteria:

- Integrated corridor planning
- Job creation
- Economic impact
- Financial attractiveness for the investment from private sector
- Smart / innovative technologies.

Duration and location of the assignment

The maximum total number of working days allocated to this assignment is anticipated to be a maximum of 40 working days.

The assignment will be based in Addis Ababa, Ethiopia with potential travel, as deemed necessary, to PIDA targeted countries, events depending on missions and requested from RECs

Weekend days, travel days and official public holidays are not working days, except in exceptional circumstances and in the interest of the project when work need to be carried out during a weekend day or a public holiday.

The assignment will not exceed 40 work-days and will not exceed a period of six months.

A 5-day week will be applicable. A follow up mission is an option, if justified during the first mission. This will be subject to inception report during the first mission.

The Water sector Expert will be provided with working facilities at the offices of ISM-TA. The Water sector Expert must demonstrate his or her qualification and experience required to carry out the above-mentioned activities.

Tenders must include the following:

- Qualification of the Consultant, experience in projects promotion and references, including profiles (CV);
- Presentation of a technical and financial proposal.
- Intervention approach (methodology, roles, limitations);
- Scheduling of the activities including detailed work plan, timelines, progress reports and final report;
- Detailed budget for each activity (fees and expenses)

Presentation of Reports

The submission dates with regard to reports are as follows:

- Inception report – within 2 weeks of the signing of the contract
- Reports on contribution to the PIDA MDS, PIDA Implementation Strategy and Financing Strategy. Other short reports as deemed necessary by the ISM-TA.
- Draft final report – on the completion of the assignment

- Final report – 14 working days after comments are received from the submission of the draft final report.

Profile of Water sector Expert

The Water sector Expert has a crucial role in implementing the contract. The Assignment Terms of Reference (TORs) contain the required profile:

Qualifications

- University degree: Master’s in water sector, Civil Engineering, Economics, Policy or Planning or in a related field of Water sector
- Excellent computer skills (MS Office: Word, Excel, Power Point, Outlook) will be an added advantage

General professional experience

- At least 10 years relevant experience directly or indirectly linked to the scope of assignment to perform

Specific Professional experience

- Proven professional experience in project planning and implementation in the Water sector including planning, designing, implementing and evaluating Water sector projects in the different regions of Africa
- Successful experience in the field of project development and implementation in the Water sector or equivalent, in at least 1 service contract financed by bilateral or multilateral Development & Cooperation Partners or Development Banks.
- Familiar with AU Member States interconnectivity, and RECs Water Resources Infrastructure Master Plan

Language Skills

- English or French, knowledge of both languages would be an added advantage

Management Authority

The Water sector Expert services contract will be made between the specialist and contractor of the EU-funded TA to AU/ISM - DT-Global. The Water sector Expert will work under and report to the TA to AU/ISM concerning all aspects of the professional services to be rendered in accordance with these ToRs. Changes in the ToRs may be made only according to needs subject to mutual written agreement between the TA to AU/ISM - DT-Global and the Water sector Expert.

Accommodation, transport and support facilities in the field

Accommodation, transportation and any other support facilities required for the execution of the project are the responsibility of the Water sector Expert. The cost thereof must be included in fees and expenses for rendering the agreed services.

Obligations of AUC

The AUC will provide the Water sector Expert with information concerning the sector. The AUC shall co-operate with the Water sector Expert and facilitate him/her in the completion of this assignment to the greatest possible extent. The TA to AU/ISM shall provide the Water sector Expert with suitable office accommodation, complete with telephone access to an international line. The Water sector Expert will provide his/her own computing and printing facilities