



INSTITUTIONAL, REGULATORY AND COOPERATIVE FRAMEWORK MODEL FOR THE NILE BASIN POWER FORUM AND POWER TRADE

ANNEX 1: DELIVERABLE 1 – “INCEPTION REPORT” PREPARED FOR:



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INSTITUTIONAL, REGULATORY AND COOPERATIVE FRAMEWORK MODEL FOR THE NILE BASIN POWER FORUM AND POWER TRADE

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I LIST OF ACRONYMS

NBI	Nile Basin Initiative
NBPF	Nile Basin Power Forum
NBPTF	Nile Basin Power Trade Framework
PMU	Project Management Unit
PPA	Power Purchase Agreement
PTC	Power Technical Committee
RPF	Regional Power Forum
RPTP	Regional Power Trade Project
SAP	Subsidiary Action Program
SAPP	Southern African Power Pool
SIEPAC	Central American Regional Electricity Market
SVP	Shared Vision Program

Table 1: Acronyms

II FOREWORD

The purpose of this first report, named Inception Report, is to present the Consultant's initial views on the Project, based on which the rest of the project will be developed. Those initial views have been prepared considering not only our own understanding of the project's objectives and the extant realities in the riparian countries, but also the results of the fruitful discussions held during the contract negotiation meeting.

This reports contains more than a thorough discussion on the activities to be carried out along the life of the project; perhaps more importantly, it contains the approach the consultant is proposing to each of the sensitivities related to the initiative, which are doubtlessly key factors for the achievement of the project's targets and its overall success.

As it is already clear to all stakeholders, in such a process regional integration initiatives are always controversial, and we expect this project not to be an exception. Therefore, in order to be able to progress towards the achievement of the project's main goals, it is necessary for stakeholders to thoroughly analyze and criticize the Consultant's proposals, and to present counter-arguments to those ideas. The purpose of this report is precisely to present before all stakeholders an initial set of ideas, describing the "Big Picture" of the issue, and to propose specific approaches to each of the identified sensitive areas.

It is our expectation that many comments and questions will be raised from the Counterpart's and stakeholders' review of this report. Discussions about these issues could thus be continued during the Inception Workshop that will be held during the week June 4th, 2007 in Dar es Salaam.

It is also expected that, as a consequence of those discussions and analyses, it will be possible to draw conclusions and definitions that will guide the activities throughout the Project. During the Inception Workshop the Consultant will present all aspects that are considered essential for the Project, and about which decisions will need to be made, so that the audience can decide among the different alternatives that will constitute the philosophical approach to the subsequent activities.

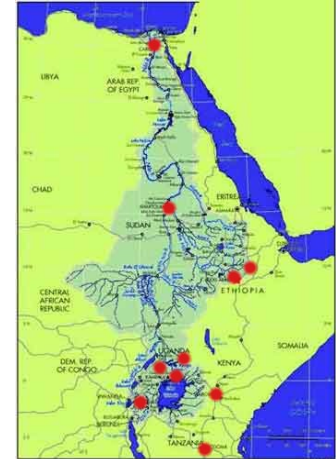
III BACKGROUND AND CONTEXT OF THIS PROJECT

The Nile Basin Initiative (NBI): Formally launched in February 1999 by the Council of Ministers of Water Affairs of the Nile Basin States, the NBI provides a forum for the Nile countries to move forward towards a cooperative process in order to realize tangible benefits in the Basin and to build a solid foundation of trust and confidence.

The NBI has two primary areas:

1. Basin-wide projects - “Shared Vision Program” (SVP) to help create an enabling environment for action on the ground
2. Sub-basin projects - “Subsidiary Action Program” (SAP) which is aimed at the delivery of actual development projects involving two or more countries

The Regional Power Trade Project (RPTP) is one of the thematic projects to be implemented basin-wide, to help establish a foundation for trans-boundary regional cooperation and to create an enabling environment conducive to investment and action on the ground within an agreed basin-wide framework.



The RPTP aims to establish the institutional means for coordinating the development of regional power markets (such as a Power Pool) among the Nile Basin countries, through the creation of an institution referred to as the Nile Basin Power Forum. The Power Forum aims to support dialogue and special studies to explore a range of policy-related issues, such as potential institutional and regulatory frameworks that will support regional power trade, and mechanisms for poverty reduction including expanding access to reliable and low-cost power supply, in an environmentally sustainable manner.

The broad benefits envisaged from the NBI are poverty alleviation through improved, sustainable management and development of the shared Nile waters, and enhanced regional stability through increased cooperation and integration among the Nile states.

Project activities are coordinated by the Project Management Unit (PMU) at the regional level and by the PTC members at the country level. Activities include the establishment and operation of the Power Forum, the conduct of a comprehensive basin-wide analysis of long-term power supply, demand and trade opportunities, the identification of potential development projects within the NBI SAPs, the preparation of a public participation plan and stakeholder analyses, and the development of knowledge management tools. These activities are carried out through studies, consultations, workshops, seminars and other modalities, for which the project may seek assistance from national and regional research and training institutions, NGOs, consultants and other public or private organizations from the Nile basin region.

The current project: “INSTITUTIONAL, REGULATORY AND COOPERATIVE FRAMEWORK MODEL FOR THE NILE BASIN POWER FORUM AND POWER TRADE”, falls within the RPTP framework. The project’s two main objectives are:

1. To assist the RPTP and the NBI Power Technical Committee (PTC) in reviewing institutional arrangements adopted by regional power trade organisations and submit discussion papers to the RPTP comparing and contrasting the different arrangements. In addition, the Consultants will draft the institutional and legal arrangements suitable for the Nile Basin Power Forum, as well as a strategic road map towards the Forum’s establishment.
2. To assist the RPTP and the PTC in reviewing and developing a model for the regulatory and institutional frameworks needed to establish and support Regional Power Trade at the Nile sub-basin and basin levels, and a strategic roadmap towards the establishment of such a power market.

IV CONCEPTUAL APPROACH

1. THE POWER FORUM AND THE REGIONAL POWER TRADE DEVELOPMENT

The establishment of the Power Forum as the initial arrangement for the development of the regional power initiative and, subsequently, of the Power Trade, is the seed out of which an institutionalized environment for trading power in the region will grow and mature, and through which the development of the key institutional and governance aspects will be materialized.

The Power Forum will have to act as a catalyst able to join together all member countries' expectations and interests, to form one common interest, so that every participant shall feel that its respective interests have been considered.

The Project's main targets are to develop all necessary components for the actual implementation and establishment of the Power Forum, and the development of the framework for the establishment of Regional Power Trade. In this context Regional Power Trade is defined as a cross border power trading system allowing bi- or multilateral energy transactions among riparian countries. As it is explained later in this report, these targets will be met through a number of specific activities and deliverables, addressing all the details in line with the ToR and in a way perceived as required for successful execution.

2. THE MAIN "TIERS" OF THE PROJECT

The Power Forum and Regional Power Trade development needs to be approached from different perspectives, systematically addressing aspects of varying nature. As per our experience and other international experiences¹, the work should be focused on four different, perfectly articulated and assembled "tiers", namely:

- The Political Tier
- The Institutional Tier
- The Technical Tier
- and the Timing Tier

The Political Tier

Without political will no such initiative may come to fruition, particularly one such as the Regional Power Forum and Power Trade that affects one of the key components for the countries' economic development and social welfare, involving one of the most sensitive strategic sectors worldwide.

The Council of Ministers has given the green light for the development of this Shared Vision Program, **The Regional Power Trade Project (RPTP)**. This constitutes the main political support; nevertheless, we understand that this general support needs to become more specific, based on concrete facts that the parties need to agree upon, such as the following as well as additional areas that may emerge along the course of the project:

- Declaration of principles, especially the willingness of the recipient countries with regards to the creation of an institutional environment that will foster power integration.
- The institutions and their roles.
- The mechanism to approve initiatives of any kind, involving cross border interests.
- Ratification of this political will (by the incumbent national institutions), converting this initiative into a mandatory instrument for all member countries.

¹ These experiences will be thoroughly analyzed along the implementation of this project.

- The explicit creation of the NBPF as the key institution to achieve the objectives of promoting regional energy trade.

The way we envisage this to happen is through the signature of a Treaty, namely the *Power Integration Treaty*, and we propose to discuss it thoroughly during this inception workshop and later in following ones. This Treaty will provide a solid basis for the development of Power Trade by legitimizing the guidelines of what is being implemented as a consequence of the Treaty, particularly through the establishment of institutions and rules (the legal/regulatory tier).

Such a Treaty needs to be negotiated carefully prior to its signature, as a previous step before sending it to the member countries for approval and ratification. During the execution of this project, significant effort should be deployed, by both the Consultants and the PMU, for this negotiation to happen. Thus, many of the activities should be performed with this objective in mind.

Our proposal is to start drafting and negotiating this Treaty at an early stage of the project, with the expectation to be able to consult with representatives of the member countries. We also include the possibility of making the Treaty's signature the central activity of the Final Workshop that will be held at the end of the year (2007).

Therefore, one way to measure the project's success is if this objective is achieved.

The Institutional Tier

Even if strong political support were available nothing would happen without the proper legal/regulatory framework aligned with those high level decisions, and without the institutions in charge of the Regional Power Trade's day-to-day implementation, enforcement and on-going updating.

Therefore, the major objectives of the Institutional Tier will be to properly develop:

- The regulatory framework, which will form the rules of the game to be observed by all participating countries in cross border power trading². This regulatory framework will mean a set of "supranational rules" which should supersede the national legislation³, and yet affect as little as possible the way each country has decided to deal with its internal electricity sector⁴.
- The institutions that are deemed appropriate for implementing this regulatory framework.

Our initial view is that the required institutions should cover at least the following functions:

- Regulatory function
- Dispute resolution
- Regional Planning
- Operations coordination
- Transactions settlement
- Statistics and inventories

The Technical Tier

Undoubtedly, the region has severe asymmetries and remarkable infrastructure weaknesses hindering a strong and sound development of power trade among the member countries. In addition, creation and enhancement of infrastructure are costly and long lasting, two factors that are significant for the region in terms of affordability and urgent need.

² See "Rule Requirements for Regional Power Trade Development" in section 1.4

³ This is one of the most difficult issues to resolve since it always generates some kind of distrust as it is perceived by the countries as losing a part of their independence or autonomy, which is true, but to the benefit of all parties involved. These benefits should be seen as mutual and symmetric for all parties.

⁴ See section 1.5 "Local Requirements to Participate in Regional Power Trade"

Therefore, any effort deployed in the improvement and coordination of the technical side of regional integration would demonstrate its benefits, most of all by making it possible to capture the benefits of the economies of scale.

In principle the main technical drivers that we see as necessary to develop are:

- Expansion planning coordination
- Technical standards harmonization
- Operational Procedures
- Cross border protection and automation systems
- Metering, communication, real time
- Capacity building

The Timing Tier

The implementation of an initiative like the regional power trading, needs to be organized in a phased manner, most of all taking into consideration the reality in terms of infrastructure development, availability of resources, and the involved parties' willingness to enter into long term reciprocal beneficial projects. Time is needed to allow the parties to develop the required trust among each other, so as to consider the possibility for a country to import power supply, to a certain extent, from external sources.

Therefore, we envisage that trading should evolve from initial sporadic power exchanges (short term trading covering needs on a limited timeframe, or taking advantage of marginal offers), towards longer time-based agreements. These agreements may be initially bilateral, to be followed later by the creation of limited multilateral transactions, moving at last to an extended integrated market. Experience shows that these processes take a long time to mature, and that maturity might not be even necessarily reached; sustained, on-going promotion and work, most of all in the line of creating consensus and trust, is necessary for ensuring a firm development in that direction.

The role of the aforementioned Treaty, and the institutions actively supporting both the Treaty and the functioning of Power Trade in the region, becomes extremely relevant with regard to the progress of the maturity process towards the depth of the commercial transactions among member countries.

Our view is that, for each of the activities carried out during this project, the time dimension must be properly considered. We will be practical in terms of feasible achievements and concentrate the focus of our work on the initial phases which can be realistically achievable in the foreseeable future, mainly the bilateral cross border transactions.

For the initial phases of Regional Power Trade detailed procedures and rules will be elaborated and proposed for implementation. We will also develop detailed guidelines for future stages, which will form the groundwork for the Power Trade's future evolution. The rules of the game for the subsequent stages will be finely tuned based on the experience gained throughout the maturity process.

3. GOVERNANCE DEVELOPMENT

Governance is one of the key and most challenging issues in developing and creating regional power trade. Governance means the structure set of institutions and roles that is put in place to actually materialize Power Trade. This is complemented by the set of provisions establishing the rules of the game by which all the agents participating in regional power trade perform their activities.

Due to the involvement of cross border transactions and the fact that traded goods are part of a public service the features of Nile Basin Regional Power Trade require an even more sophisticated design and development.

This requires:

1. The institutions to develop the ability to think, act and take decisions at a regional level, independently of their location or the origin of the staff that constitute them.
2. The legal framework to be “supranational” and the countries and local authorities, to accept this fact, and consequently, consistently prepare the local legal frameworks to be subordinate, in some aspects, to regional regulation. This is one of the most difficult areas for reaching an agreement among parties since it always generates some kind of distrust and is perceived as a partial loss of any given country’s independence or autonomy.

An initial high-level agreement is required to legitimize further expansion of rules or institutions that the development of Power Trade will require.

3.1. THE POWER FORUM

There are many different examples where actual institutions were created to drive regional trade development. International experience shows however, that regardless of the institution’s name, in many cases the process is initiated by creating a high level institution which is the “seed” to develop both power trade and the framework required for trading power.

An institution like the **Nile Basin Power Forum (NBPF)**, which would have the role of the highest-level institution, would have (but not be limited to) the following characteristics:

1. Likely, a body with two organizational levels: i) a “board”, the Power Forum Board, and ii) a permanent Secretariat and representation of all member countries.
2. The Board, comprised if possible by persons with decision making capacities granted by their respective countries, embodying the highest political level where sensitive strategic decisions and guidelines are taken / adopted.
3. The main objective is the development of Regional Power Trade. This entails oversight of its development, provision of guidelines and policies to foster power trade, and promotion of economically efficient system expansion in order to facilitate power trade.
4. The Secretariat, a permanent body with its own internal organisation and rules. The structure and organisation is one of the core activities of this consultancy, as along with its objectives, location and resources.
5. Its own staff and the capability of creating / recommending the creation of other regional institutions required to implement and develop Power Trade in the region.

3.2. OTHER INSTITUTIONS AND THE REGIONAL FRAMEWORK

Other institutions that may be needed for developing Regional Power Trade include:

- Regional Regulator, supervising the application of Regional Power Trade rules, and eventually acting as a first recourse for dispute resolution.
- Regional System Operator that could act at times as a coordinator, a function that can be performed, alternatively, in rotating shifts by local system operators.
- Regional Market Operator.

Not all of these institutions may be needed at the beginning or even at the earliest stages of power trade development. Trade development and the multi-step progress towards an actual regional market will require different rules (trading arrangements) and institutions in each of the steps. Moreover, institutions may incorporate additional functions as Power Trade develops.

During project execution, we will exhaustively analyze the possibilities, and articulate in the various constitutional documents, how and when those institutions may emerge along the evolution of Regional Power Trade. One point that will be particularly taken into consideration is the need for separating operational functions into two different bodies, the Regional System Operator and the Regional Market Operator. Several international experiences will be reviewed in order to determine

which configuration better fits with the characteristics of the region.

The following table presents a complete framework (though not exhaustive in terms of “functions”) for establishing institutions and allocating to them the main functions that will be needed for performing and developing power trade. As mentioned above, this framework will not be necessarily needed at the beginning. The Road Map that will be developed during project execution will lay out the timing for establishing both the institutions and their functions.

	Power Forum	Regional Regulator	Regional System Operator (*)	Regional Market Operator (*)
Regional planning	R		I	
Coordination and negotiations for carrying out regional infrastructure projects	R		I	
Creation of regional institutions	R			
Management and coordination of relationship with sub-regional initiatives	R			
Implementation of the Regional Power Trade Road Map – Determining the moment for transition from one stage to the next, according to the development path indicated in the Road Map.	R			
Overall supervision of regional Power Trade and measures to promote power trade	R			
Regional database (development and maintenance)	R	I	I	I
Management of regional grid and regional dispatch			R	
Settlement in regional power trading				R
Dispute Resolution		R		
Development and approval of trading arrangements in each phase of regional trading	R	I		
Development and approval of regional grid code	R	I	I	
Development of tariff methodology in the regional grid	R	I	I	
Agreement on compensation to domestic transmission companies for using of their transmission system	R	I	I	
Application of tariff methodology and calculation of compensation to domestic transmission companies		R	I	
Supervision of trading arrangement functioning and initiatives for its modification, if needed		R	I	I
Initiative for modification of the regional grid code, when needed		I	R	

Table 2: Role Allocation for Regional Institutions

R: Institution Responsible for this function

I: Institution that has to produce Inputs for this function

(*) During Project execution the roles of each institution will be discussed; even if it is appropriate to have two separate institutions.

During Project implementation all roles will be carefully developed and clearly articulated.

3.3. THE POWER TRADE INITIATIVE AND OTHER SUB-REGIONAL INITIATIVES

An important issue is the relationship of the NBI “Shared Vision Program”, with other sub-basin or sub-regional initiatives.

Obviously, if the objectives between these initiatives are contradictory, problems will occur. As established in the previous point, the design of power trade in the region is intended to be as flexible as possible. The objective is basically to develop trade, generate win-win situations, and thus, benefit from regional power trade. It was also established that the design of Power Trade would try to be flexible enough to cope with different speed in the development of member countries. If this objective is achieved, sub-basin or sub-regional initiatives will not conflict with the NBI's current SVP.

The possibility of the NBI not being contradictory with sub regional initiatives does not mean that the initiatives are automatically concurrent. Coordination mechanisms will be required to optimise the use of resources in order to not duplicate efforts. For example, if a database is being developed by NBI, it would be inefficient for a sub-regional initiative to develop its own. Rather, it is much more sensible for the two initiatives to communicate in such efforts, and reach an agreement for sharing a common database (in the example) so as to avoid task repetition.

Coordination will be much more important at the time of decision making on regional institutions and regional rules or standards. Consensus will have to be reached on minimum standards, basic rules and other primary issues.

Along the execution of the Project, we will analyse the synergies that may arise from different initiatives, and how the former could be articulated through Regional Power Trade. We will also make recommendations for cases in which changes in the existing structures / configurations are beneficial for the region.

4. RULE REQUIREMENTS FOR REGIONAL POWER TRADE DEVELOPMENT

It can be argued that actually no rules are needed for Regional Power Trade, and countries can negotiate and agree directly on Power Trade transactions. However, our view is that for the development of a sound regional trading system, apart from institutions, it is important to have in place trading rules or, at least, guidelines that will be followed from the very beginning. This has several advantages:

1. If all countries agree to follow certain rules, guidelines, standards to negotiate and trade, negotiations will be much easier since they will already have a general framework to follow and it will not be necessary to begin from zero in each case.
2. Following initial rules and guidelines helps “creating a culture” which will facilitate the evolution of more sophisticated ways of trading, until achieving, eventually, a “regional market”. This also means that transition can be managed in an orderly way by the decision makers, letting at the same time the parties gain capacity and skills for later stages of the trading arrangements.
3. Following some rules and guidelines will certainly save the countries from entering into situations that may hinder later the development of new trading stages. Power Purchase Agreements (PPA) can serve as an example in this case. Many countries have signed PPAs locally or with neighbouring countries, that are later an obstacle for trade development in new dimensions.
4. Rules and guidelines are a way to level the playing field, smoothing the differences between

countries.

5. Common rules allow for more efficient administration and use of scarce resources. For instance, the use of minimal transmission infrastructure and at the same time, its development in an orderly and optimized manner. This example is particularly relevant as transmission capacity expansion is too difficult – costly and complex - to be driven entirely by market forces.

So, we believe in, and recommend that, as it has been done in similar circumstances, the creation and management of the regional trading system should be based on rules, which will evolve together with the development of the region, but in a predictable and orderly way.

5. LOCAL REQUIREMENTS TO PARTICIPATE IN THE REGIONAL POWER TRADE

The analysis of the requirements that a country must meet to participate in an organised regional trade can be done from two aspects:

1. Institutional aspects.
2. Technical aspects.

5.1. INSTITUTIONAL ASPECTS

A member country has to meet one basic condition in order to participate in the NBI's Regional Power Trade: to be a signatory party of the *Power Integration Treaty* discussed above in the Project's political tier (section 2.1). This means, among others, that the country accepts the principles and may be represented in the Regional Power Trade institutions, whichever these may be.

Often, countries need time to process internally all that is needed to finally and officially sign and ratify the Treaty. In these cases there are always mechanisms to allow the countries enough time for following the due process. However, what is not allowed is for a country not being willing or deciding not to sign the agreement, and at the same time participating as a full member in Regional Power Trade.

As a direct consequence of the above, each country will have to accept the different rules, regulations and authorities that the Regional Power Trade develops. Thus, rules and regulations must be as simple, few and flexible as possible according to the respective stage of trading.

There is an on-going debate worldwide, related to whether the local regulations should be homogeneous and modified, if necessary, in order to respond to the common pattern dictated by the Regional Regulation. Our view, based on relevant international experience⁵, is that the design of the Regional Regulation should interfere to the least possible extent in member countries' the internal rules and regulations. It must be always kept in mind that developing countries have generally different and difficult situations regarding their domestic power sectors, and introducing additional requirements and/or conditions may turn out to be impossible for them to accomplish.

Consistently with this, our approach will be such that, in order to participate in the Regional Power Trade, the member country's regulations will be fully respected, introducing no more than minor adjustments to reach consistency at the borders where transfers will take place.

The only necessary condition is that national regulations do not introduce contradictions or obstacles to power trade. As long as this condition is met, other aspects of national regulation may facilitate or hinder power trade, but in any case may prevent it.

Another frequent question is whether the power sectors of the Regional Power Trade member countries need to be similar in structure. Again, international experience has shown that it is possible to develop regional trade, and even regional markets, where the participants' energy supply industry

⁵ For example the case of SIEPAC, the Central American Regional Electricity Market, where coexist 6 substantially different local regulations with one regional regulation.

is of different size and structure, such as vertically integrated utilities vs. unbundled systems, or publicly-owned vs. privately-owned companies, etc.

5.2. TECHNICAL ASPECTS

Power trade will always require development and use of certain technical standards since it involves interconnection of electric grids. Normally, these basic standards are agreed upon by the countries, and are met for fluid power trade. These standards address basic system security, stability, and quality, along with the management of interconnections.

Clearly, countries already meeting more strict technical standards will not reduce them to the minimal level that will be developed at the regional level, or that may exist in other countries. It will be necessary, therefore, to find a way so that countries with less developed or stringent standards can achieve acceptable regional standards while, at the same time, the more strict standards of more developed countries are not affected by power trade.

As part of the Regional Power Trade Framework, a sort of Regional Grid Code will be developed, establishing the conditions to be met by the national power systems, in order to be able to interconnect to a regional network.

6. CONCLUSIONS

1. Signature of the *Power Integration Treaty* for NBI (and perhaps eventually other) countries is required for participation in an organised Regional Power Trade.
2. It is possible to give a special status to a country that has not yet signed the initial agreement because of delays due to their internal processes, but it is not acceptable that a country openly refuses to sign the agreement and yet participates in the Regional Power Trade organisation.
3. It is necessary for the countries participating in the Regional Power Trade to accept and obey regional rules, regulations, procedures, standards, etc. set out by Regional Regulation, the Treaty, or other rulings issued by regional authorities.
4. It is not necessary for countries to have symmetric regulations for developing regional trade; it is enough that the regulations do not present an obstacle or impediment to trading.
5. Countries do not need to have similar industry structure nor size to participate in regional trade.
6. Regional trade and the regional institutions that are developed, can help the region's less developed countries to achieve better technical standards and faster development of their national power sectors than if they did not participate in Regional Power Trade.
7. Minimum technical standards are required for a fluid regional trade and countries will have to work towards meeting regionally accepted standards in specific issues, mainly in those that affect security and stability of systems.

7. A PHASED AND FLEXIBLE APPROACH

The Nile Basin region presents a group of very heterogeneous countries from the point of view of their electricity supply industries:

- There are countries that have begun a process of reform and others that do not even envisage that process as they are dominated by a state-owned monopoly.
- Size of electricity systems, extension of grids, and transmission infrastructure are quite different.

- Electrification rates vary largely among countries.
- Different institutional frameworks exist throughout the countries.

These facts represent a challenge and, at the same time, an opportunity. The challenge is to achieve development of power trade in such a heterogeneous environment. The opportunity lies in the possibility of developing the power trade systems and of potentially planning the reform processes (as per the respective decisions of the countries), having the facilitation of Regional Power Trade as an important objective.

To explain this opportunity further, there are many cases in which the pre-existing conditions (rules, standards, etc.) of mature electric systems result in restrictions to integration when those countries attempt to make the transition from an isolated system to a regionally integrated one. Countries with not yet fully developed electricity systems can learn from the experience of these “mature systems” and use the opportunity to develop their systems, anticipating future integration in Regional Power Trade.

It is therefore important for the countries with less developed electric systems to consider Regional Power Trade as a relevant element or input, when planning system expansions or reform processes.

Given the electricity systems’ heterogeneous condition in the different countries, our recommendation is to base the institutional design and actual implementation on a phased and flexible approach.

7.1. PHASED APPROACH

A phased approach means that stages can be established towards a final objective of a “regional power market”. It must be made clear that the realization of the regional power market is far in the future, but that doesn’t mean that the countries cannot obtain the benefits of trading in the near future, until a “market” structure is achieved.

On the contrary, trading benefits can always be obtained, even at the very first stage. In fact “trading” by definition is a win–win situation; throughout history, if one of the partners does not gain something through the transaction, then there will be no trade.

Therefore, the objective is to promote trading among the countries in an orderly way, so as to make it “easier”, more transparent and self-sustaining. Once these benefits are apparent, trade will develop and will win “momentum”, developing faster and faster.

Regional trading can begin in a very simple way: cross border trading between neighbouring countries under a predefined scheme which has been approved by the NBI member countries, can be a first step. Providing a framework for these situations has several advantages: facilitates negotiation, creates a culture of negotiation under pre-defined rules, establishes procedures, generates information to be amassed in a databank, etc.

Trading can be later developed at a second stage: trading between two countries that use (in part) transmission infrastructure of a third country. These cases introduce the need of establishing open access to transmission capacity, wheeling charges, compensation to the third country for using its infrastructure, and other issues.

One of the objectives of this consultancy will be to propose stages of development and their guidelines, and to define with precision the first stage, since the subsequent ones will require inputs that will only be available when the next stage is approaching.

7.2. FLEXIBLE APPROACH

A phased approach can be flexible enough to provide the countries with the possibility of adapting over time for the requirements of the next stage.

The lifetime of any given phase is not pre-determined. For example, it is not established that the first phase will take 5 years. On the contrary, phases will occur naturally when certain conditions are met.

Member countries can propose as an objective, however, to achieve the next phase in a certain number of years, but the process is not thought in terms of “years to achieve an objective”. It should be approached as a series of milestones that must be achieved to evolve from one stage to the next. This provides flexibility to the countries, and the possibility of managing their own implementation

timeframes.

Another aspect of this flexibility is the possibility to cope with the different countries' development speeds. This means that some countries may be ready to evolve to the next stage and that they do so, without the need of all the countries being able to move forward to the next stage simultaneously.

For example: let's suppose that countries are in the first stage, trading between neighbours. An opportunity may arise to trade, in which it is necessary to use a third country's transmission infrastructure. In this case, countries agree to follow regional directives to solve the problem of how the third country will be compensated for the use of its system. In this situation, these three countries can be considered to have moved to the next stage.

It can be pointed out already, that the use of a third party's transmission system and compensation for that use, is a difficult and key element that can accelerate or slow down regional trading.

This flexibility is especially useful, and nearly an "indispensable requirement", for the case of the Nile Basin given the size of the region, the large number of countries, and each country's heterogeneous point of departure.

Flexibility is also useful for avoiding conflict with sub-basin initiatives. It is very probable that some groups of countries in a sub-region achieve a faster development, and in this case they can evolve to next stages earlier than other countries.

8. THE TREATY AND THE FORMAL REQUIREMENTS TO ACTUALLY ESTABLISH THE NBPF

The *Power Integration Treaty*, playing the role of an Inter Governmental Agreement should indicatively include topics such as:

1. Preamble
2. Purpose of the agreement
3. Principles and objectives of power trade in the region
4. Definitions
5. Institutional framework (where, in this case, it is defined the NBPF, its objective, functions, rights, duties, composition, etc.)
6. Parties of the agreement
7. Settlement of disputes
8. Ratification and entry into force
9. Duration of the agreement
10. Withdrawal from the agreement
11. Relation to other agreements
12. Review and amendment

Along the implementation of this Project, an initial draft of the Treaty text will be prepared, after reviewing relevant experiences, similar to this regional power integration. Through successive communications and consultations with the stakeholders, a revised and refined draft will be produced. This refined draft should be sent through official channels to the Council of Ministers, for consideration, with the proposal of being discussed during the Final Workshop aimed at its approval.

In parallel with the development of this Treaty, we will research the legal status that the Regional Power Trade institutions should have, with the purpose of including the decision of this status within the same discussion and approval as the Treaty. Because the NBPF will have to be a permanent institution located and settled physically in one of the NBI member countries, yet with roles and powers that exceed the national boundaries of the host country, it will need to be granted a supranational status. This status will have to be reflected in the way that it is structured, in its constitution, and in its legal registration. The same applies for any institutions created by the NBPF to administer Regional Power Trade, and with the governing law that will apply to the registered bodies.

As a part of establishing the NBPF, we will analyse existing institutional frameworks that address such supranational status, both in the region and in other parts of the world. We will refer to this solid background of experience in proposing and elaborating the essential NBPF founding documents and in establishing its status as a regional authority.

9. TRAINING NEEDS ASSESSMENT

9.1. OVERVIEW OF THE TNA

The overall goal of the Training Needs Assessment (TNA) is to evaluate the baseline of capacity among major stakeholders in the NBI member countries, and to determine the capacity building activities that are needed for the sustainable creation and implementation of regional power trade.

In general terms, capacity is evaluated according to an individual's or an institution's collective knowledge and skills to undertake an initiative, or to see it through to completion. In this project, and at this stage, we are also measuring capacity by the level of willingness (political will) among stakeholder senior decision makers to engage and commit to the development of the regional power forum and trade. During the TNA therefore, we will be looking for ways to raise the stakeholders' interest in, and commitment to, project objectives, implicitly building consensus and understanding among the various countries involved.

This TNA will be carried out across the 10 (11) NBI member countries stretching from Egypt to Tanzania and Uganda, and will encompass the major sector players in each country, namely the relevant energy-related Ministries, electric utilities, and regulatory agencies (if they exist). Given this vast geographic and institutional scope, the TNA and subsequent training efforts will need to focus on a somewhat "macro" level of influence. Instead of evaluating the training needs of individual staff that operate these institutions and companies, the team will conduct the TNA at national and institutional levels. Comparisons between countries and corresponding institutions will also be made so as to determine the similar or differing needs amongst them.

In summary, the goals of the Training Needs Assessment are to:

- Evaluate the capacity of NBI member countries and their major stakeholder institutions to play an active role in the creation and implementation of the Regional Power Trade initiative; and to,
- Propose capacity building activities to substantially improve consensus, coordination and ability among stakeholders so as to develop sustainable power trade in the region.

9.2. CAPACITY BUILDING AREAS

From our experience with regional electricity trade and markets in other parts of the world, we have learned that there are certain key concepts in economics, policy, regulation, and restructured power sector operations of which countries and their institutions must have a solid grasp, in order to be able to actively participate in regional trade development. For the purpose of creating a structure under which to conduct this TNA, and to consider stakeholders understanding of these multivariable issues, we have grouped these concepts into three (3) main areas as they relate to the NBI project:

- Organization and Structure of Reformed Power Sectors (Markets)
- Electricity Trading Operations
- Regional Power Sector Cooperation and Coordination

Within each of these areas falls a variety of topics and issues that are discussed further below.

9.2.1. ORGANIZATION AND STRUCTURE OF REFORMED POWER SECTORS

NBI member countries are at various stages of reform with differing plans for the future. Some of them plan to unbundle and reorganize the sector entirely, including increased private sector

participation, while others intend to maintain the current vertically integrated structure and public ownership of the system. Some level of sector openness is desirable however, to facilitate trade among countries and to allow for regional cooperation to take place. The TNA will evaluate the preparedness of each member country for opening its sector/market to electricity imports-exports, and determine what capacities need to be built in each to create the level playing field between the countries' individual sectors. The perspective thus, is to highlight the concepts that apply to internal (country) market structures keeping in mind the goal of regional cooperation and trade.

Topics that should be covered in these training activities include:

- Electric industry structure, organisation, reform processes. To generate a knowledge about experiences in other power sectors, analysing pros and cons identified in each case, and the most relevant models for organising the power sector
- Microeconomics fundamentals (oriented to the power sector). The main purpose here is to reinforce economic concepts that apply directly to the power sector, such as marginal cost, explain why this approach is thought to represent adequately market behaviour, and why offer and demand meet their economic optimum around these values. The same stands with regards to identifying optimum market development in the medium and long term (planning).
- Power markets: How are they organised? How are the generators dispatched (principles)? How are prices established (principles)? Different types of contracts in power markets. How is settlement made?
- Market institutions: Which are the main institutions intervening in a power market? Which are their roles? Which are their responsibilities? Planning in a market system, rights and obligations of the participants.

9.2.2. ELECTRICITY TRADING OPERATIONS

This area includes issues related to the implementation of electricity trading, either between multiple parties in the same system (country) or between two or more systems (countries). Most developing countries operate their electricity sectors according to a set of technical criteria and rules. With changes to the sector organization, entrance of new parties, and increasing complexity of electricity flows, the rules of the game and operational procedures must also change. Knowing how to operate an internal, or national-level, sector in this more complex environment brings stakeholders one step closer to carrying out similar activities at a regional level. With this in mind, the following topics need to be considered:

- Dispatching: Described and governed by the market rules. Different techniques will be analysed.
- Trading in the market: the process of "trading" in a power market according to different market models.
- Regulation of transmission, transmission tariffs, grid codes. To present experiences and key issues necessary for understanding the requirements of regional markets and how to charge the use of networks.

9.2.3. REGIONAL TRADE AND COORDINATION

Those NBI countries with more developed domestic power sectors and institutions will be prepared to address regional trade and cooperation issues from the beginning. Others will need some "background" capacity building from the previous two areas before being able to fully appreciate the regional aspects of power sector development and operation. Training on regional issues is obviously however, the NBI's main target for the capacity building component of this project – to develop not only the practical understanding of how regional markets and trade function, but also to build consensus and willingness among key stakeholders. The thrust of the TNA and the proposed training will focus on the stakeholders' current capacity and needs in this area, including the topics listed here:

- Project appraisal in a regional environment. How to identify benefits, pros and cons, physical and economic adequacy, and integration in a multi-projects options sector. How to share benefits and costs among countries involved in a regional project.
- Operating and market rules in a regional environment. Rules oriented not only towards organizing

transactions in an imperfect market, but also to guarantee transparency and predictability. Different cases will be analysed, including relevant examples outside the region.

- System operation in a regional environment. How regional operation – dispatch, hydro coordination, etc. – is normally carried out in other representative examples.
- Market operation in a regional environment. How short and long term transactions are organized and settled in other regional markets.
- Metering and settlement in regional environments. How metering has to be deployed for cross-border transactions, obstacles to be overcome, investment and implementation through transitional periods, and other issues.
- Regulation at the regional level. To understand what “regional regulation” is about, based on other regional initiatives, and establishing the common rules of the game for cross-border transactions.
- Regional planning. Identification of mutually beneficial regional planning objective, system expansion, operational planning, and coordination among planning entities.
- Resolution of disputes in a regional environment. The roles that existing stakeholders and the Power Trade Forum may play to resolve disputes not able to be solved by market rules or other contracts, and evaluating the need for new entities to carry out this function.

9.3. STAKEHOLDERS

The main stakeholders that will be involved in the process to develop the Regional Power Trade will be the energy-related ministries, electricity utilities (largely state-owned), and regulatory agencies where they exist. In special cases, some IPPs and large consumers may also be involved to represent private sector and consumer perspectives. These same stakeholders that we will evaluate during personal interviews and meetings will conduct this TNA.

V WORK PLAN

1. PROJECT OBJECTIVES

The objectives of this project as established by the Terms of Reference are:

1. To assist the RPTP and the Power Technical Committee (PTC) of the NBI in reviewing the institutional arrangements adopted by regional power trade organisations and submit discussion papers to the RPTP comparing and contrasting the different arrangements. In addition, the institutional and legal arrangements suitable for the Nile Basin Power Forum will be drafted, along with a strategic road map towards the establishment of such a forum.
2. Assist the RPTP and the PTC of the NBI in reviewing and developing a model for the regulatory and institutional frameworks needed to establish and support Regional Power Trade at the Nile sub – basin and basin levels, and a strategic roadmap towards the establishment of such a power market.

Specifically, the Consultant expects to develop and implement the following activities:

1. An analysis of international experience regarding regional power trade organisations and the corresponding arrangements. Conclusions and recommendations for the Nile Basin region.
2. Organisation, functions and resources required for establishing the NBPF and its corresponding road map.
3. Proposal of a regional power trade framework, its development in stages and the corresponding road map to achieve the objective.
4. Estimation of resources required to achieve the objectives.
5. Training needs assessment and training plan.
6. Proposal on the institutions' location.
7. Drafting of the most relevant memoranda required to establish the institution (NBPF) and the power trading framework.

During the inception mission held in Dar es Salaam on June 4th – 7th, 2007, the Working Group Members and the Consultant agreed to adjust the scope of work, as per the request included in the letter NBI/RPT/Studies – 1/14/07 from UNOPS. The following points describe the activities, deliverables and revised work plan. The minutes of the inception mission is presented in Annex I.

2. ACTIVITIES

The following points describe the activities to be carried out in this assignment for achieving the established objectives in terms of:

- Scope of the activity,
- Approach / methodology to obtain the results,
- Inputs required by the activity,
- Outputs /results of the activity

2.1. ACTIVITY 1 – REVIEW ALL NBI DOCUMENTS

Inputs required:

Relevant documentation on NBI.

Discussions with the counterpart on the scope and current situation of both the NBI and this initiative.

This review will include the available documents related to this project, which will be provided by the PMU, such as the Project Appraisal Document, the Project Implementation Plan, general NBI overview reports, SVP project documents, and information on related ongoing projects in the Nile Basin. The aim is to:

- Ensure the project team’s full understanding of the NBI process
- The placement of this initiative within the complete NBI
- The substance of this project and the role of the Project in promoting regional power trade
- The progress already made
- Other regional or sub-regional initiatives: objectives, implementation degree of regional forums, achievements
- Definitions, guidelines already existing regarding the “Power Forum” constitution. Definition, if any, of the Power Forum as regional institution, objectives, governance, achievements up to the moment.

During the Inception Mission the Consultant will discuss with the Client the relevant documents to be analysed and expect to make available during that Mission.

Outputs produced:

A full and detailed comprehension of the scope of the project, its insertion in the NBI and the achievements of this SVP up to the moment.

2.2. ACTIVITY 2 – REVIEW OF OTHER POWER TRADE ORGANISATIONS

This activity aims at reviewing institutional and legal arrangements of Power Trade Organizations around the world, including:

- UCTE, CENTREL, NORDEL (and NordPool), BALTREL and SUDEL in Europe
- The re-creation of a regional market in the Commonwealth of Independent States
- PJM, New England ISO, South West Power Pool, Western System Power Pool, and Mid-West ISO in the US;
- The Central American regional market based on the SIEPAC’s transmission infrastructure
- The Southern Africa Power Pool and the Western Africa Power Pool in Africa
- The Great Mekong Sub region initiative and the ASEAN Interconnection projects in South-East Asia
- The National Electricity Market in Australia
- CAPP (reasons for its failure)

Other related events taking place in the region as a result of other NBI projects and programs, will be also taken into consideration, and their impact / influence will be assessed.

This list includes numerous institutions to be reviewed. The Consultant will proceed with this review in a systematic way, focusing in certain elements that can be useful for this TA. This methodology will also allow extracting conclusions more easily, and facilitate comparisons between those conclusions analyzed.

It is proposed to focus on the following key points:

1. Objectives of the institution
2. Internal organisation

3. Governance
4. Achievements

Finally, comparisons and conclusions will be extracted.

Outputs produced:

Description of selected cases from the international experience in Power Forums and Power Trade Organizations.

Lessons and conclusions from this international experience, useful for the NBI.

2.3. ACTIVITY 3 – REVIEW OTHER SIMILAR INSTITUTIONS IN THE REGION

An information gathering tour is foreseen in this project, including visits to each of the NBI member countries. During these visits, the Consultant will also conduct interviews with institutions corresponding to regional initiatives.

It has been agreed with the PMU that the regional institutions to be visited are: Eastern African Power Pool, East African Community, EGL (Energie des Grands Lacs). Contact information will be provided by the PMU.

Outputs produced:

A summary document of the status and institutional structures of regional organisations within the Nile Basin, focusing on power market development, and recommendations of how these organizations can support RTP's objectives.

2.4. ACTIVITY 4 – REVIEW OF THE CURRENT FRAMEWORK AND ARRANGEMENTS IN THE NBI REGION

Input required:

- Approval of forms to collect information
- Support to coordinate meetings in the different countries of the NBI
- A list with coordinates (email, telephone, address) of contacts in each of the NBI countries

This activity aims at reviewing and assessing the existing institutional and legal arrangements, energy policies, network planning, financing arrangements and accounting policies, compatibility of national regulatory regimes and Power Purchase Agreements, tariff structures and regulatory frameworks in the Nile Basin countries.

Experience from other regional initiatives has shown that barriers to cross-border trading may arise from:

- the poor performance of many of the state-owned utilities, rendering them unable to fully conduct normal commercial activities;
- the long distances involved, and the challenging geographical and natural environment;
- the weaknesses of the national grids, which require strengthening (and hence investment) before trading is possible;
- the lack of infrastructure, such as power transmission interconnections and regional/inter-regional co-ordination centres, or control centres;
- energy strategies that rely on self-sufficiency;
- the difficulty in obtaining project financing for cross-border transmission interconnections,

and the difficulty (and complexity) of raising government guarantees for cross-border deals;

- the lack of a (commercial/legal/regulatory) framework for transactions to take place;
- the complexity of arrangements for system operation;
- the lack of agreement on tariff system for use of transmission infrastructure;
- the lack of institutions to give regional trading political legitimacy and to play the co-ordinating and energy trade enhancement role;
- the lack of a legal framework for energy trade (no common or uniform legal or commercial framework to deal with cross-border electricity trade and, generally, the lack of official support from governments for coordinated legal, regulatory and pricing policies);
- the lack of generally accepted accounting principles and standards in some of the countries;
- the lack of general harmonization of technical codes, specifications and standards; and
- the lack of trading mechanisms in the energy sector, which is much more complex than the trading of other goods or commodities.

The Consultant will perform a series of missions to the NBI countries involved in this project, to analyse the current situation and perspectives in those points relevant for regional power trade.

For the purposes of gathering symmetric information that is comparable between the countries, the Consultant has developed a questionnaire that the team members may use as a guide in each of the countries visited. This questionnaire may be further refined and finalised prior to the information gathering phase.

Once the information is gathered, the Consultant will systematise the it so as to facilitate the review of the key points, and extract conclusions.

Outputs produced:

Conclusions and recommendations on the information gathered during the visit to the countries.

Analysis of the potential benefits to each country, and for the region as a whole, that shall result from participation of all NBI countries in the power forum/ power trade.

2.5. ACTIVITY 5 – ANALYSIS OF SPECIFIC REGIONAL MARKETS AND BEST PRACTISES IN PPAs

Input required:

Results & conclusions from Activity 2: Review of other Power Trade Organisations.

2.5.1. ANALYSIS OF SPECIFIC REGIONAL MARKETS

The Consultant will conduct an in-depth analysis of a number of regional markets from the point of view of the institutional and regulatory framework, and the roadmap for their implementation.

Three or four cases will be selected from those shown above in activity 2. The criteria for their selection will take into account how representative these regional markets may be at the international level, and how they can provide lessons for the development of the regional market in the Nile Basin region.

2.5.2. BEST PRACTISES IN PPAs

PPAs are useful tools for introducing private sector participation in the power systems and thus contribute to satisfying investment requirements in generation. However, if not adequately designed, PPAs may turn into a hurdle for regional integration or fluid cross border trading since they can introduce inflexibilities and obligations in the supply system that do not allow for a correct optimisation of supply. A document with best international practises in PPAs will be developed, stating recommended elements and those to be avoided.

Outputs produced:

In depth analysis of a certain number of power trade organisations and the roadmap for their implementation.

A proposal of trading framework for the NBI.

Best practises for PPAs.

2.6. ACTIVITY 5 + (NEW ACITIVITY) 5+ PROPOSAL OF TRADING FRAMEWORK FOR THE NBI.

Input required:

Results & conclusions from Activity 2: Review of other Power Trade Organisations.

The Consultant will develop in great contours a trading framework proposal for the NBI: the Power Trade Model. This proposal will include a thorough analysis of the required changes to remove the identified barriers and impediments for the development of regional power trade. This model will be used as reference for further activities.

Output produced:

NBI Power Trade Model proposed and possible roadmap for its implementation.

2.7. ACTIVITY 6 – REPORTING AND INFORMATION EXCHANGE FOR THE IMPLEMENTATION OF POWER TRADE

Inputs required:

Results of Activities 4 and 5, and more precisely, the decisions taken regarding NBPTF characteristics.

This activity will be devoted to developing reporting process requirements and information exchange protocols required for implementing the initial stages of the Power Trade regime. The requirements will be established based on the proposed power trade model for the NB (Activity 5).

Regional trade will work only if there is transparent and reliable information available to the participants.

Each of the designed stages will have its own information requirements and, obviously, the protocols for information exchange or for making the information public. This constitutes the “regional information system”. Information requirements for the first stage will be described in detail, as well as the treatment of information and procedures. Recommendations and guidelines will be provided for subsequent stages.

Regional trade generally begins with bilateral trading between pairs of countries in the region. Even this simple situation requires reliable and transparent information; if not, one country will prevail on the other and take advantage of this situation, which is not healthy for the development of trade. If one country does not provide transparent information and takes advantage of this to prevail on another country, it will be very difficult for a market to develop in the future.

To ensure market development it is recommended to establish, from the very beginning, an “information system” with clear procedures to exchange information in a reliable and systematic way. Regardless of how simple the information of the first stage may be, cultivating a “culture” of transparency and systematic (periodic) information exchange is a very positive step.

The best way to organize and implement this today is through regional databases, which are designed in modular ways so as to allow their future evolution to more sophisticated instruments and make them accessible through internet (in a web site for example). Regional databases are always one of

the first issues implemented in regions that desire to achieve a regional power market in the future.

This information will deal basically with regional trade, and will be oriented towards developing and facilitating trade in the most possible transparent way. This information will have a more dynamic evolution, as trading progresses from the point of view of the quantity, quality and type of information. Each stage of regional trading will have different requirements of information.

The Consultant will proceed according to the following steps:

- **Identification and specification of the information:** for each stage there will be requirements for different type of information with a different degree of detail.

Detailed recommendations will be made on the information needed in the first stage of Power Trade, to be used as an input to the database. This need for subsequent stages will be outlined in more general terms. It is important to establish in each stage the information that will be handled, having in mind the future stages and the “modularity” of the database.

- **Establishment of roles and responsibilities** for managing the database: This means who will gather the information, validate the information, upload it on the database, etc.
- **Development of database structure:** This means defining modules, variables, periodicity of each variable, units of measure, etc.
- **Development of the procedures to gather the information:** Including the periodicity, the responsible party/institution in each country, the obligation to provide the information, etc.
- **Development of the procedures to validate the information** and incorporate it into the database.
- **Development of the procedure to be followed when information is not provided, or when it does not fulfil the validation criteria:** This means how to deal with a situation where information is not provided, or that the information provided is found to be invalid.
- **Integration of valid information to the database:** This means establishing the responsible party/institution for checking that the procedures have been followed and, when the information is valid, adding it to the database on a predefined date.
- **Accessibility of the information to the parties** (countries, institutions within the countries, etc): This means distinguishing the information to be completely public, from that with limited access, defined during the design of information sharing procedures.
- **Reporting:** This means recommending periodic reports, contents and the person/institution responsible for producing the reports.

Output produced:

Database and reporting during the early stages of power trade implementation.

2.8. ACTIVITY 7 – REGIONAL DATA TEMPLATES

Input required:

Results from activity 2

The Consultant will produce a series of templates for data gathering, not exclusively oriented to the basic data necessary in the first stages of regional power trading development. During the inception mission it was agreed that the Consultant has only to prepare the templates, and to provide them to the PMU.

It was also agreed that the PMU will provide information and contacts regarding the DSS (Decision Support System). The system planning tools in the different countries will be researched during the visit to the countries.

The information to be researched and, therefore the templates to be developed, will deal basically with the following topics:

- i) Regional generation planning, assessment, evaluation and selection
- ii) Power sector master planning, integrating water and energy resources
- iii) Power system operations including power plant operations and design of power system protection schemes
- iv) Power system stability and reliability studies
- v) Power system security, blackout mitigation and system restoration modelling and analysis
- vi) Load forecasting and growth pattern modelling
- vii) Development and regulation of regional power sector policy
- viii) Regional power market and power trade analysis and operations, including transactions management
- ix) Economic and financial assessment of power projects
- x) Power project EIA and socioeconomic evaluation
- xi) Project risk assessment, evaluation and mitigation planning
- xii) Development of documentary videos and high quality information brochures on investment opportunities in the region

Output produced:

Data gathering templates

2.9. ACTIVITY 8 – PROCEDURES AND GUIDELINES FOR DATA PROCESSING

Input required:

Results from Activity 7

This activity should be read together with Activities 6 and 7. It deals with procedures to gather, process and incorporate information in a database.

Activity 6 developed specific procedures to gather, process and incorporate information in a database; activity 7 developed the templates for information gathering.

The present activity will review the procedures developed in activity 6, and adapt them as necessary.

Output produced:

Procedures and guidelines for gathering and processing the information defined in activity 7.

2.10. ACTIVITY 9 – RESOURCES REQUIREMENTS AND COST ESTIMATES

Input required:

Proposed characteristics for power trade stages (model defined in activity 5+).

This task will focus on the resources needed at a regional level to have an efficient coordination of the work (activities) required to carry out and develop power trading. The basis for estimating the resources needed in terms of human resources and other infrastructure (IT, systems, etc), will be the power trade model proposed by the Consultant in activity 5.

To achieve an estimation of the required resources, the Consultant will:

1. Establish the regional institutions required for NBI's operation, based on the model proposed in Activity 5.
2. Make an estimation of human resources (professionals and support / administrative staff) for the institutions.
3. Estimate the infrastructure in terms of office space.
4. Identify and quantify IT systems and administrative systems.
5. Make a valorisation of the resources, differentiating between investment and operational costs.

Output produced:

Resource requirements and cost estimations.

2.11. ACTIVITY 10 – TRAINING NEEDS ASSESSMENT

Input required:

Results from information gathering tour.

2.11.1. ASSESSMENT METHOD

The consulting team will conduct the TNA in combination with the Information Gathering task, through meetings in person with the appropriate representatives of the NBI country stakeholders, accompanied by some follow-up communication by telephone and e-mail. Given the range of countries and variety of stakeholders to visit during a relatively short time period, these tasks will be undertaken by several of our team members – experts from Mercados, Nord Pool and CEEST. A questionnaire and manual have been developed to assist each expert in this process, in order to gather input that can be used to make a symmetric assessment among the countries. The team will then be able to systematically compile and analyse the input to arrive at a set of recommended capacity building activities for stakeholders in the region.

a) Establishing a Baseline

Much of the information needed to establish a baseline of the stakeholders' capacity will arise from the information gathering task, which for implementation purposes is combined with the assessment part of the TNA.

For example, the Power Sector Policy information template requires that for each country we document the following:

- Guidelines of the power sector policy
- Which is the policy regarding power trade (with neighbouring countries or the region)?
- Main challenges of the power sector
- The role of the State
- Role of private sector: current and foreseen
- Sector structure: main actors, their roles
- Industry structure: companies intervening, ownership
- On going reform process if any
 - Objectives of the process

Advances in the process

Expected advances for next years

With this information, we will present a profile of each country's power sector structure, experience with or status of reform, and level of public vs. private participation in the sector. This profile will provide the answers to questions about the country's, and thus the corresponding institutions', capacity in handling power sector operations in a more liberal environment oriented towards trade. If it is clear that the sector and stakeholders have been operating a more "traditional", vertically integrated and somewhat closed system, they will need greater capacity building in the "background" areas. Those stakeholders operating in a more open system, perhaps those already trading a small amount of power across country borders, will need perhaps less training.

b) Capacity Needs Assessment

To deepen the assessment beyond the information collected in the information templates, we will explore some issues that are more specifically related to Power Trade and institutional capacity building with these stakeholders. Some of these issues relate to leadership and level of participation in the regional cooperation process, since, as a part of this project, a champion(s) and driver(s) of Power Trade should emerge. Thus, the "information" collected is not only factual but subjective, and based partly on perception and understanding of this project. This type of valuable input is also, and perhaps most useful for determining the way to go about consensus building among stakeholders.

2.11.2. TYPES OF ACTIVITIES

Once the information gathering – assessment process has been completed, and the team has analysed all input to arrive at the areas requiring capacity building, and among which institutions, countries, etc., we will determine the most effective modality of delivering each type of training activity.

The effectiveness of each type of activity, or implementation mode, depends on a variety of factors including the number of people to be trained, subject and degree of intensity needed, level of participating professionals (and how much time they have available for training), overall timeframe for the activity, and budget available. We will consider a vast range of implementation mode types for the activities, depending on the aforementioned conditions and the most practical solutions. We describe here the different types of capacity building activities that could be included in the training plan that will emerge from this TNA:

- *Workshop*: One- to two-week classroom-style training activity for 30 to 50 participants, at a venue located in the region.
- *Study Tour*: One- to two-week hands-on training for 5 to 15 participants, that will take place at two or more regional or international venues for the purpose of visiting project sites and/or meeting with experts on site.
- *Wed-Based Workshop*: Workshop module materials provided on-line with e-mail and/or web "chat" access to the instructors, and a one-time video conference session between participants and instructors.
- *Web-Based Resource*: Development of, and access to, a dedicated web page/portal specifically tailored to the module topic, and maintained by a local institution.
- *Invitational Travel*: Travel within the region to NBI activities applicable to stakeholders/individuals who would not normally participate, and contingent upon available space in the workshop/activity, and a case-by-case approval by the PMU.
- *Seminar*: One- to two-day outreach or executive-level awareness/training activity to reach large numbers of the public at minimum cost, or to reach an insulated, selected audience of busy executives whose support is necessary in a given area.
- *Forum*: One- to two-day conference-style activity designed to highlight key issues within a specific area, regional participant presentations, information exchange, panel discussions, and increased networking among regional stakeholders.
- *Degree-Oriented Program*: Long-term (9 months – 1 year), intensive training that combines classroom training, site visits, and internships into a comprehensive program, upon completion of which, participants receive a specialized degree from an accredited academic institution.
- *Partnership*: Long-term partnership (1-2 years) between regional, or regional and

international, organizations in the same stakeholder category to develop institutional capacity and exchange experience. Partnerships will be designed with specific goals and deliverables to demonstrate level of skill/knowledge transfer.

- *Exchange*: Exchange visits between executives or managers within the region to exchange information and share experience related to a specific, common issue.
- *Internship*: Two- to three-week placement of selected participants in a regional or international organization where the participant can work side-by-side with a mentor to increase his/her technical job skills and performance capacity.
- *Curriculum/Materials Development*: Development, updating and production of curricula and/or materials designed for a specific audience to be used in training and/or outreach activities in the NBI program and beyond.
- *Strategy Development*: Design of a strategic institutional development plan including the mission, objectives, appropriate activities, implementation/work plan, etc. (ie. Business strategy), conducted by a team of regional and international experts.

2.11.3. ASSESSMENT AND RECOMMENDATIONS

The TNA team will identify the most pressing common regional issues, either for all countries or relevant to a few selected ones, that should be addressed through the NBI training and capacity building program. We will then develop a recommended training plan designed to build institutional and human capacity in the region's energy sector. The activities recommended in each area will be built around specific objectives derived from Power Trade goals, and common barriers to realizing these goals.

The TNA's report and training plan recommendations will identify a number of activities appropriate to each audience and the technologies available to them (workshops, study tours, web-based forums, internships, partnerships, exchanges, etc.). A sample matrix-style structure that we will use to summarize the training plan recommendations is shown below. This structure outlines the Area, Objectives, Topics, Activity Type and Beneficiary Stakeholders, for each activity in an integrated grid format.

2.11.4. SAMPLE ASSESSMENT AND RECOMMENDATIONS SUMMARY FORMAT

This Matrix is provided only as a sample of the format of summary training recommendations that will emerge from the TNA. The contents are illustrative only and will change according to the areas, objectives, and activities determined during and after the TNA

Area	Objective	Topic	Type of Activity	Countries	Beneficiary Stakeholders
A1 Organization and Structure of Reformed Power Sectors (Markets)	O1 Increase understanding of key concepts that apply to internal (country) market structures with the goal of increasing regional cooperation and trade.	T1 Market Oriented Electric Industry Structures and Organisation	Regional Workshop	Eritrea Ethiopia Rwanda Burundi	Ministries, Power Utilities
	O2 Build capacities of stakeholders to create the level playing field between the countries' individual sectors.	T2 Power Sector Economics	Regional Workshop	DR Congo Eritrea Ethiopia Rwanda Burundi	Ministries
	O3 other..	T3 Role of the Regulatory Agency	Regional Workshop	DR Congo Eritrea Rwanda Burundi	Ministries, Power Utilities, Large Consumers
		etc.			
A2 Electricity Trading Operations	O1 Increase understanding of changes in electricity sector operations resulting from restructuring	T1 Principles of Economic Dispatch	Executive Seminar	Ethiopia Kenya Tanzania Uganda	Ministries (for high level decision makers, policy makers)
	O2 Introduction to market-oriented rules of the game and operational procedures	T2 Performing Least Cost, Economic Dispatch	Workshop	Ethiopia Kenya Tanzania Uganda	Power Utilities (for management and operations level staff)
	O3 Introduction to Cross Border Transactions and Operations	T3 Transmission Issues in Cross Border Power Exchange	Workshop, Study Tour, Web-Based Resources	All countries	Ministries, Power Utilities
	O4 other...				
A3 Regional Power Sector Cooperation and Coordination	O1 Develop the practical understanding of how regional markets and trade function,	T1 Market operation in a regional environment.	Executive Seminar or Workshop	All countries	Ministries, Power Utilities
	O2 Build consensus and willingness among key stakeholders for regional power trade	T2 Annual or Semi-Annual Forum for Regional Utility Management and Planning	Forum	All countries	System Operators, Transmission Companies
	O3 other..	T3 Regional Utility or Regulatory Partnership/Exchange	Partnership/Exchange	Criteria to be defined	Regulatory Agencies, Utilities
A4 Other that may be identified during TNA (I.e. Consumer Awareness, etc.)	O1 Improve regional consumer understanding of benefits of regional interconnection (power import-export)	T1			Large consumers
	O2 other..	T2 T3			

Table3: Sample Assessment and Recommendations Summary Format

2.12. ACTIVITY 11 - DRAFTING OF MEMORANDA & LEGAL DOCUMENTS

Input required:

Results from Activity 5+ (model of power trade for the NBI).

Based on the results of the previous activities, the required memoranda for the development of trade will be identified and drafted.

An “**initial agreement**” or “**Memorandum of Understanding**” (MOU) may be necessary / appropriate to provide a solid legal support to the development of power trade and the establishment of the proposed model.

It has also been mentioned as appropriate to count with a **standard agreement to trade** between neighbouring countries. The advantages of having such a “template” include that:

1. Standard issues are already solved, therefore, less discussions and elaborations are required.
2. It ensures that the contract will not prevent future developments of the regional trade since the latter will be designed taking this agreement into account.
3. It will anticipate the adaptations for next steps of the regional trade.
4. It will anticipate providing information to facilitate and encourage the development of a future market.
5. It will establish standard conditions for operation of the cross border trade so that it may be adapted to future developments and will contribute to the required capacity building in cross border trading.

Other agreements that may be required will depend on the decided power trade model for the NBI and will be identified during the development of the corresponding tasks.

Outputs produced:

Initial agreement or MOU, if required.

Standard agreement to trade between neighbouring countries

Other agreements identified during the development of the power trade model for the NBI

2.13. ACTIVITY 12 – RESPOND TO COMMENTS AND CLARIFICATIONS

Input required:

Comments and requests for clarifications by PMU or PTC.

During the development of the project, the Consultant will respond to all comments and clarifications sought by the PMU and PTC, emanating from the submitted draft reports and discussions papers.

Modifications to obtain final versions of documents will be made accordingly.

Output produced:

Clarifications and production of the documents’ final versions

2.14. ACTIVITY 13 – COMPREHENSIVE DRAFT REPORT

Input required:

All documents produced during the execution of the project.

The Consultant will compile all the documents (reports and discussion papers) produced during the project into a comprehensive report which will be presented to the RPTP's power experts.

Output produced:

Comprehensive draft report.

3. MISSIONS PLAN

Project execution will take approximately 8 months, considering the period between the Kick Off Mission and the delivery of the Final Report.

The missions and workshops to be held during project execution are as follows:

- **Initial Kick off meeting** which was already held via teleconference.
- **Inception Workshop** already held in Dar es Salaam during week of June 4th
- **PTC meeting** previewed for August. The Consultant is expected to present a status report.
- **Preparatory / Interim Workshop** previewed for October 15th to 17th in Nairobi.
- **Final Workshop** previewed for December 14th to 18th in Dar es Salaam
- **Information Gathering Tour** previewed to be performed during August.

3.1. KICK OFF MEETING

the Kick Off meeting has already been held via teleconference. During this meeting mutual knowledge among counterparts was achieved.

Comments on an initial work plan were received.

The date for the Inception Mission was established.

3.2. INCEPTION WORKSHOP

The Inception Workshop was held during the **week of June 4th in Dar es Salaam**. During this workshop the following activities were performed:

- Presentation by the Consultant of the original work plan.
- Presentation by the Consultant of the original scope of the different activities involved in the project, and methodological approach to achieve the activities' objectives.
- Discussions with the Counterpart on the content of the presentations made.
- Presentation by PMU of modifications to the original scope of work.
- Agreement on new scope of work, deliverables, missions and general work plan (**the**

minutes of the inception mission is presented in annex).

3.3. PTC MEETING

It was agreed that the Consultant will attend the PTC meeting in August 2007 to present a status report of the project. Precise date and venue were not established.

3.4. PREPARATORY / INTERIM WORKSHOP

The preparatory/interim workshop will be held during **October 15th to 17th, 2007, in Nairobi.**

This workshop will be devoted to discussing the Interim Report, which consists in the results of the activities carried out up to the moment (Activities 2 to 8).

3.5. FINAL WORKSHOP

It is foreseen that the Final Workshop will be held on **December 18th in Dar es Salaam.** In this workshop the results and recommendations of the project will be presented to the NBI and the countries' authorities. The Consultant will be available from December 14th to 15th for a meeting with the Working Group.

3.6. INFORMATION GATHERING TOUR

The visits to the region's countries will be conducted during the month of August so as to gather the required information to fulfil the objectives of Activity 4. The questionnaire for information gathering has already been submitted to the PMU on June 18th via email, as agreed during the inception mission.

4. DELIVERABLES: CONTENTS AND ACTIVITIES LINKED TO THEM

- **Deliverable 1: An Inception Report (Final Version)** establishing the activities, scope, and work plan adjusted according to the requirements of the PMU(**The current report**)
- **Deliverable 2:** A review document of the legal and institutional arrangements of regional Power Markets.
- **Deliverable 3:** A review document of status and institutional structures of regional organisation within the Nile basin focussing on power market development, suggesting how these can support the RPTP's objectives.
- **Deliverable 4:** A discussion paper detailing how the various barriers to enhanced power trade can be overcome.
- **Deliverable 5:** A review document of the institutional and regulatory frameworks, and policies of regional electricity trading, including a compendium of internationally accepted best practices in Power Purchase Agreements at regional levels.
- **Deliverable 6:** A draft recommendation on the institutional and regulatory regime changes, necessary for setting up the Power Trade at sub – basin and basin levels, which shall include the minimum universally accepted technical and legal requirements for utilities to participate in a power pool.
- **Deliverable 7:** A discussion paper outlining in sufficient detail, several institutional and regulatory framework models suitable for the development of power market regimes at sub – basin and basin levels, recognising the region's unique characteristics: the paper shall include a roadmap with specific recommendations on the short – term and long – term strategies for the attainment of a Power Trade Regime at sub – basin and basin levels.
- **Deliverable 8:** A report of the proposed Grid Code and guidelines for reporting processes.

- **Deliverable 9:** Procedures and guidelines for data mining, screening and identification. Power sector information & data templates, information exchange protocols between / among members participating in the Power Trade.
- **Deliverable 10:** PMU to facilitate a workshop of PTC members where the Consultant shall present review reports and papers of deliverables 1 – 9 above, in the form of an **Interim Report** and seek approval to proceed with the remaining deliverables of the study.
- **Deliverable 11:** A review document of the resources needed in the form of human and information system support and tools, for the setting up and maintenance of Nile Basin Power Trade regimes at the initial stages, including a specific training and development program for staff in the power sector of the participating member countries: Detailed Terms of Reference shall be submitted for the identified trainings and any other key studies needed to support the countries during the transition period.
- **Deliverable 12:** Draft documents of the proposed Memoranda of Understanding or any other pertinent legal instrument necessary to establish and guide the operations of a Power Trade market during the initial stages.
- **Deliverable 13:** A draft document needed to establish the legal status of Power Trade / Market regime for participating member countries.
- **Deliverable 14:** A comprehensive draft report comprising all the above deliverables shall be presented for discussion / approval at a regional workshop (the 2nd workshop) of regional power experts where the Consultant shall be expected to play a leading role as the presenter (a synopsis document of the draft report in both English and French shall accompany the report); the PMU shall facilitate the workshop.
- **Deliverable 15:** A comprehensive final report incorporating comments, corrections, clarifications and inputs received from the PTC and other regional power experts; a synopsis document (reader – friendly Executive Summary) of the comprehensive final report shall be submitted in both French and English.

Throughout the project, the team leader and the key experts will be available to address and respond to all comments and clarifications sought by the PMU and PTC, emanating from the submitted reports, documents and discussion papers.

Reports will be sent electronically on due dates to the contact person(s) agreed during the inception mission. Hard copies, if required by contract, will be sent by courier and posted at latest on the due date of the corresponding report.

With regard to deliverables, it was considered appropriate to link each of them to the activities related to each deliverable's subjects. The following relations between Deliverables and Activities were agreed (as all activities are agreed, no further comments or clarifications are required for the deliverables).

Deliverable #	Linked to activity
1	Current Report
2	1,2
3	3
4	4
5	5
6	5+
7	5+

Deliverable #	Linked to activity
8	6
9	7,8
10	Workshop
11	9,10
12	11
13	11
14	13 & Workshop
15	13 Final Report

Table 4: Relation between Deliverables and Activities

5. THE TEAM

5.1. TEAM COMPOSITION

The core team, as required by the terms of reference is composed by:

1. **Roberto D'Addario:** Team Leader and Electricity Markets Expert
2. **Svein Pedersen:** Power System Planning Expert
3. **Alberto Pototsching:** Energy Economics Expert
4. **Mohammad Elsobki:** Regional Regulatory Expert.

Other members of the Consultant's team are:

Knut Fossdal: Power System Team

Enrique Patiño: Economics and Policy team / Deputy Team Leader

Serge Nzepa: International Legal Expert

Joanne Dixon: Training Expert, assistant to the Team Leader in training matters

Hubert Menna: Coordinator of Local Support Team

Group of Professionals from the Region: acting as advisory group and facilitating the visit to the countries.

5.2. TEAM ORGANISATION

The following diagram shows the organisational structure of the Consulting Team:

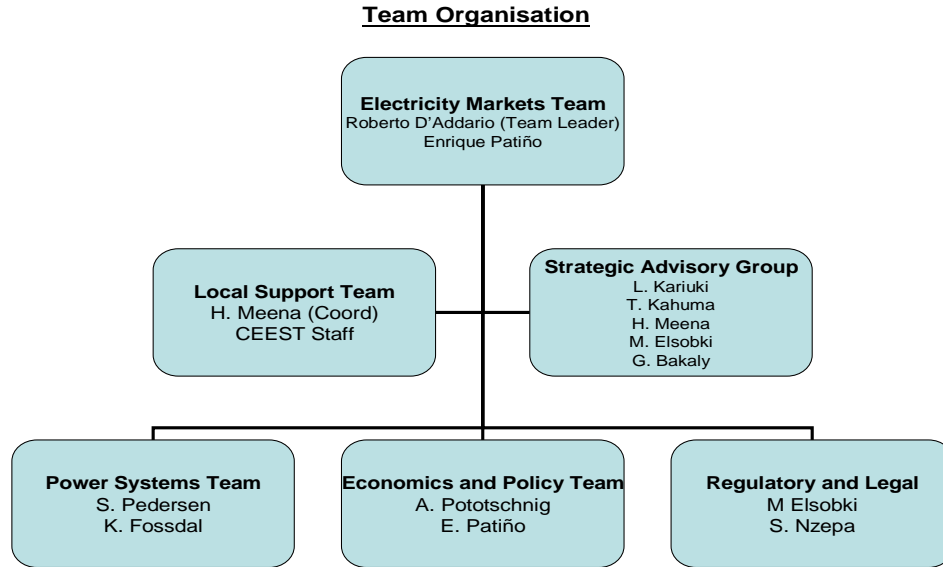


Figure 1: Team Organisation

5.3. RESPONSIBILITY MATRIX

The following matrix shows the responsible for each of the tasks and workshops. This does not mean that is the only professional involved; they will be having support from other members of the team and from the back office of the corresponding companies.

	R. D'Addario	S. Pedersen	K. Fossdal	A. Pototschnig	E. Patiño	M. Elsobki	S. Nzepa
Project Management	◆						
Kick Off Meeting	◆						
Inception Report					◆		
Inception Workshop	◆						
Review of NBI documents						◆	
Review other Power Trade Organisations				◆			
Review Framework & Arrangements NBI region					◆		
Analysis of Specific Reg. Markets & Best Practises PPAs			◆				
Reporting and Information Exchange					◆		

	R. D'Addario	S. Pedersen	K. Fosssdal	A. Pototschnig	E. Patiño	M. Elsobki	S. Nzepa
Regional Data Templates		◆					
Procedures and guidelines for data processing		◆					
Resources Requirements & Costs Estimates					◆		
Training Needs Assessment					◆		
Drafting of Memoranda & Legal Documents							◆
Respond Comments & Clarifications	◆						
Comprehensive Draft Report					◆		
Final Workshop	◆						
Comprehensive Final Report					◆		

Table 5: Responsibility Matrix

VI SCHEDULE OF ACTIVITIES

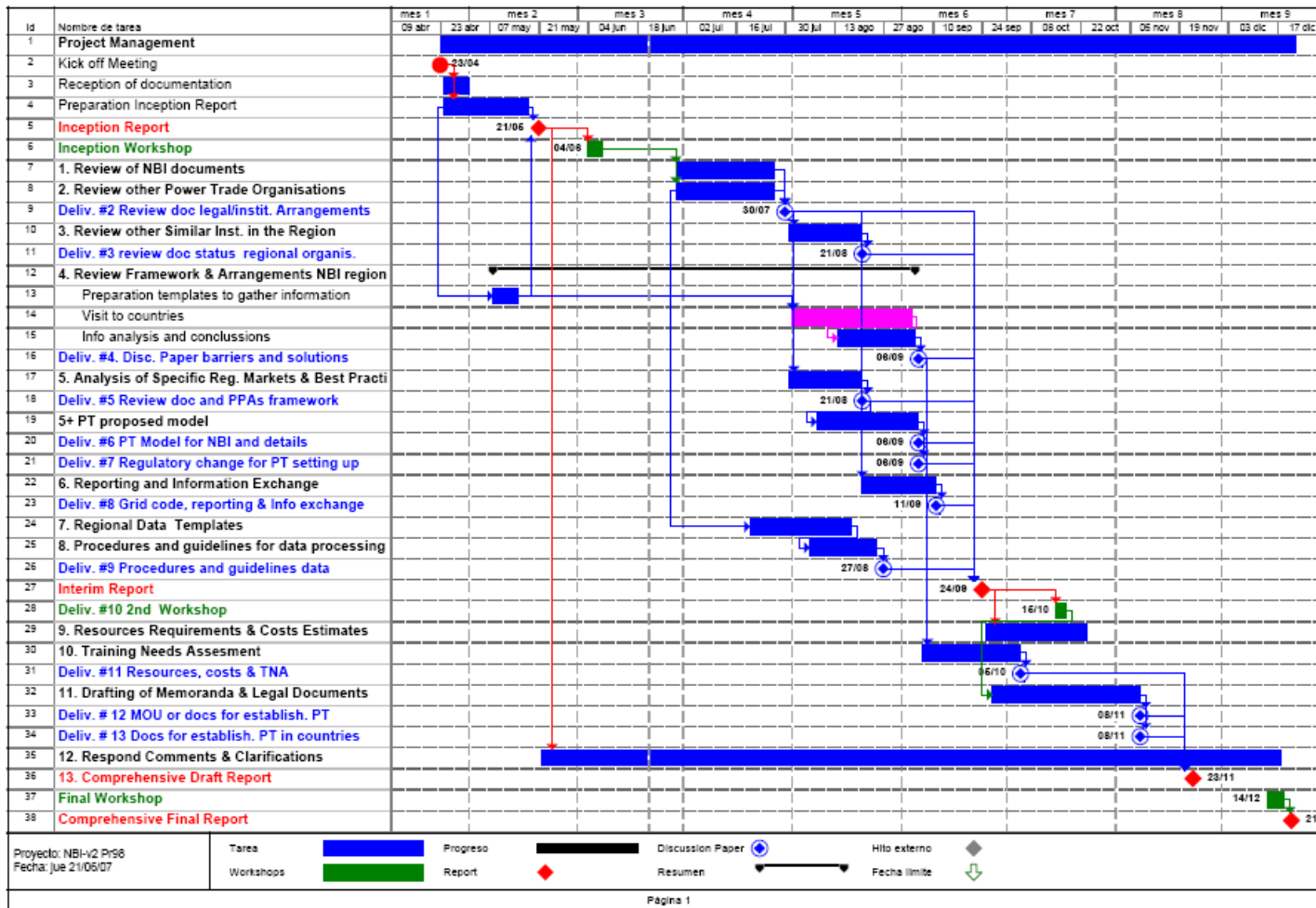


Figure 2: Activity Schedule

VII MISCELANEOUS

1. VIRTUAL PROJECT ACTIVITY ROOM

1.1. COMPONENTS AND MEANS

The fact that this study comprises the participation of several Nile River riparian countries, and also consultants from other countries, makes necessary the implementation of some communication means, in such a way that the distances and geographical diversity won't constitute an impediment for the normal development of the works.

Due to the nature of this project, it is even more important to have fluid communications among all parties, for consensus building will always be a key approach during the execution of the study. In this regard, easy and quick access to all information of the study and easy and practical ways to exchange opinions, to get positions, etc, are facilities that need to be available for the project.

To accomplish those requirements, a website specific for this project has already been implemented, which has two different sections:

- Public section, accessible for everybody accessing the website (dedicated to general information about the NBI Power Forum and Power Trade)
- Private section, accessible from the previous sections, but only for authorized individuals (through ID and Password)

This website has an administrator in charge of uploading information and issuing ID and Passwords. The Website Administrator reports directly to the Project Leader or the Project Coordinator. It is proposed to analyze, during the Inception Mission, the mechanisms to be used for checking with the PMU the following issues:

- Information to be placed in the Public Section
- Information to be placed in the Private Section
- Individuals that are authorized to access the Private Section

Besides this centralized means to exchange information, it has already been put in place a voice communication network using publicly available messaging systems. The chosen one is the SKYPE system, for which already the PMU's and the Consultants' IDs have been exchanged and used. In the Private Section of the website it has been included a label devoted to contacts in general, where all contact information about project participants will be placed, including SKYPE IDs.

For those individuals located in areas without high quality internet access, in order to participate in multilateral conferences via SKYPE, a routine based on alternative communication means, like Computer to Telephone systems will be implemented, which will allow to easily set up conference calls, as a way to keep those individuals connected with the rest of the team.

1.2. COMMUNICATION RECORDS

The Consultant will keep record of all communications held with the counterpart, either formal written exchanges or voice communications.

The file with those records will be posted on the Project Website.

2. QUALITY ASSURANCE PLAN AND RISK MITIGATION

2.1. QUALITY ASSURANCE PLAN

The key component of the Quality Assurance Plan is precisely the present Inception Report. This report is intended to be an exhaustive and detailed work plan for the whole project, establishing inputs and outputs for every activity, deliverables expected from each of them, clear identification of roles and responsibilities of the Consulting team, expected interventions of the counter part and timing (Gantt diagram with details at daily level).

The Gantt diagram for the project includes the dates for each of the four workshops agreed during contract negotiations, as well as the proposed locations for each of them. It is expected that during the Inception Workshop those dates and places will be approved and be fixed from then onwards, and all parties commit to work pursuing the accomplishment of the approved time schedule for the project.

This Inception Report also includes a plan for data gathering during the visits to the Nile River riparian countries, which plan is expected to be discussed and agreed upon during the Inception Workshop.

Besides this plan for project execution, there is also an Internal Quality Check Mechanism, based on the following organizational diagram:

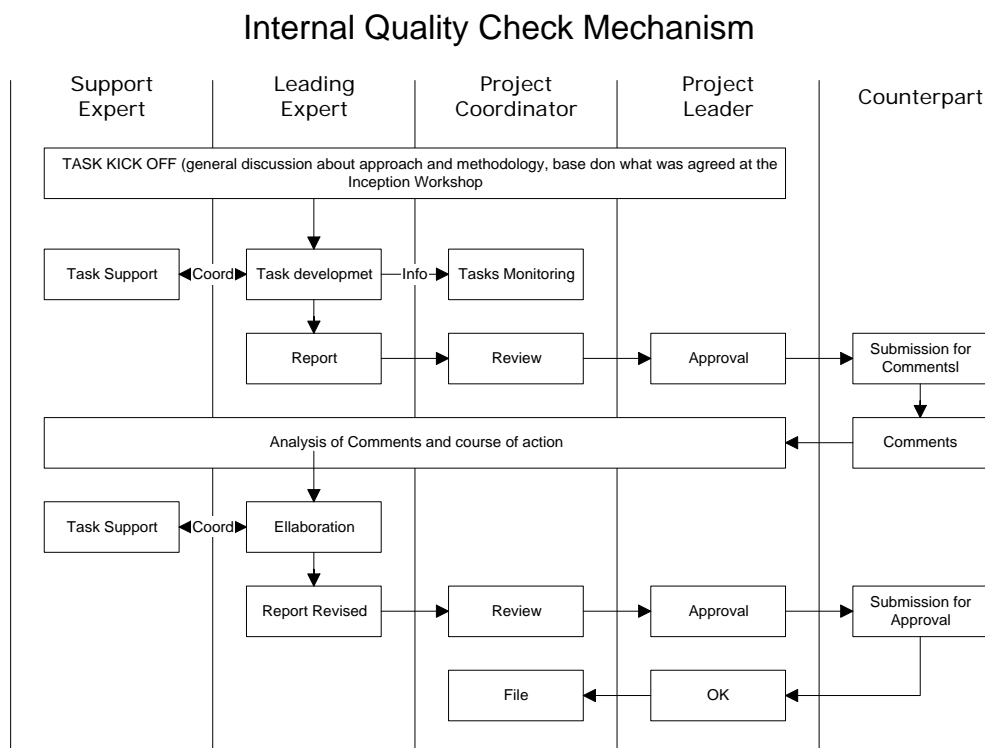


Figure 3: Internal Quality Check Mechanism

The key components of this Mechanism are:

- The project has been provided with enough management resources, with a Project Leader (overall coordination, communications with the Client and Reports approval), a Project Coordinator (specific task coordination with the Key Experts, timing watchdog and primary responsibility for the tour around the riparian countries) and a Coordinator on the ground (support to the in depth analysis of the riparian countries' situation, support to the tasks' detailed activities coordination and liaison with the PMU)
- Clear delimitation of roles
- Each Task has one of the Key Experts responsible for its completion according to the ToRs' requirements
- Each Key Expert has resources allocated (time of other Key Experts) that will act as support. The Key Expert in charge is responsible for the coordination of this support work

- Inclusion of an expert (besides the Key Experts) specialized in Capacity Building management, in charge of Training Needs Assessment and other training activities
- Full logistic support

2.2. RISK MITIGATION

In the foreseeable course of the project, there is one potential risk that needs to be properly managed in order to avoid the project getting stuck at different points: the lack of timely response from some of the stakeholders from whom opinions or comments will be required.

According to many previous experiences, this is a certain risk, for not always the parties from whom a reaction is expected, are in a condition to do it, either due to lack of time, lack of capacity or lack of interest in the subject submitted for their consideration.

The consultant will do whatever is needed to make the communications as fluid as possible (particularly preparing reports as concise as possible and easy to read), and also will try to keep motivations as high as possible, but in any case it must be expected that actual participation will not always reach 100%.

The proposed way to deal with this possible fact is the combination of different measures:

- Send all Documents, Discussion Papers and Reports electronically directly to the counterpart members appointed, as agreed with the PMU during the inception phase (and or amended along the life of the project), copied to the PMU
- Simultaneously send the hard copies per mail to the contact addresses provided during this inception phase
- Place all sent documents on the Project Website
- Give express instructions to get their comments back to the PMU before a specific date (15 calendar days after submission of the electronic copy)
- Place all received comments on the Project Website
- After expiration of the given time for comments, it will be understood by the Consultant that there are no more comments, and the final version of the documents will be prepared and submitted to the PMU for final approval. The consultant will clearly comment the treatment to each of the received comments and observations from the counterpart.
- Unless serious disagreements from the stakeholders with the documents occur, the PMU will approve expediently the final version of the documents.

As part of the Monthly Advance Reports, a special section will be included analyzing the evolution of the project with regards to the accomplishment of the timing and stakeholder participation, among others relevant matters.

VIII ANNEX I – MINUTE INCEPTION MISSION**NILE BASIN INITIATIVE****REGIONAL POWER TRADE PROJECT**

Consultancy Services to Develop an Institutional, Regulatory and Cooperative Framework Model for Power Trade

MINUTES OF INCEPTION REPORT MEETING

Venue: Dar es Salaam PMU Offices

Dates: 4th – 7th June 2007

In Attendance:

NAME	ORGANIZATION
SWG – Power Trade	
Henry Bidasala Igaga	Ministry of Energy & Mineral Development, Uganda (Chairperson of SWG)
Barampanze Pierre	Ministry of Energy & Mines, Burundi
Zalalem Gebrehiwot	Ethiopian Electric Power corporation
Peter N. Kinuthia	East African Community Secretariat
Sherif A. Ewiss	Eastern African Power Pool
Désiré Nzayanga	NELSAP
Hazem Hanafi	ENTRO
Kamu R. Karekaho	Regional Power Trade Project
David Ngula	Regional Power Trade Project
Mengesha Shiferaw	Regional Power Trade Project
Humphrey Ndwiga	Regional Power Trade Project
Consultant	
Enrique Patino	Mercados
Knut Fossdal	Nord Pool Consulting
Roberto D’Addario	Mercados

Hubert E. Meena	CEEST Foundation
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Introduction

The Chairman opened the session with words of welcome, an introduction and a proposal of agenda for the day:

- presentation by the Consultant of the general approach and philosophy of the project,
- discussion on the presentation,
- presentation of scope of activities originally foreseen,
- discussion on scope of activities,
- presentation by the Regional Project Manager (RPM) of the changes desired on the scope of work.

The project director, Mr. D'Addario appreciated the words of welcome and presented the Consultant's professionals present at the meeting.

1. Scope of Work Realignment

During the workshop it was discussed how to accommodate the changes requested by means of the letter NBI/RPT/Studies – 1/14/07 from UNOPS.

It was agreed by the Working Group members and the Consultant that the tasks can be implemented without deviation at the overall level of effort negotiated earlier under Appendix A Description of the Services of the contract.

After a thorough analysis, several clarifications were made, as follows:

Activities

1. **Activity # 1.** Documents to be submitted by the Client to the Consultant will be agreed with PMU.
2. **Activity # 2.** No further clarifications required.
3. **Activity # 3.** This is a new task to be performed. The Consultant requests the Client to identify the regional initiatives that should be analysed. The Consultant will visit these institutions as part of the visit to the countries. The institutions agreed to be analysed are, Eastern African Power Pool, East African Community, EGL (Energie des Grands Lacs). Contact information will be provided by the PMU.
4. **Activity # 4.** No further clarifications required.
5. **Activity # 5.** Analyse a number of regional markets (to be determined) from the point of view of the institutional and regulatory framework and the roadmap for their implementation. Cases will be selected from those analysed in activity 2. A document with best international practises in PPAs will be developed and added to the deliverable.

6. **New Activity: Activity 5+.** DEVELOPMENT IN GREAT CONTOURS OF A PROPOSAL OF TRADING FRAMEWORK FOR THE NBI. This proposal will include a thorough analysis regarding changes needed to remove the identified barriers and impediments for the RPT development. This model will be used as reference for further activities.
7. **Activity # 6.** No further clarifications required.
8. **Activity # 7.** The Consultant will produce a series of templates. It is agreed that the Consultant has only to prepare the templates and provide them to the Client. The Client will provide information and contacts regarding the DSS (Decision Support System). The system planning tools will be researched during the visit to the countries.
9. **Activity # 8.** Should be read together with **Activity # 7.** Deals with procedures to gather, process and incorporate information in a database.
10. **Activity # 9.** No further clarifications required.
11. **Activity # 10.** No further clarifications required.
12. **Activity # 11.** No further clarifications required.
13. **Activity # 12.** No further clarifications required.
14. **Activity # 13.** No further clarifications required.

Deliverables

With regards to deliverables, it was considered appropriate to link each deliverable with the activities that are related to the subjects of each of them. The following relations were agreed between Deliverables and Activities (as all activities are agreed, no further comments or clarifications are required for the deliverables):

1. **Deliverable # 1:** Already submitted.
2. **Deliverable # 2:** No further clarifications required. (Activity 1,2)
3. **Deliverable # 3:** No further clarifications required. (Activity 3)
4. **Deliverable # 4:** No further clarifications required (Activity 4)
5. **Deliverable # 5:** No further clarifications required (Activity 5)
6. **Deliverable # 6:** No further clarifications required (Activity 5+)
7. **Deliverable # 7:** No further clarifications required (Activity 5+)
8. **Deliverable # 8:** Less templates (Activity 6)
9. **Deliverable # 9:** Add "and templates" (Activities 7,8)
10. **Deliverable # 10:** Workshop

- 11. **Deliverable # 11:** No further clarifications required (Activity 9, 10)
- 12. **Deliverable # 12:** No further clarifications required (Activity 11)
- 13. **Deliverable # 13:** No further clarifications required (Activity 11)
- 14. **Deliverable # 14:** Workshop and Activity 13
- 15. **Deliverable # 15:** Final Report Activity 13

2. Virtual project communication room.

Web site for the project is already established, with two sections: public access and private access. For access to the private section, passwords are required.

It was agreed as follows:

- Passwords will be administered by PMU. List of accesses will be worked out and passwords will be distributed.
- Official communications of the Project will be coordinated by and through PMU.

3 Risk mitigation

To mitigate against possible delays or non responses from the Client, it was agreed that:

- All reports and questionnaires should also be sent to the PTC members to expedite the process of reviewing and preparing answers and comments.
- All information submitted to the parties will also be published on the web page-private section.
- The main reports (Interim Report and Final Report) have to be delivered 3 weeks before the workshops.
- Comments on discussion papers to be received within 15 days after submission.

4 Timeline

With regards to the Data Gathering exercise, it was agreed that:

- The Consultant will prepare and submit to the PMU the refined version of the questionnaire (including operational data and training needs assessment and information to be obtained from relevant regional institutions) by June 18th, 2007.
- The PMU will review and distribute the questionnaire within one week
- The countries will be given one month for collecting the information
- The visits by the Consultant will take place during August 2007.
- The Consultant will propose a visit schedule by June 18th, 2007

With regards to the Workshops, it was agreed that:

1. The Consultant will attend the PTC meeting in August 2007 to present a status report.
2. The preparatory/interim workshop will be held during October 15th to 17th, 2007, in Nairobi.
3. The final workshop shall be held on December 18th, 2007, in Dar es Salaam. The Consultant will also be available between December 14th and 15th for a meeting with the Working Group.

Closing of the Meeting

There being no other business, the chairperson thanked the consultants, the Study Working Group and the entire PMU for their contribution towards the success of the Inception Workshop.

Signature:

Date:

Eng. Kamu R. Karekaho

For, Client

Signature:

Date:

Mr. Roberto D'Addario

For Consultant