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**Hydropower Investment  
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# **MARKET CLEARING CONCEPT AND ITS ROLE IN THE ELECTRICITY MARKET IN GEORGIA**

MARCH 2013

This publication was produced for review by the United States Agency for International Development. It was prepared by Deloitte Consulting LLP

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USAID HYDROPOWER INVESTMENT PROMOTION PROJECT  
(HIPP)

CONTRACT NUMBER: EEM-I-00-07-00005-0

DELOITTE CONSULTING LLP

USAID/CAUCASUS OFFICE OF ENERGY AND ENVIRONMENT

MONDAY, MARCH 11, 2013

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## 1.0 EXECUTIVE SUMMARY

- The design of the Electricity Trading Mechanism (ETM) in the Georgian Electricity Market aims to provide hydropower plant access to regional power markets and is in support to the Government of Georgia (GoG) Strategic “10-Point Plan”.
- USAID/HIPP is providing technical support to the Ministry of Energy and Natural Resources (MENR) as it seeks to make the minimum modifications required to the current Georgian power market design towards the ETM design.
- As part of the ETM, a clearing mechanism will be needed to cover for proposed electricity transactions in the day-ahead market (DAM), purchases of electricity transmission interconnection capacity and eventually for over-the-counter (OTC) contracts settled by the market operator.
- Clearing involves the management of post-trading, pre-settlement credit exposures and ensures that trades are settled in accordance with market rules, even if a buyer or seller becomes insolvent prior to settlement. The MCH will protect the market players against counterparty risks, will be the guarantee of post-trade anonymity and will perform efficient allocation and calculation of collateral.
- A key element of the clearing mechanism implementation is The Law on Payment Systems and Payment Services that will enable the creation of a Market Clearing House (MCH). This law defines the principles of regulation and supervision of payment systems and payment services.
- The Law on Payment Systems and Payment Services was adopted by Parliament on July 1 of 2012 and it is premature to state definitively that the MCH will receive a license from GNEWRC, because the MCH will be subject to a yet developed registration procedure at the National Bank.

## 2.0 TERMS AND ACRONYMS

Terms and abbreviations used in this document have the following meanings below. For purposes of harmonization with European law, a number of terms that are used in the EU are used in place of present terms used in Georgian legislation.

DAM	Day-Ahead Market
DSO	Distribution System Operator
Derivatives Market	Market or sub-market on which transactions in products with a deferred settlement date are concluded and/or registered.
Electricity Market	Exchange of demand and supply for the purpose of efficient selling, purchasing and supplying of electricity.
ETM	Electricity Trading Mechanism
ESCO	Electricity System Commercial Operator of Georgia
EU	European Union
GEMM 2015	Georgian Electricity Market Model 2015
GNEWRC	Georgian National Energy and Water Supply Regulatory Commission
GoG	Government of Georgia
GSE	Georgian State Electrosystem
G10 Countries	The Group of Ten is made up of eleven industrial countries (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States) which consult and co-operate on economic, monetary and financial matters
HIPP	Hydropower Investment Promotion Project
HPP	Hydro Power Plant
HTTP	Hypertext Transfer Protocol
ISDN	Integrated Service Digital Network
IT	Information Technology
MCH	Market Clearing House
MO	Market Operator
Market Participant	Participant in the GEMM that is not a Market Service Provider
NCC	National Control (Dispatch) Center in Georgia
OTC	Over-the counter contracts that are traded in direct negotiation between buyers and sellers
PX	Power Exchange
Stresstest	simulates the default of one or more clearing members under the assumption of extreme but plausible market conditions
TSO	Transmission System Operator
XML	Extensible Markup Language

### **3.0 MARKET CLEARING CONCEPT**

The ETM is designed to enable Georgian HPPs to sell their electricity output into the Turkish power market (and eventually other regional markets) with a trading mechanism that properly allocates the market player's risks and provides dependable cross-border transmission rights. The clearing mechanism, as part of the Electricity Trading Mechanism (ETM), will be needed to cover for proposed electricity transactions in the day-ahead market and eventually for over-the-counter (OTC) contracts that will be settled by the market operator.

Electricity as a commodity requires a particular market model to allow for a liquid market. A competitive Georgian electricity market framework requires a variety of improvements related to the current structure of the electricity market in Georgia. Such framework requires that both the physical and financial aspects of electricity must be taken into account. The financial nature of the exchange allows traders to hedge their physical exposure against volatile market prices. The need of a financial commodity market is related to the price variation in the underlying asset. The physical one allows participants to balance and meet physical demands from their consumers and counterparties. In addition, an efficient supervision of the financial market is also of importance in order to increase the confidence and to secure the investments of the market players. Furthermore, by providing tools for risk management, the financial market contributes to the efficient functioning of both wholesale and retail markets.

A market clearing mechanism guarantees the financial regularity of the market players and reduce the counter party risk. The clearing mechanism is identified with the establishment of a Market Clearing House (MCH). The MCH is an entity that clears and guarantees the performance and settlement of futures and options contracts and ensures that all trades will be cleared. If the parties have entered the contract via a financial electricity exchange, clearing is mandatory. A clearing house stands between two clearing parties (also known as members or clearing participants) and its purpose is to reduce the risk of one (or more) clearing party failing to honor its trade settlement obligations. A clearing license is required for participation as a clearing member and is obtained by means of the conclusion of a corresponding clearing agreement with the MCH. The clearing license authorizes the holder to clear transactions in products which are approved.

International electricity trading is conducted via energy exchanges or bilateral contracts. Products are traded with short or long-term horizons, either for the physical delivery of electricity or on a purely financial level. The MCH will become the counterparty to both the buyer and the seller once a trade is done on the exchange or once an over-the counter (OTC) trade is registered for clearing. The trading at the financial exchange is anonymous: the parties do not know each other's identity. The MCH provides clearing services for the partner exchange/exchanges and is responsible for the physical settlement of the transactions. Therefore, the clearing entity has strong financial position and a well regulated system to manage counterparty risks. The market player who trades on the exchange has to have an agreement with both the exchange and with the clearing house.

In principle, the MCH might be an existing bank or commodities house, or it could be newly established special purpose entity. Anyone, who has appropriate provision to act as a clearing house, could enter the market. This provision will be the product of a competitive tendering process and will operate under a clear set of rules that are transparent to clients and clearing house members. Some clearing houses provide services to only one exchange, others serve a group of exchanges.

The daily activities of the MCH include: reporting (monitoring), clearing, funds administration, real-time surveillance, information dissemination and to ensure that all trades are settled in accordance with market rules, even if a buyer or seller becomes insolvent prior to settlement. Along with the daily activities, the MCH performs periodical administration related to: membership, funds, reporting, dispute resolution, ex-post operations monitoring, and management of instructions and notices. Figure 1 shows the explicit functions of the MCH described by the “Four Lines of Defense” in its organizational structure.

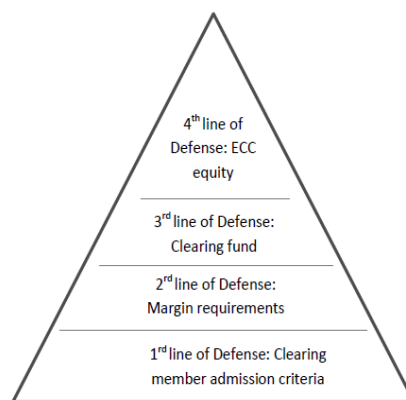


Figure 1. MCH functions

As a central counterparty, the MCH guarantees financial fulfillment and carries out cash clearing for purchases and sales of all transactions concluded on trades, as well as establishes risk management control for the transactions.

The MCH provides a range of services related to guarantee of contracts, clearance and settlement of trades, management of risk for their members and associated exchanges. In providing these services, clearing houses can be organized in a wide variety of forms: some clearing houses are organized as departments of their affiliated exchanges, others are independent legal entities. Some clearing houses are owned by their member clearing members, others are owned by exchanges or are public corporations. Despite these organizational differences, clearing houses typically have a core set of common features. Most important, clearing houses serve as the central counterparty to deals struck between exchange members. That is, the clearing house becomes the buyer to every seller of a contract and the seller to every buyer. As a central counterparty, the MCH guarantees financial fulfillments of all its members and sustainability of the market.

When the underlying prices are volatile, the demand for price hedging increases. Producers, suppliers and consumers can optimize their risks associated with variations in price in coming months and years by selling or buying future contracts



based on the underlying asset to an already decided price. The efficiency of an organized financial market is represented by the size of the traded volume of the underlying asset in relation to the acceptability of standardized contracts. Figure 2 demonstrates how the market-clearing price is formed. Trading is based on an auction trade system. The spot concept is based on bids for purchase and sale of power contracts of one-hour duration that cover all 24 hours of the next day. The market clearing price or system price for a particular hour is first calculated using only the bids for purchase and sale that participants have submitted. To do this, all purchase bids are summed to create a demand curve, and all sale offers are summed to create a supply curve (offer curve). In the real-time electricity market, the clearing prices are calculated based on the actual system operations security-constrained economic dispatch.

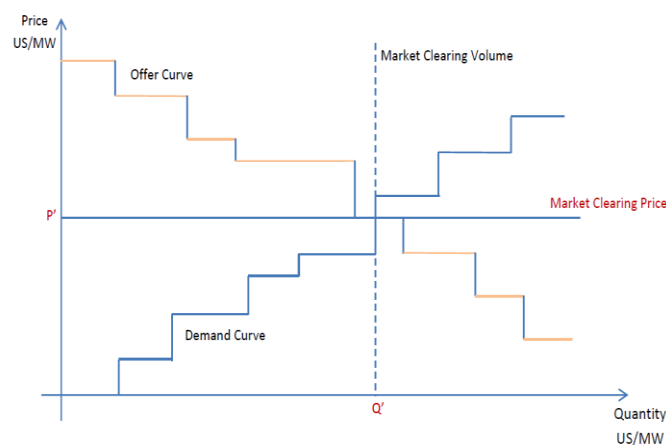


Figure 2. Formation of the market clearing price

Furthermore, the derivatives give rise to cash flows based on the differences between the contract price of the derivative and the spot price of electricity. The prices of these instruments reflect the expected spot price, plus premiums to cover credit default risk and market risk of the players. In order to function properly, the MCH's have appropriate own funds to the operations for conducting sufficient security to guarantee fulfilment of the contracts and professional secrecy for staff and representatives.

### 3.1 Types of risks associated with the MCH

The MCH assumes the counterparty risk for all transactions concluded on its exchange or transactions that are registered as trades. In the event of a default, the MCH guarantees payment and deliveries. The MCH concentrates the risk of settlement failures into itself and is able to isolate the effects of a failure of a market participant. The MCH guarantees the settlement: it will ensure that the settlement is carried out, even if one of the parties cannot fulfil its obligations. In the event of a

settlement failure, the clearing member (the market participant) may be declared to be in default and clearing house default procedures may be utilized, which may include the orderly liquidation of the defaulting member's positions and collateral. Therefore, managing the counterparty risk is an essential part of the MCH's business. By substituting itself as the counterparty to trades, the clearing house assumes a variety of risks that must be managed. The clearing house typically assumes no market risk because, as central counterparty, for every long position it holds there is a corresponding short position, and vice versa. It is, however, exposed to the risk that one or more of its clearing members might default on their outstanding contracts. This exposes the clearing house to credit risks (replacement cost risks) and also to liquidity risks.

**Credit risks:** Any party selling a commodity will wish to understand the creditworthiness of their counterparty to manage their risk in the event of a default. To manage this risk, purchasers may be required to post some form of collateral. Equally, the terms on which sales are made may vary according to the creditworthiness of the purchaser, with less creditworthy counterparties being charged a premium to reflect credit risk. This is a sensible and efficient response to dealing with the risk of default. Further, to cover the potential liabilities of the market as a whole arising from a party who is unable to settle their imbalance liabilities, market participants are required to post further collateral under the market rules. The level of collateral is linked to their estimated imbalance exposure over time (i.e. a function of forecast consumption and notified net purchase contracts).

**Liquidity risks:** Liquidity can be defined as the degree to which an asset can be bought and sold in the market without affecting the price of the asset and without incurring significant transaction costs. The size of the liquidity in a market has a great impact on risk management, transaction costs and the value of the derivatives. Liquidity can be measured by studying the volume of trades in the market, the bid-offer spread, number of trades, the range of products available to market participants and the number of market participants.

By substituting itself as counterparty to its clearing members, the MCH exposes itself to liquidity risks; it must fulfil its payment obligations to non-defaulting members on schedule, even if one or more members default. Indeed, it is particularly critical that a clearing house perform its obligations without delay so that questions about its solvency do not arise. Depending upon the design of the clearing arrangements and the functions it performs, the clearing house may obligate itself to make a wide variety of payments: pass-through of profits on outstanding contracts, pass-through of option premium payments, reimbursements of cash initial margins, or payments for deliveries. In the event of a default, a clearing house would typically look to assets of the defaulting member and its own financial resources to raise the necessary funds. However, because clearing houses typically seek to minimize the opportunity costs of membership, in most cases few of these assets are cash assets. Non-cash assets must be liquidated or pledged before the clearing house can meet its obligatory transactions, which may be difficult or costly to complete in the time required. Furthermore, for clearing houses that effect settlements in multiple currencies, foreign exchange transactions might also be necessary to convert the proceeds of such borrowings or asset sales into the required currency.

Principal risks may also exist if contracts provide for delivery (rather than cash settlement) and if a delivery-versus-payment mechanism is not utilized to effect deliveries.

**Principal (delivery) risks:** Clearing houses can incur large credit exposures on settlement days, when the full principal value of transactions may be at risk. This can occur if upon maturity (futures) or exercise or expiration (options) contracts are settled through delivery and delivery versus payment (DVP) is not achieved. If a commodity or underlying instrument is delivered prior to receipt of payment, the deliverer risks losing its full value. If payment is made prior to delivery, the payer risks losing the full value of the payment. In some cases, the sequence in which deliveries and payments will occur is known in advance and principal risk is clearly asymmetric. In other cases, the sequence is not known in advance; indeed, even on settlement day the counterparties may lack real time information on the status of deliveries and payments. Many products traded by derivatives exchanges call for cash settlement rather than delivery, and principal risk is thereby eliminated. These cash settlements are generally handled through the same channels as other cash payments. However, certain contracts that are settled through physical delivery foreign exchange contracts in some G10 countries and base metals contracts in others have resulted in quite substantial deliveries in recent years. In these cases, where a DVP mechanism is not available clearing houses have used other techniques (prepayment, third-party guarantees) to limit the size of exposures or the risk of loss.

In those cases in which clearing houses utilize private settlement banks rather than central banks to effect money settlements, another source of risk is the possibility of failure of a settlement bank.

**Settlement bank failures:** Clearing houses effect money settlements through one or more settlement banks. Clearing houses in some countries use the central bank as the sole settlement bank, which effectively eliminates the risk of settlement bank failure. However, clearing houses in other countries use private settlement banks and, therefore, are exposed to the risks of settlement bank failures. Such failures could pose both credit risks and liquidity risks to a clearing house.

The size of the clearing house's credit and liquidity exposures to its settlement banks may be quite significant. However, whether this is so depends critically on: (1) the amounts owed to the clearing house by clearing members that utilized the settlement bank on the date of its failure; (2) the timing of the settlement bank's failure; and (3) the terms of the settlement agreement between the clearing house and its clearing members and settlement banks.

Clearing houses also typically maintain their own financial resources to help cover losses and ensure timely settlements, and the investment of such resources usually entails some risk of loss or illiquidity. Like other payment and settlement systems, exchange clearing houses face various operational risks.

**Operational risks:** Operational risk is the risk of credit losses or liquidity pressures as a result of inadequate systems and controls, human error or management failure.

With respect to systems, the clearing house faces the potential breakdown of some component of the hardware, software or communications systems that are critical to its risk management system. Of particular concern is the breakdown of hardware that would impair the clearing house's ability to calculate money settlements, creating potential liquidity pressures both for itself and for clearing members. Breakdown of a key operational component could also heighten credit risks to a clearing house in at least two ways. First, it could hamper its ability to monitor its credit exposures. For example, a breakdown in communications with an exchange's trading floor could deprive the clearing house of timely information on the open positions of clearing members or changes in the market value of such positions. Second, it could hamper the clearing house's efforts to control its exposures to its members.

Finally, legal risks are also a concern; it is important, for example, that the clearing house's default procedures be supported in all relevant legal jurisdictions.

**Legal risks:** Clearing houses for exchange-traded derivatives may face a variety of legal risks that have the potential to substantially increase losses from a default, either by a clearing member or by a settlement bank. In the event of a clearing member's bankruptcy, perhaps the most significant is the legal risk that the multilateral netting arrangement between clearing members and the clearing house would not be upheld under the national law. Clearing houses in many jurisdictions have been afforded special legislative protection to ensure that their netting is valid. Another significant potential source of risk is that bankruptcy administrators might challenge a clearing house's right to close out (or transfer) positions and liquidate (or transfer) a defaulting member's assets.

Clearing houses have financial resources (equity, reserves and other sources of funds) that are typically invested in order to generate revenues to partially offset the costs of clearing house operations. Clearing houses usually invest these funds in very short-term bank deposits or placements or in highly liquid, short-term securities. Thus, market risks on these investments tend to be negligible.

The MCH mitigates risks to participants through a system consisting of the following procedures:

- Novation of trades as soon as they are matched in the markets trading platforms or have been accepted as deals by the two participants. As a result, the trading participant is not exposed to the other trading participants credit risk.
- Strict criteria for the admission of Clearing Members: the MCH acts on a "principal-to-principal" basis, which means that MCH members act as intermediaries for their clients transactions. With the help of strict admission criteria the MCH ensures that its members have the necessary resources to fulfill the highest requirements.
- Daily settlement of profits and losses: Open positions are marked to market every day and profits and losses are paid out or collected on a daily basis. Payments are settled on a net basis.

- Margins are required on a daily basis – and, if necessary, intraday in volatile market conditions - to cover current and future exposures of open positions and pending spot market transactions.

#### **4.0 EXAMPLES OF MCH**

European Commodity Clearing (ECC) was established through the spin-off of the clearing and settlement services of European Energy Exchange (EEX) in 2006. The aim was to achieve cooperation with other markets in the field of physical and financial settlement of transactions and, thus generate advantages for trading participants. These advantages are achieved by offsetting the margins to be furnished for several products on different trading platforms (cross-margining), netting of payment streams, and through providing uniform technical access to clearing services for market participants that usually operate on several trading platforms.

ECC provides clearing and settlement services for transactions concluded on the partner exchanges or registered for clearing on these exchanges after conclusion off the exchange. ECC demands a contribution to the clearing fund from the Clearing Members. This contribution is used, amongst other things, to cover intra-day risks and other risks. ECC's own contribution to the clearing fund (currently in the range of € 3 mn) is deducted from the result of the stresstest. Depending on the assessment of the clearing members risk, ECC also determines an absolute minimum for the clearing fund contribution. Currently, fifteen Clearing Members are integrated into the clearing process on ECC. European Commodity Clearing AG (ECC) is the central clearing house for energy and related products in Europe. In its capacity as the central counterparty, ECC assumes clearing as well as physical and financial settlement of transactions concluded on APX-ENDEX, the CEGH Gas Exchange of the Vienna Stock Exchange, EEX, EPEX SPOT, HUPX and Powernext as well as clearing and settlement of transactions registered for OTC clearing on these exchanges. Furthermore, ECC does not exclude cooperations beyond Europe so as to offer customers advantages on their national markets through integrated clearing.

ECC is supervised by the German Federal Financial Supervisory Authority and the German Central Bank. Therefore, it complies with capital requirements according to the German Banking Act. Any institution based in the European Union (EU) territory or Switzerland, that will apply for a clearing license, is also supervised by the competent authorities within their countries of incorporation in accordance with the parameters of the directives of the EU or the Swiss bank commission. Currently, the European practice conditions a general clearing license on the precondition of liable equity funds on the part of the institution filling the application in the amount of EU 30 mln.

The volume cleared by ECC has risen continuously and rapidly over more than twofold in the recent few years. For example, in the year 2011, ECC settled a volume of 1,389 TWh in power contracts and more than 560 TWh in natural gas contracts. Moreover, ECC provides clearing and settlement services for CO<sub>2</sub> emission allowances and coal markets.

A competitive electricity market maintains economic dispatch and system stability and should focus on open access for trading that is essential for the competitive goal. Implementations of new entrants in the generation market, clear market rules and legislative framework improvements that provide access to the transmission facility accelerate the process of market competition. Investment takes place when the opportunity costs provide sufficient incentives for the participants in the market. Investment decisions are made in response to market demand. Identifying the deviations between the current Georgian market structure and a competitive market structure assists in evaluating transitional strategies and designing approximations to the competitive ideal.

Under the GEMM 2015, a license will be required by or for the settlement activities of the MCH. The MCH will receive a license from GNEWRC, because the MCH will be subject to a registration procedure at the National Bank of Georgia.

The MCH will be created pursuant to the Law of Georgia on “Payment System and Payment Service” that will govern all Georgian clearing and settlement operations including those related to the electricity markets. Although the MCH will be registered by the National Bank of Georgia, it will operate in the electricity market pursuant to rules and procedures established by GNEWRC to govern electricity market operations.

The Law of Georgia on “Payment System and Payment Service” (hereinafter the “Payment System Law”) is the key law towards the ETM implementation of a clearing house in the electricity market in Georgia. The Law was originally drafted by the National Bank of Georgia. The “Payment System Law” was submitted to the Parliament of Georgia, was adopted by Parliament and entered into force on the 1st of July, 2012. The next part of the report describes a summary of the “Payment System Law” and the requirements for the creation of the MCH in Georgia.

## **5.0 SUMMARY OF LAW OF GEORGIA ON “PAYMENT SYSTEM AND PAYMENT SERVICE”**

The “Payment System Law” is aimed at the support of effective functioning of payment systems throughout Georgia. This law defines the principles of regulation and supervision of payment systems and payment services; it regulates the issues connected with the financial collateral.

The relations connected with payment system is regulated by the Organic law of Georgia on the “National Bank of Georgia”, the “Payment System law”, Law of Georgia on “Securities’ Market” and other normative acts of Georgia.

In case if the provisions concerning payment systems and payments services of the “Payment System Law” and other laws contradict each other, the provisions of the “Payment System Law” shall prevail. The “Payment System Law” includes the definition of terms. Along with other terms it defines the payment system and clearing system. Payment system means cash payment system, securities’ payment system and/or clearing system.

Clearing system means a set of rules and standard procedures existing among three or more participants applying of which the procession of transfer orders sent by participant is done and net positions are calculated and/or established among participants for further payment where the calculation of net positions is based on the principle when the system operator acts on behalf of a seller to every buyer and on behalf of a buyer to every seller.

System operator is a legal entity which independently or together with other legal persons is authorized and responsible to operate payment system and draft payment system rules in accordance with the Georgian Legislation.

The “Payment System Law” envisages significant payment system operator and significant payment service provider together with the system operator and payment service provider. The reason for that is the following when the system operator’s and payment service provider’s annual turnover may reach a certain level, also the number of clients will also be increased in that case the National Bank of Georgia may declare the payment service provider and payment system operator to be significant payment service provider and significant payment system operator. This may be done by the National Bank of Georgia on the basis of a regulation which will specify the details how the significant payment system operator and significant payment service provider will be regulated, inspected and etc. The payment system operator and payment service provider shall be registered by the National bank of Georgia. When they become significant payment system operator and significant payment service provider, the National Bank of Georgia will adopt a normative act which will regulate all relevant issues.

Relevant provisions from the “Payment System law” concern registration of system operator, regulation and supervision of payment system operator, and payment service provider, confidentiality of information, the information which has to be submitted by the significant system operator and significant payment service provider, inspection, sanctions and duties of system operator, and payment service provider.

## **5.1 The Registration of Payment System Operator**

A legal entity is authorized to manage payment system throughout the whole territory of Georgia only in case if it is registered as a system operator by the National Bank of Georgia.

The registration or revocation of registration of payment system operator is done in accordance with the rules and requirements established by the National Bank of Georgia.

The National Bank of Georgia is authorized to establish standards in order to ensure the effective functioning of payment systems and provision of payment services. The National Bank of Georgia is authorized to request the system operator and receive financial, statistical and other information within its competence.

## **6.0 The Regulation and Supervision of Payment System Operator and Payment Service Provider**

The National Bank of Georgia is authorized to regulate and supervise the system operator and payment system provider in accordance with the Organic Law of Georgia on the “National Bank of Georgia”, the “Payment System Law” and other normative acts. The National Bank of Georgia is authorized to issue normative acts regulating payment services.

In order to carry out the supervisory functions the National Bank of Georgia is authorized to:

- a) issue normative acts;
- b) establish requirements for the system operator and payment system provider which is connected with the system rules, procedures, standards, rights and obligations of participants, the safety of the system and technical maintenance and other issues concerning system operation;
- c) establish additional requirements for the significant system operator and significant payment service provider;
- d) enable the significant system operator and significant payment system provider not to follow the norms established by the “Payment System Law” and the National Bank of Georgia during specified period and/or specified conditions;
- e) request the significant system operator and significant service provider in writing to act or abstain from a specific activity.

## **7.0 THE STORAGE OF INFORMATION AND CONFIDENTIALITY**

The information concerning cash funds and/or e-money, transactions made by the consumer shall only be given to the same consumer or to its duly authorized representative, also in cases envisaged by the legislation of Georgia this information may be given to the Financial Monitoring Service of Georgia and persons participating in the execution of acts subject to the Law of Georgia on “Execution Proceedings”. This information may be given to other persons only on the basis of court decision.

The information concerning the payment operation may be given to the relevant payment system, system operator, the receiver’s provider and to the receiver. The information envisaged in a transfer order given to the operator as a result of payment system functioning may only be given to the relevant participant or it’s duly authorized representative, in cases envisaged by the legislation of Georgia this information may be given to persons who are authorized to execute acts subject to the Law of Georgia on “Execution Proceedings”.

The Court, investigatory bodies and tax authorities are prohibited to transfer this information to third persons and media before the decision is taken. It is also prohibited to use this information in public speeches. The payment system operator and payment service provider are obliged to take and execute relevant measures in order to protect confidentiality of information. Furthermore, the payment system



operator and payment service provider are obliged to keep records and documentation in accordance with the legislation of Georgia and are obliged to keep information of participants, consumers and operations made by them electronically for not less than 15 years.

## **8.0 THE INFORMATION WHICH HAS TO BE SUBMITTED BY THE SIGNIFICANT PAYMENT SYSTEM OPERATOR AND SIGNIFICANT PAYMENT SERVICE PROVIDER**

Significant Payment System Operator and Significant Payment Service Provider are obliged in 30 days period from the adoption of an individual administrative-legal act by the National Bank of Georgia (concerning the fact that they are deemed to be significant) to submit to the National Bank of Georgia the following documentation:

- a) The original copies of founding documents of a legal entity, or their notarized, or legalized (confirmed with apostil) copies;
- b) Information concerning managers, holders of significant shares and beneficial owners;
- c) Documentation which proves the amount of capital;
- d) Other additional information envisaged by the regulations of the National Bank of Georgia.

The capital of significant system operator and significant service provider during carrying out the activities may not be less than the capital established and calculated by the National Bank of Georgia. The significant system operator and significant payment service provider may be authorized to carry out only the activities envisaged by the "Payment System Law".

The National Bank of Georgia is authorized to ask the significant system provider and significant payment service provider, also the participants of significant payment system to open a settlement account at the National Bank of Georgia.

## **9.0 INSPECTION**

The National Bank of Georgia is authorized to inspect onsite or offsite the relevance of activities of the payment system operator or payment system provider with the requirements of the legislation of Georgia and is authorized to request and receive the documentation, accounting documents, records and other information within its competence.

The National Bank of Georgia is authorized to inspect onsite or offsite the consistency of significant system participant's rules with the requirements of legislation of Georgia.

## **10.0 SANCTIONS**

The National Bank of Georgia is authorized to use sanctions against the system operator and payment service provider in case if the system operator and payment service provider:

- a) violated one of the provisions of the “Law on Payment Systems” or the instruction, regulation, resolution, written notice issued by the National Bank of Georgia;
- b) submitted incorrect or inaccurate information;
- c) violated the requirements of Law of Georgia on “Facilitation the Prevention of Illicit Income Legalization”.

If the above-mentioned violations have been committed, the National Bank of Georgia is authorized to use the following sanctions:

- a) send written notice and /or require that the relevant entity stop committing the violations;
- b) use monetary sanction in accordance with the regulation and amount fixed by the National Bank of Georgia;
- c) revoke the registration.

As result, the amount of monetary sanction will be directed to the State budget of Georgia.

## **11.0 THE LIST OF PAYMENT SYSTEM OPERATORS AND PAYMENT SERVICE PROVIDERS**

The National Bank of Georgia maintains the register of payment system operators and payment service providers and publishes it on its web site.

## **12.0 THE OBLIGATIONS OF PAYMENT SYSTEM OPERATOR AND PAYMENT SERVICE PROVIDER**

The Payment System Operator and Payment Service Provider are obliged to notify the National Bank of Georgia, all other system providers in which they participates on their reorganization, liquidation, insolvency, or on temporal suspension of activities and any other circumstances which may affect the payment system operation or payment service provision by this entity.

## **13.0 CONCLUSIONS**

The “Payment System Law” envisages the provisions concerning the payment systems and payment services. Any legal entity which would like to have clearing house must be registered as a payment system operator at the National Bank of Georgia. The National Bank is authorized to inspect the payment system operator and payment service provider and use sanctions in case if they violate the requirements set. This is the only legal instrument which will specifically regulate payment systems and payment services.

The “Payment System Law” includes provisions concerning the significant system provider and significant payment service provider. It also contains the provisions concerning the financial collateral and payment, settlement and clearing finality issues. The “Payment System Law” allows payment system operator and payment service provider to apply international norms and international best practice in case of absence of norms regulating payment system and payment service.

Despite the ongoing initiatives, important differences remain between the set up of the electricity trading mechanism in the Georgian market and the neighboring markets, such as different balancing markets (pricing, settlement units, etc.). A harmonization of these rules would represent an important integration step, since the optimization of imbalance risk could be managed across borders.

Furthermore, best European practices show adaptation of financial instruments Directives that secure investment services for improving market conditions. For instance, in April of 2004, the European Parliament and Council approved the Directive on Markets in Financial Instruments (MiFID). From 1st of November 2007, MiFID replaced the Investment Services Directive (ISD). MiFID harmonizes regulation for investment services in the Member States and its purpose is to enhance the protection for investor and increase competition in the trade in financial instruments in the securities markets. The directive only applies to investment companies and regulated markets for financial instruments. The directive concerns, among other things, issues regarding the distinction between different market places, transparency, customer categorization, investor protection and investment services.

The performance of the Georgian electricity market will be dependent on an efficient interaction between the physical and the financial market. Therefore the assessment in this report is focused on the functions and the necessity of a MCH for ruling out the risk of financial default for the market players. The legal establishment of the MCH will be based on the adaption of the "Payment Law". This law is a key element in the ETM framework for enhancing the enabling environment for hydropower development in Georgia, as discussed in the report.

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