

## **Twinning Project Fiche**

**UA/44b**

**Support the National Commission for State Energy and Public  
Utilities Regulation (NEURC) of Ukraine in the Process of Electricity  
Market Reform**

## Abbreviations

ACER	Agency for the Cooperation of Energy Regulators
BC	Beneficiary Country
Electricity Market Law	The law "On operating principles of the electricity market of Ukraine" adopted on 24 October 2013
DSO	Distribution System Operator
EBRD	European Bank for Reconstruction and Development
ERP	Economic Reform Programme for 2010-2014
EIB	European Investment Bank
EnCT	Energy Community Treaty
ENP	European Neighbourhood Policy
ENPI	European Neighbourhood and Partnership Instrument
ENTSO-E	European Network of Transmission System Operators for Electricity
EU	European Union
IEA	International Energy Agency
IFI	International Financial Institution
MO	Market Operator
MoU	EU-Ukraine Memorandum of Understanding on energy cooperation
MTE	Medium-term Expert
MS	European Union Member State
NERC	National Commission for State Energy Regulation of Ukraine - Ukrainian energy regulatory authority until 27 August 2014 when it was liquidated by the President of Ukraine and the new regulatory authority - NEURC – was established.
NEURC	National Commission for State Energy and Public Utilities Regulation of Ukraine
PAO	Twinning Project Administration Office
PCA	Partnership and Cooperation Agreement
PL	Project Leader
SC	Steering Committee
RTA	Resident Twinning Advisor
STE	Short-term Expert
ToR	Terms of Reference
TPA	Third Party Access
TSO	Transmission System Operator
UPS	Unified Power System of Ukraine

## **1. Basic Information**

### **1.1 Programme**

ENPI Annual Action Programme for Ukraine 2012

### **1.2 Twinning Number**

UA/44b (EuropeAid/136822/DD/ACT/UA)

### **1.3 Title**

Support the National Commission for State Energy and Public Utilities Regulation (NEURC) of Ukraine in the Process of Electricity Market Reform

### **1.4 Sector**

Energy

### **1.5 Beneficiary country**

Ukraine

### **1.6 Beneficiary administration**

National Commission for State Energy and Public Utilities Regulation (NEURC) of Ukraine

## **2. Objectives**

### **2.1 Overall Objective(s)**

The overall objective of this project is to foster the reform of electricity market of Ukraine to be implemented in line with the provisions of the Energy Community acquis.

### **2.2 Project purpose**

The purpose of this project is to strengthen the capacity of NEURC in order to drive the electricity market reform process in the direction of full compliance with the EnCT acquis.

NEURC has to adopt and/or introduce a number of regulations and follow a number of new procedures, which will be in compliance with the new electricity market Law "On operating principles of the electricity market of Ukraine". Given that in the EU there is significant experience and knowledge on electricity market regulation issues, NEURC could benefit from and exploit good practices and appropriate approaches through collaboration with EU regulatory authorities.

### **2.3 Contribution to National Development Plan/Cooperation agreement/Association Agreement/Action Plan**

During 2010-2013 the national development framework in Ukraine was defined by the Economic Reform Programme for 2010-2014 (ERP), adopted on 2 June 2010 at

the meeting of the President's Committee for Economic Reform. The ERP is linked to the main priorities of the Association Agenda, including the measures related to the establishment of a Deep and Comprehensive Free Trade Area, visa liberalisation, cooperation in energy and other sectors. The energy sector and its sub-sectors attract considerable attention in the ERP. In particular, the programme acknowledges the need of independent energy regulator and foresees measures on the reform of electricity market as well as gradual increase of electricity tariffs for households up to the cost recovery levels in parallel with the reform of social protection system.

In line with the provisions of the ERP, the government of Ukraine has launched the revision of the Energy Strategy of Ukraine until 2030. Approved in 2006, the document had represented a significant milestone by providing a development strategy for the sector. As many of the projections in the strategy were contentious (there was an emphasis on supply measures at the expense of energy demand and efficiency), the ERP called for the review of the Energy Strategy. The original plan of the government was to finalise the revision process by the end of 2011, but the deadline has been shifted many times, inter alia due to the need to adequately embrace changing circumstances. On 24 July 2013 the Cabinet of Ministers of Ukraine approved the revised Energy Strategy. As a next step, an action plan on the implementation of the Strategy should be developed to define concrete steps and timeframe on relevant policy and implementation measures, in particular, in the electricity sector.

The revised Energy Strategy foresees almost 50% increase in electricity demand in 2030 compared to 2010 and acknowledges the need in comprehensive modernisation of generation and transmission assets with the emphasis on energy efficiency and environmental protection. The document also addresses the issues of market organisation and foresees gradual introduction of new market model, which is based on bilateral contracts, day-ahead market, balancing market and ancillary services market.

In the framework of the implementation of the ERP, in June 2012, Verkhovna Rada of Ukraine (the parliament) adopted amendments to the law of Ukraine "On natural monopolies"<sup>1</sup>, which provided for incentive-based regulation in the sector.

On 24 October 2013, the parliament voted the law "On operating principles of the electricity market of Ukraine"<sup>2</sup> (hereinafter – Electricity Market Law), which is in effect starting 01 January 2014. Although the Electricity Market Law still need further improvements in particular to be fully compliant with the EnCT acquis, its adoption has been recognised by the EnCT Secretariat as the main priority which should open a way for the development and updating of the legal framework covering areas like: market model, price regulation, unbundling, customer eligibility criteria, interconnection capacity allocation, transparency provisions, etc. This law also amends the principal legal act, which has been governing the operation and development of electricity system and electricity production, trade and supply to

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<sup>1</sup>the law of Ukraine "On natural monopolies" could be found at:

<http://zakon4.rada.gov.ua/laws/show/1682-14>

<sup>2</sup>the law of Ukraine "On operating principles of the electricity market of Ukraine" could be found at:

<http://zakon2.rada.gov.ua/laws/show/663-18>

customers since 1997, i.e.: the law "On electric power industry", a number of provisions of which had not been fully compliant with EU Directive 2003/54 before it has been amended.

Since 1998, EU-Ukraine energy cooperation has been based on the provisions of the Partnership Cooperation and Agreement (PCA). Ukraine is also considered a priority partner country within the European Neighbourhood Policy (ENP). A joint EU-Ukraine Action Plan (including energy) was endorsed by the EU-Ukraine Cooperation Council in 2005. In 2008 an agreement was reached to start negotiations on an EU-Ukraine Association Agreement - the successor agreement to the PCA. In this context, in November 2009, the EU-Ukraine Association Agenda was adopted to facilitate the entry into force of the Association Agreement.

As a sign of the advanced state of the EU-Ukraine energy cooperation under the European Neighbourhood Policy (ENP) cooperation, a Memorandum of Understanding on energy cooperation (hereinafter – the MoU) was signed at the 2005 EU-Ukraine Summit. The MoU establishes a joint strategy towards the progressive integration of the Ukrainian energy market with that of the EU. One of the key priorities in EU-Ukraine energy cooperation foreseen by the MoU was Ukraine's joining the Energy Community Treaty (EnCT).

Since February 2011, Ukraine has been a Contracting Party of the Energy Community. A legal framework and obligations provided by the EnCT should be of important help to Ukraine on its way of reforms, as it covers the list of EU Directives to implement, including on energy markets functioning. A first set of deadlines for the EnCT commitments passed on 1 January 2012, covering inter alia, electricity and gas market opening for non-household customers, unbundling and third party access, which were only partially met by Ukraine. Other deadlines are currently approaching and require relevant preparations to be met.

In the area of electricity, the Protocol concerning the accession of Ukraine to the EnCT covers the list of commitments related to the implementation among other of the 2<sup>nd</sup> EU Energy Legislative Package<sup>3</sup>. In October 2012, the EnCT Ministerial Council invited Ukraine to expedite its internal procedures to join the decision on implementation of the 3<sup>rd</sup> EU Energy Legislative package adopted by the EnCT Ministerial Council in October 2011<sup>4</sup>.

It is worth considering that Ukrainian government after the recent political change (February 2014), emphasized that electricity market reform is still a priority for the country and that further steps towards compliance with the EnCT commitments will be taken.

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<sup>3</sup> Protocol concerning the accession of Ukraine to the EnCT could be found at:

<http://www.energy-community.org/pls/portal/docs/728177.PDF>

<sup>4</sup> Decision of the EnCT Ministerial Council dated 6 October 2011 on implementation of Directive 2009/72/EC and Regulation (EC) 714/2009:

<http://www.energy-community.org/pls/portal/docs/1146182.PDF>

### 3. Description

#### 3.1 Background and justification

The electricity sector has undergone through several stages of reform: it was mostly unbundled and partially privatised in the 1990s; state-owned assets were consolidated in 2004; a further phase of privatisation and restructuring has been underway since 2012. The main motivation for the reform is to increase the economic efficiency of the sector in view of the high and rising costs of all the resources of electricity. As of now, the electricity sector is split into generation, transmission system operation, and distribution and supply activities. However, within designated areas activities on distribution and electricity supply at regulated tariffs are provided by one legal entity.

The main authority in charge of the development of electricity sector policy and planning the annual electricity balance in the country is the Ministry of Energy and Coal Industry of Ukraine. The Ministry is also in charge of coordinating the EnCT process in Ukraine.

The National Commission for State Energy and Public Utilities Regulation (NEURC) of Ukraine is in charge of regulating the activities by natural monopolies, in particular, in power sector, including protection of customer rights, licensing, tariff regulation and pricing. NEURC is fully financed from the state budget of Ukraine.

The detailed list of NEURC's tasks in the area of electricity market regulation is defined in the law of Ukraine "On electric power industry", the Electricity Market Law and NEURC's statute approved by the order of the President of Ukraine No 715/2014 dated 10 September 2014. Since 2007 the draft law of Ukraine "About State Regulation in the Energy Sector", which amends the list of powers and tasks of NEURC, is being under preparation. It should be noted, however, that full independence of NEURC, including in financial terms has yet to be implemented.

Electricity regulated prices for industrial users are significantly higher than for households, and are determined each month by NEURC. Industrial customers cross-subsidise residential users; the tariff paid by industry is estimated to 22% higher than it would pay if there were no cross-subsidy. However, industrial prices in Ukraine are still lower than the average OECD European ones. Residential electricity prices in Ukraine remain very low compared to average OECD European ones; the percentage of costs recovered by the residential tariff, by 2011, had fallen to 28%. After households electricity tariff increase that year (2011), the percentage of electricity costs recovered by the residential sector payments is estimated in the order of 30%. As a result, low electricity tariffs for the population make uneconomical almost any measures aimed at energy saving in the residential sector.

The main distortion created, because of the situation that tariffs for industry are increased, is reduction of exporting activity, which contributed to more than 50% of GDP in 2010. Industry, especially heavy energy consuming sectors, like ferrous and nonferrous metallurgy, chemistry, cement production, is rapidly losing its competitiveness, and may lose markets. In parallel thermal power generating companies work with an insufficient margin, and sometimes at a loss and all these against the fact of the on-going aging of fixed assets (average age of Ukraine's thermal plant fleet is 47 years) and the physical destruction of the energy infrastructure. For this reason since independence, there were no new thermal power

plant investments in Ukraine; currently only measures on reconstruction / modernization of thermal power stations units are implementing.

In this context, the adoption of the Electricity Market Law is considering as a big step towards market liberalisation. The Electricity Market Law, however, is not fully compliant with the provisions of EnCT acquis. In view of the EnCT Secretariat that have analysed the draft Electricity Market Law, the main areas on non-compliance are on:

- the concepts of different types of suppliers i.e. independent, guaranteed and supplier of last resort;
- the proper definition of transmission and distribution system operator and provisions on their independence by unbundling from other activities;
- the proper implementation of the provisions (scope and time) for exemption of new interconnectors;
- the possibility for granting illegal State aid to undertakings by providing State intervention and payment of electricity consumed by undertakings;
- the Cost Imbalance Settlement Fund and lack of a scheme for gradually reaching cost-reflectivity;
- the existence of the Electricity Market Council (which according to the draft Law was established as a cartel). Although according to the adopted Law, the role of the Electricity Market Council has been diminished and it has no significant influence on market functioning.

In this context, this Twinning project is expected to support NEURC in the process of the implementation of the new electricity market model in compliance with Ukraine's commitments in the EnCT. More specifically, the project concentrates on some of the most significant regulatory areas of the forthcoming market reform, namely: third party access to networks and capacity allocation of interconnectors, switching/replacement electricity supplier and appointment of default/last resort supplier, rules for establishment and operation of default/last resort supplier, establishment of day-ahead market rules and compliance of unbundling of distribution and supply. All these correspond to the priorities of NEURC in the context of implementation of the provisions of the Electricity Market Law.

## 3.2 Linked activities

The following relevant initiatives and projects have taken place in the country.

### 3.2.1 EU funded projects

- TACIS National Action Programme for Ukraine 2004, Twinning Project with National Electricity Regulatory Commission (NERC): "Strengthening of the administrative and legal framework in the field of electricity regulation in Ukraine" (*completed in 2009*).
- ENPI National Action Programme for Ukraine 2007, Twinning Project with National Electricity Regulatory Commission (NERC): "Strengthening of the administrative and legal framework in the field of gas regulation in Ukraine" (*completed in 2011*) and Twinning Project "Support to NERC in the

process of implementation of the gas legislation in line with the provisions of ECT" (*completed in 2012*).

- TAIEX Instrument - study visit related to the legal and contractual experience of the EU MSs in the field of balancing groups functioning on the wholesale electricity markets (*completed in 2009*).
- EU/FWC BENEFICIARIES 2009 - LOT 4 Energy: "Preparation of Twinning project and provision of assistance to National Commission for State Energy and Public Utilities Regulation of Ukraine in the area of electricity market regulation" (*completed in December 2014*).

The previous Twinning project on electricity (2007-2009) concentrated on the capacity building of NERC to ensure the proper development and implementation of primary and secondary legislation, regulations and adaptive decision making in the field of energy regulation in line with development of the EU internal market. The project activities were focused in the following six areas:

- Institutional strengthening of NERC
- Review of and harmonization with the EU Energy Legislation
- Multi-year incentive-based regulation and benchmarking
- Development of a quality of service regulation programme
- Selected support in the monitoring of the wholesale electricity market
- Selected support in the unbundling process.

The recent project "Preparation of Twinning project and provision of assistance to NEURC in the area of electricity market regulation" is providing technical assistance in the issues related to the new market model anticipated by the Electricity Market Law. These are:

- The practice of participation of hydroelectric power plants (HPP) and pump-storage power plants (PSP) on a competitive market.
- Unbundling of activities on electricity distribution and supply in line with the provisions of the Directive 2003/54/EC.
- The methods of consideration of transmission and distribution losses in tariffs for transmission and distribution.
- Mechanisms of application of electricity end-user regulated prices (tariffs) under liberalized market conditions.
- Allocation of electricity cross border capacity

### **3.2.2 Projects and loans funded by other donors**

The following relevant IFI-funded projects have been executed during recent years in the field of electricity regulation sector:

- WB Loan 4795-0 UA, Component E on Implementation of the Wholesale Electricity Market Concept, technical assistance to NERC. During this project new concept of wholesale electricity market has been proposed, a number of documents for new market model were drafted and other issues were developed (*completed in 2008*);
- EBRD - UREDLF - Regulatory Support Programme. This assignment was for consultancy services to assist NERC in further development and implementation of renewable energy regulations in Ukraine (*completed in 2013*).



### 3.3 Results

The Twinning project will achieve **6 Results**, which correspond to the **6 project Components** as follows:

**Result 1: The capability of NEURC's staff to achieve the objectives of the Twinning project is strengthened through efficient coordination of activities, shared understanding of the project implementation strategy and English language proficiency in electricity market literature and terminology**

The result will be achieved through close cooperation of Twinning partners, close coordination of project activities with the Energy Community Treaty (EnCT) Secretariat and the Agency for the Cooperation of Energy Regulators (ACER) as well as through sub-contracting of specialised language training service to improve English skills of NEURC staff in the specialised terminology in the project-related areas. The "*Component 1: Project support and specialised language training*" includes the necessary Activities to reach the Result 1.

Given complexity of the project, it is crucial that all necessary coordination arrangements are established to ensure its effective implementation. This, in particular, should cover proper communication arrangements between NEURC and MS Partner, project communication and visibility activities, sufficient level of coordination of project activities with the EnCT Secretariat and ACER. In this process insufficient English language skills of NEURC experts directly involved in the implementation of project components could seriously limit smooth project implementation by setting additional barriers in the communication process.

In the framework of this Component, the MS and BC Partners will set up the working groups for the Components 2-6 and will establish coordination of the project activities with the EnCT Secretariat and ACER. In addition, the MS Partner will organize language training service for NEURC staff.

**Result 2: NEURC is fully equipped with knowledge and regulatory documents on the issues related to the access of market actors to the electricity networks that should be organized in line with the provisions of the EnCT acquis**

This result will be achieved through the close collaboration between the Twinning partners in developing the regulatory framework on Third Party Access Rules and provisions of standard contracts required, in order NEURC to be able to proceed to relevant approval and adoption. The "*Component 2: Access of market actors to electricity networks*" includes the necessary Activities to reach the Result 2.

In accordance to the provisions of the Electricity Market Law, the role of NEURC in the area of Third Party Access (TPA) to electricity networks comprises:

- Regulatory function: agreement on the Electricity Grid Code, incorporating specific chapters or provisions related to TPA rules and approval of standard contracts for transmission and distribution services.
- Monitoring function in the area of performance of the Grid Operator, the implementation of the rules on the allocation of interconnection transmission capacity of cross border electricity networks; fulfillment of the requirements on non-discriminatory access to the electricity networks and the rules followed by the transmission and distribution undertakings to make connections and maintenance.

In the framework of this Component, NEURC should receive support related to the development of a procedure on access to electricity networks (transmission & distribution) in line with the provisions of the EU legislation on TPA (Directive 2003/54/EC, Directive 2009/72/EC). The market (transmission/distribution services) and physical aspects of connections should be explicitly defined; however, the emphasis should be placed on the market part.

**Result 3: Legal and regulatory capacity of NEURC in the area of regulation of customer's right to switch electricity supplier, switching/appointment of Default Supplier / Supplier of Last Resort is strengthened to the extent to ensure further transposition in the Ukrainian regulatory framework of relevant provisions of EnCT acquis**

This result will be achieved through transfer of tangible EU experience and joint effort of twinning partners in developing the required regulatory documents, so NEURC will be able to introduce the new regulations on electricity supply affecting issues of supplier switching, replacement and appointment. The "*Component 3: Switching electricity supplier, switching/appointment of Default Supplier / Supplier of Last Resort*" includes the necessary Activities to reach the Result 3.

There is no distinction in the Electricity Market Law between the Default and the Last Resort Supplier, which uses the term "Guaranteed Supplier" - an electricity supplier that carries out electricity supply exclusively within a fixed territory, and which is obliged to enter into a contract for electricity supply with any electricity consumer applying to it and located in a territory where such supplier carries out licensed activities of electricity supply.

In accordance with the provisions of the Electricity Market Law, the role of NEURC with regard to the issue of switching electricity supplier is, in particular, as follows:

- Identification of requirements to types of activities, which can be combined by an electricity supplier when carrying out activities on guaranteed electricity supply.
- Monitoring of electricity suppliers compliance with requirements on reviewing and assessing petitions and complaints of electricity customers on issues of electricity supply.
- Approval of model contracts to be used for electricity supply by Independent Electricity Suppliers and of standard electricity supply contracts used by Default/Last Resort Electricity Suppliers, based on which respective electricity suppliers enter into contracts for electricity supply in the retail market.
- Approval of switching rules and procedure by which switching or replacement of electricity supplier takes place.

In the framework of this Component, NEURC should receive support in the course of the development of regulatory framework and/or provisions for legal acts regulating the procedure of electricity supplier switching, replacement and in parallel ensuring fair, transparent and simple process for customer in line with the provisions of the Electricity Market Law and the EU acquis, i.e.: Directive 2003/54/EC and Directive 2009/72/EC. It is important that the Component contributes to the amendment of the existing concept of supplier and to the differentiation between the "guaranteed supplier", "default supplier", "supplier of last resort" and "independent supplier".

**Result 4: Legal and regulatory capacity of NEURC in the area of regulation of Default supplier / Supplier of Last Resort operation is strengthened to the extent to ensure further transposition in the Ukrainian regulatory framework of relevant provisions of EnCT acquis on public service obligations and customer protection**

This result will be achieved through joint work between the Twinning partners on necessary draft regulatory documents establishing the institution of Default Supplier / Supplier of Last Resort under the electricity market reform that becomes the basis for NEURC towards the required approval and adoption of relevant rules. The "*Component 4: Regulation of Default supplier / Supplier of Last Resort operation*" includes the necessary Activities to reach the Result 4.

The terms of Default supplier and Supplier of Last Resort are not used in the Electricity Market Law; however the term "Guaranteed Supplier" is used in the Electricity Market Law and as mentioned above it will be used in this document as Default Supplier. According to the Electricity Market Law, Guaranteed Supplier is the electricity supplier who carries out electricity supply exclusively within a fixed territory, and is obliged to enter into a contract for electricity supply with any electricity consumer petitioning him and located on the territory where such supplier carries out licensed activities in electricity supply.

The anticipated role of NEURC with regard to regulation of establishment and operation of Default/Last Resort Suppliers is defined by the Electricity Market Law, in particular, as follows:

- The procedure for obtaining the status of a Default/Last Resort Electricity Supplier and the relevant license terms and conditions shall be established by NEURC.
- The borders of the territory of the Default Supplier activity are established by NEURC. Within the territory of one Default Electricity Supplier no other Default Electricity Suppliers are allowed to operate.
- The requirements to the types of activities that may be combined by the electricity supplier in carrying out a guaranteed electricity supply shall be established by NEURC.
- Tariffs for the services of a Default/Last Resort Electricity Suppliers are regulated by NEURC in accordance to the methodology for calculation of tariff for the guaranteed and last resort electricity supply services.
- The Methodology for calculation of retail tariffs of Guaranteed Supplier is established by NEURC.
- In case of revocation of a license for the supply of electricity and/or cancellation of registration of a Default Electricity Supplier as electricity market entity, the electricity supply to customers thereof is provided by the Last Resort Electricity Supplier determined according to a procedure approved by NEURC.

There is a need of integrating the Default Supplier institution under the new electricity market conditions, thus regulating rules/conditions for providing supply services by Default Supplier, including simple and easy procedure for customers to access data about their consumption and calculations, requirements for the quality of customer service, payment systems, procedures of complaint handling, etc. The problem of customer supply data management by the unbundled market participants should be also examined. In addition the issues of revision of supplier licenses to adapt to the

services of guaranteed electricity supply, the compensation of potential losses of Default Suppliers and the case of providing electricity to vulnerable customers will be also considered. Moreover, methodologies for tariff development of Default Supplier's service and retail prices distinguishing household customers from other customers will be developed. The current experience of characteristic EU regulatory approaches will be analyzed and comparative assessment will be carried out for the Ukrainian case resulting to good practice recommendations.

**Result 5: Legal and regulatory capacity of NEURC on Day-ahead Market operation is developed**

This result will be achieved through collaboration of both Twinning partners in transferring tangible EU experience and in developing the necessary regulatory framework of Day-ahead Market, as it is described by the Electricity Market Law, and therefore equip NEURC with proper knowledge and means which are necessary in order to proceed to the establishment of the Day-ahead Market. The "*Component 5: Support in the development of Day-ahead Market Rules*" includes the necessary Activities to reach the Result 5.

The anticipated role of NEURC with regard to the issue of Day-ahead Market Rules is defined by the Electricity Market Law, in particular, as follows:

- Approval of the Day-ahead Market Rules by NEURC, but before they should have been agreed with the Antimonopoly Committee of Ukraine.
- NEURC shall have the right to set: the minimum volume of the obligatory sale of electricity in the Day-ahead market by Electricity Producers, the minimum volume of the obligatory sale of imported electricity in the Day-ahead market by Independent Suppliers; the minimum volume of the obligatory purchase of electricity in the Day-ahead market by network companies aiming at covering technological losses of transmission and distribution; and the minimum volume of the obligatory purchase of electricity in the Day-ahead market by hydro pump storage stations for covering technological needs of the hydro pump storage stations.

**Result 6: Capacity of NEURC in supporting the TSO and DSO unbundling is enhanced**

This result will be achieved through two main actions: (i) cooperation of the Twinning partners in transfer and dissemination of best practice and EU experience in TSO and DSO unbundling and (ii) support in organizing NEURC's supervision and monitoring functions over the targeted TSO and DSOs. The "*Component 6: Support in the implementation of TSO and DSO unbundling*" includes the necessary Activities to reach the Result 6.

In accordance with the provisions of the Electricity Market Law, the role of NEURC on the issue of implementation of TSO and DSO unbundling concentrates on monitoring of unbundling and enforcement of operators' compliance with unbundling requirements. Distribution and supply of electricity activities are currently bundled within regional energy companies. There are currently 27 such utilities with different forms of ownership (25 Oblenergос, one for each Administrative Region, plus Kyivenergo and Sevastopolenergo), each serving more than 100,000 connected customers. These companies are owners of the distribution network assets in the respective region and are licensed by NEURC to distribute and supply electricity to

customers. In terms of the TSO there is a need of further full compliance with "Third Energy Package" requirements on TSO ownership unbundling and TSO certification.

Component 6 on unbundling is expected to be a follow-up to the relevant task of the Framework Contract project "Preparation of Twinning project and provision of assistance to National Commission for State Energy and Public Utilities Regulation of Ukraine in the area of electricity market regulation" by expanding to more practical issues and issues related to the adaptation of the existing TSO and DSOs to the new market model. It is worth considering also that the results on unbundling of DSO gained in the previous electricity Twinning project will be exploited and there will not be any overlapping.

All the above-mentioned results correspond to the priority areas for NEURC's contribution to the electricity market reform as foreseen by the Electricity Market Law and the relevant EnCT acquis. Moreover, the project areas selected are not among those, which NEURC's present skills and knowledge could tackle with; therefore the EU experience transfer and support could be catalytic in achieving the timely contribution and preparation of appropriate regulatory infrastructure by NEURC.

### 3.4 Activities

The formulation of the twinning project should be based on certain principles and guidelines derived from the "Institution Building in the Framework of European Union Policies Common Twinning Manual" in its Revision 2012 and templates of Twinning Contracts with annexes currently available in Revision 2013.

In addition, it is important to ensure that the provisions of the project work plan do not overlap with previous activities in this area funded by the EU and other donors. In this context, the results of the electricity Twinning project implemented with NEURC in 2007-2009 should be taken into account at stage of work plan preparation, especially regarding the tasks, which relate to the unbundling, wholesale market operation and harmonization of legislation.

In order to achieve the results listed in Section 3.3 as above, Activities within respective Components are foreseen. Activities are concrete actions, among many steps aimed at the achievement of the mandatory Results. Each Activity is further analysed to a number of Tasks.

The inauguration and the end of the project will be announced through the opening and closing workshops under the Activity 0.1.

#### ***Activity 0.1 Organization of opening and closing workshops***

The RTA will be responsible for organization of a 1 day project opening workshop to kick off the implementation of the project. In addition, a one day project closing workshop should be organized to discuss the project results and present them to the wider audience.

During the first month of the Project a kick-off workshop will be organized to introduce the aims and activities agreed upon in the Work Plan to all relevant stakeholders. The public shall be informed as well by organizing a media conference announcing the project launch and objectives. A conference/workshop shall be

organized during the final period of the project implementation phase. The main goal is to present the results of the project as well as lessons learnt and recommendations to the same audience that attended the kick-off workshop. The conference/workshop will be open to the general public and to the media.

These two publicity events will have both a scientific and an information dissemination role about the project. They will be addressed to the broader stakeholders of the Ukrainian electricity market and will be attended by a number of Short-term and/or Medium-term experts of the MS Twinning partner, who will have the opportunity to deliver presentations and discuss regulatory issues with the workshop participants.

The output of this activity will be two well-organized workshops addressed to broad audience of Ukrainian electricity officials and experts.

### **3.4.1 Component 1: Project support and specialized language training**

*Result 1: The capability of NEURC's staff to achieve the objectives of the Twinning project is strengthened through efficient coordination of activities, shared understanding of the project implementation strategy and English language proficiency in electricity market literature and terminology.*

#### ***Activity 1.1 Coordination and liaison with the Energy Community Secretariat and ACER***

The MS and BC Partners will establish the working groups for the Components 2-6 consisting of the representatives of NEURC and experts from the MS Partner Administration. The working groups will meet on a regular basis during the project implementation. The RTA will be responsible for all coordination, logistical and operational matters regarding the establishment and operation of the working groups.

The MS Partner will set up an appropriate liaison/coordination mechanism with the Energy Community Secretariat. This liaison will be continuous during the project and will comprise exchange of scientific opinions and necessary information facilitating the operation of the project working groups. In addition to regular exchange of information on project-related activities, one coordination meeting in Kyiv with representatives of the Energy Community Secretariat and at least one mission of NEURC representatives and RTA to Vienna will be organized in course of the project. The timing should be jointly agreed between MS Partner Administration, NEURC and EnCT Secretariat at stage of drafting the Twinning Contract.

The liaison of NEURC with ACER (Agency for the Cooperation of Energy Regulators), which is an EU Agency created by the Third Energy Package to further progress on the completion of the internal energy market both for electricity and for natural gas, will be also strengthened. ACER plays a central role in the development of EU-wide network and market rules with a view to enhance competition. Among others it coordinates regional and cross-regional initiatives which favor market integration. NEURC might benefit from the developments elaborated at ACER for electricity markets operation and cross-regional initiatives. In order to develop regular consultations and exchange of information on EU common principles for energy markets regulation and relative regulatory functions in accordance with Directive 2009/72/EC one coordination meeting/workshop in Kyiv with representatives of the

ACER and at least one mission/workshop of NEURC representatives and RTA to Ljubljana will be organized in the framework of the project. The timing of events and their agenda will be adjusted between MS Partner Administration, NEURC and ACER at stage of drafting the Twinning Contract.

The output of this activity will be well-organized coordination process with EnCT Secretariat and ACER. In addition, two coordination meetings in Kyiv with representatives of the EnCT Secretariat and ACER respectively and two missions of NEURC representatives (5 days for 6 NEURC's experts maximum in each mission) and RTA to Vienna and Ljubljana will be organized.

***Activity 1.2 Organization and conducting of English training with emphasis on literature used in the electricity sector and energy markets***

The electricity sub sector has specialized terminology and it is quite difficult to obtain high quality translators with detailed knowledge of the electricity sector and of sufficient caliber to allow free-flowing discussions between all the working group members and the MS experts.

The MS Partner will organize English language training service for NEURC staff directly involved in the implementation of the components. This will be done through sub-contracting of an accredited Ukraine-based Language Training Institute to provide training during the project period. Training will be for 2 groups formed according to the level and proficiency in English. A number in the order of 264 hours (i.e. classes for 90 minutes twice a week) have been estimated. The number of NEURC employees to be trained will be around 25.

The output of this Activity will be the training certificates issued to NEURC staff.

**3.4.2 Component 2: Access of market actors to electricity networks**

*Result 2: NEURC is fully equipped with knowledge and regulatory documents on the issues related to the access of market actors to the electricity networks that should be organized in line with the provisions of the EnCT acquis.*

***Activity 2.1 Development of Third Party Access Rules and Standard Contracts (Market part)***

The output of Activity 2.1 will be recommendations and draft regulatory documents for TPA Rules as well as draft provisions of standard contracts related to the access to networks. These documents will be drafted within the Twinning project by the relevant experts of both Twinning partners.

From the market point of view, aspects like responsibilities and relations among market participants (TSO, DSO, suppliers, etc.), procedures of providing these services, information provision and standard contracts conditions have to be defined. Moreover, approaches for regulatory monitoring, cases of violation of the rules of TPA have to be identified and relevant sanctions to be proposed.

*Task 2.1.1* The outline, the content and the approach of the work on TPA Rules will be discussed and defined in detail.

*Task 2.1.2* The Electricity Market Law, in view of adaptation to the new market model, and the EnCT acquis on provision of transmission/distribution services will be reviewed in terms of required amendments and additional new rules to be introduced by NEURC.

*Task 2.1.3* Collection and presentation of examples from the EU Member States and international experience, placing the emphasis on best practice cases of non-discriminatory access.

*Task 2.1.4* Preparation of detailed documents in the form of recommendations, draft Rules and related standard contracts on TPA that will cover regulation of the following topics:

- Procedure of electricity suppliers', producers' access to the power networks;
- Development of standard contract for electricity transmission;
- Improvement/development of standard contract for electricity distribution;
- Organization and coordination of the framework of electricity transmission and distribution activity in connected networks by adjacent licensees of the operating network companies;
- Identification of parts of information relevant to transmission/distribution services that should be available for market participants, design of proper procedure for disclosure of this information and indicating administrator and responsible provider of information;
- Formulation of proper procedure for electricity metering and accounting, necessary to fairly and transparently calculate the payments of customers and market participants for transmission/distribution services provided;
- Allocation of responsibilities between network companies and producers, suppliers with the aim of satisfying demand of customers, taking into consideration, also, compliance with service quality criteria;
- Development of regulation for monitoring network operators compliance with rules for access to the transmission/distribution services;
- Identification of potential areas of liability of infringement of electricity network organizations and preventive measures reducing cases of violation the rules of access to their networks.

*Task 2.1.5* Workshop presentation of draft final documents to interested market participants (suppliers, generators, etc.) and transmission, distribution, market operators; incorporation of remarks and comments towards preparation of project final documents.

***Activity 2.2 Review and preparation of Amendments of connection rules (Physical part)***

The output of Activity 2.2 will be the draft recommendations on amendments of existing connection rules, calculation methodology for connection fee and standard contracts for the connection to transmission and distribution networks. These documents will be drafted within the Twinning project by the relevant experts of both Twinning partners.



At present NEURC has developed and approved rules for physical connections (approved on 17 January, 2013 by NERC Resolution No 32)<sup>5</sup> and calculation methodology for the connection fees (approved on 12 February, 2013 by NERC Resolution No 115), which should be reviewed towards identifying compliance amendments due to market reform by the Electricity Market Law. In this context, the overall procedure for electricity connection and the connection fee calculation approach should be partly reviewed under the new market conditions. Since the NEURC's regulation on connection fees entered into force recently on 28 February, 2013, it is estimated that there is need for the necessary adaptation review and not for a detailed work from scratch.

*Task 2.2.1* Review of the existing Ukrainian legislation on networks connection rules and check of compliance with the supply and distribution unbundling and other market reform provisions under the Electricity Market Law.

*Task 2.2.2* Collection of experience of the EU countries regarding regulation of network connection and standard contracts, assessment of best practice cases.

*Task 2.2.3* Execution of comparative analysis of the findings in the Tasks 2.2.1 and 2.2.2 and discussion on alternative solutions in internal NEURC workshop.

*Task 2.2.4* Development of recommendations and drafting the amendments in the existing connections rules and the methodology for calculation of connection fees on standard and non-standard connections, allocation of responsibilities between network operators, customers and generators.

### **3.4.3 Component 3: Switching electricity supplier, switching/appointment of Default Supplier / Supplier of Last Resort**

*Result 3: Legal and regulatory capacity of NEURC in the area of regulation of customer's right to switch electricity supplier, switching/appointment of Default Supplier / Supplier of Last Resort is strengthened to the extent to ensure further transposition in the Ukrainian regulatory framework of relevant provisions of EnCT acquis.*

#### ***Activity 3.1 Formulation of Rules for switching electricity supplier and of Standard Supply Contracts***

The output of Activity 3.1 will be recommendations and draft regulatory documents on switching Independent Electricity Supplier and Default (Guaranteed) Supplier and replacement of supplier with Supplier of Last Resort, as well as all the required draft standard supply contracts. These documents will be drafted within the Twinning project by the relevant experts of both Twinning partners.

The issue of customer' information and getting them acquainted with the case of selecting supplier should be also stressed, because it is expected that there are broad categories of customers who are not experienced to properly select their supplier. The issue of proper management protection of customers' personal data is also related, in view of the need for giving access to suppliers regarding electricity load profiles and

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<sup>5</sup>NERC Resolution No 32: <http://www.nerc.gov.ua/index.php?id=6072>

other sensitive information. The general legislation on protection of personal data might not be considered sufficient in this case.

*Task 3.1.1* The outline, the content and the approach of switching rules, Supplier Replacement rules and on Electricity Supply rules will be discussed and defined. Especially the required procedures for selection, replacement and contracting of electricity supplier by electricity customers will be focused under the Electricity Market Law provisions.

*Task 3.1.2* Analysis of the existing Ukrainian legal framework, the provisions of the Electricity Market Law and the EU/EnCT acquis will be analyzed.

*Task 3.1.3* Collection of the relevant EU Member States experience with emphasis on best practice examples and discussion of pros and cons in internal workshop with NEURC officials.

*Task 3.1.4* Preparation of detailed recommendations, draft rules and related Standard Contracts comprising:

- Comprehensive list of customers who are eligible in the process of changing (switching, replacing) supplier, and getting to the Default (Guaranteed) Supplier;
- Design of transparent and simple supplier changing procedure minimizing the participation of customers, in compliance with the provisions of the Commercial Code of Ukraine and the Civil Code of Ukraine;
- Identification of contracting succession for changing supplier;
- Time schedule of implementation of all phases of the switching (from the customer's decision to the actual implementation of change) and supplier replacement;
- Schemes of information exchange in the supplier change process (types of data, privacy, etc.);
- Determination of cases when the customer cannot change the supplier;
- Identification of the rules of supply of sub-customers and their incorporation in the broader supply rules;
- Monitoring of cases of prevention of customer change to another supplier and avoiding it;
- Draft regulatory document in providing information support for customers about their rights and opportunities at the market;
- Draft regulatory document arranging procedures for customers to change supplier and/or select the Default (Guaranteed) Supplier;
- Definition of Default (Guaranteed) Supplier replacement procedure, in particular, timetable of change; the term of change; procedure and criteria for choosing a Default (Guaranteed) Supplier; involved entities and their functions; content of the information provided to customers and the procedure of its provision; regulation of contractual relations; payment arrangements; debts; Default (Guaranteed) Supplier risks;
- Model contract form for the electricity supply by Independent Supplier;
- Standard contract form for the supply from Default (Guaranteed) Supplier.

*Task 3.1.5* Workshop presentation of draft final documents to interested market participants; incorporation of remarks and comments and preparation of project final documents.

***Activity 3.2 Organization and execution of Study Tour on switching, replacement and appointment of Electricity Supplier Regulation***

The output of Activity 3.2 will be the report of the Study Tour participants on the issues discussed within the Study Tour including the main conclusions for the experience presented by the visited EU Member State officials and organizations.

A Study Tour for one week and for 6 NEURC officials will be organized to an EU Member State with successful experience in regulating relevant issues on switching, replacement and appointment of electricity supplier. This event will occur after the discussion on EU experience has been completed and before proceeding to drafting of rules.

**3.4.4 Component 4: Regulation of Default supplier / Supplier of Last Resort operation**

*Result 4: Legal and regulatory capacity of NEURC in the area of regulation of Default supplier / Supplier of Last Resort operation is strengthened to the extent to ensure further transposition in the Ukrainian regulatory framework of relevant provisions of EnCT acquis on public service obligations and customer protection.*

***Activity 4.1 Preparation of Rules for Default/Last Resort Suppliers operation***

The output of Activity 4.1 will be recommendations and draft regulatory documents for Rules for Default/Last Resort Suppliers establishment and operation. These documents will be drafted within the Twinning project by the relevant experts of both Twinning partners.

*Task 4.1.1* The outline, the content and the approach of the work on rules for Default/Last Resort Suppliers establishment and operation will be discussed and defined.

*Task 4.1.2* Analysis of current Ukrainian legislation on the part of Default/Last Resort Suppliers and their adaptation to the conditions of reformed market.

*Task 4.1.3* Collection and presentation of the relevant EU Member States cases based on similar approach in regulating Default electricity supply with emphasis on best practice examples.

*Task 4.1.4* Preparation of detailed recommendations and draft Rules comprising:

- Improvement of quality in service provision by Default/Last Resort Suppliers, particularly in terms of providing information to customers, quality of customer service, requirements for billing, procedures for complaint and applications handling;
- Regulation of relations between Distribution Companies, Default/Last Resort Suppliers and household consumers with PV installations, in view of purchasing electricity at "green" tariff.

*Task 4.1.5* Organization of workshop presentation of draft final documents to interested market participants; incorporation of remarks and comments towards preparation of project final documents.

***Activity 4.2 Identification of License conditions for Default/Last Resort Suppliers***

The output of Activity 4.2 will be the recommendations for amendments on license conditions of Default/Last Resort Suppliers. These documents will be drafted within the Twinning project by the relevant experts of both Twinning partners.

*Task 4.2.1* Review of the existing licensing regulations and the relevant license terms and conditions for electricity supply.

*Task 4.2.2* Collection and discussion of similar EU licensing experience for Default/Last Resort Suppliers.

*Task 4.2.3* Preparation of recommendations for amendments on the existing licensing regulations and the relevant license terms and conditions of Default/Last Resort Suppliers and workshop presentation to interested market participants; incorporation of remarks and preparation of final project documents.

***Activity 4.3 Preparation of tariff (price) methodologies for Default/Last Resort Suppliers***

The output of Activity 4.3 will be the recommendations and draft methodology on tariffs for Default and Last Resort Suppliers' service and retail prices. These documents will be drafted within the Twinning project by the relevant experts of both Twinning partners.

*Task 4.3.1* Review of the existing tariff methodologies for electricity supply services and retail prices.

*Task 4.3.2* Selection of best practice examples of EU experience in similar activities and comparison with the Ukrainian practice.

*Task 4.3.3* Definition of the approach to be followed and the content of the Default/Last Resort Supplier service tariffs and retail prices; preparation of tariff methodology including:

- Draft methodology for tariff development for Default/Last Resort Supplier, approaches in considering risks arising from the performance of the Last Resort Supplier;
- Draft methodology for Guaranteed supplier retail prices calculation considering relevant Electricity Market Law provisions;
- Mechanisms to compensate losses of Default/Last Resort Suppliers in case of supplying household consumers in terms of the new market model.

*Task 4.3.4* Workshop presentation of methodology to interested market participants, in the context of a consultation exercise; incorporation of remarks and preparation of final project documents.

#### ***Activity 4.4. Organization and execution of Study Tour on electricity supply regulation***

The output of the Activity 3.4 will be the report of Study Tour participants on the issues discussed within the Study Tour including the main conclusions on the experience presented by the visited EU Member State officials and organizations.

A Study Tour for one week and for 6 NEURC officials involved in Component 4 will be organized to an EU Member State with successful experience in regulation electricity suppliers operation. This event will occur after the discussion on EU experience has been completed and during preparation of relevant recommendations.

### **3.4.5 Component 5: Support in the development of Day-ahead Market Rules**

*Result 5: Legal and regulatory capacity of NEURC on Day-ahead Market operation is developed.*

#### ***Activity 5.1 Development of Rules of Day-ahead Market***

The output of Activity 5.1 will be recommendations and draft regulatory documents for the Rules of Day-ahead market. These documents will be drafted within the Twinning project by the relevant experts of both Twinning partners.

*Task 5.1.1* Define the criteria and main points under assessment for the establishment of a Day-ahead market in Ukraine.

*Task 5.1.2* Review of national regulatory frameworks and experience of the EU MS countries on the functioning of Day-ahead markets.

*Task 5.1.3* Drafting of comparative assessment of Ukrainian and EU legislation on the Day-ahead market functioning and recommendations on improving primary/secondary legislation of Ukraine, concerning the functioning of the Day-ahead market.

*Task 5.1.4* Review on the practical implementation of all aspects/processes (organizational, economic, financial and technical) related to electricity trade at the Day-ahead market in the EU countries.

*Task 5.1.5* Preparation of recommendations and draft rules for a Day-ahead market in Ukraine, including recommendations for draft license terms and conditions for the Market Operator.

#### ***Activity 5.2 Development of Recommendations for Day-ahead Market operation***

The output of Activity 5.2 will be the supporting report for NEURC on regulation of Day-ahead market operation. The supporting report will be drafted within the Twinning project by the relevant experts of both Twinning partners. In addition to the analyses and the recommendations about Day-ahead market operation, the supporting report will present also the relevant EU experience and the findings of the Day-ahead market visited by NEURC experts in the Study Tour.

*Task 5.2.1* Analysis of the reasons and decisions affecting the liquidity of the Ukrainian Day-ahead market.

*Task 5.2.2* Collection of information and presentation of relevant EU MS experience focusing on best practices and decision-making procedures and criteria.

*Task 5.2.3* Preparation of case study report on successful Day-ahead market operation.

*Task 5.2.4* Preparation of decision support document with analyses of expected effects on liquidity, prices, distortions, etc. of the Day-ahead market and pertinent recommendations for NEURC.

*Task 5.2.5* Workshop presentation of proposed recommendations and the relevant EU experience to interested market participants; incorporation of remarks and preparation of final project documents.

***Activity 5.3 Organization and execution of Study Tour on Day-ahead market operation***

The output of the Activity 5.3 will be the report of Study Tour participants on the issues discussed within the Study Tour including the main conclusions on the experience presented by the visited EU Member State officials and organizations.

A Study Tour for one week and for 6 NEURC officials involved in Component 5 will be organized to an EU Member State with relevant experience and successful regulation of Day-ahead market operation. This event will occur after the discussion on EU experience has been completed and during preparation of relevant recommendations.

**3.4.6 Component 6: Support in the implementation of TSO and DSO unbundling**

*Result 6: Capacity of NEURC in supporting the TSO and DSO unbundling is enhanced.*

***Activity 6.1 Preparation and execution of information Campaign to Distribution Companies***

The output of Activity 6.1 will be the package of documents related to the execution of the information campaign to distribution companies. The campaign will be carried by NEURC. The information material to be disseminated will consist of the reports prepared in the first three Tasks of this Activity. The whole info package will be drafted within the Twinning project.

*Task 6.1.1* Review of comparative assessment of Ukrainian and EU legislation on unbundling towards identifying recommendations to improve primary and secondary legislation of Ukraine concerning the distribution/supply unbundling and preparation of dissemination report for the campaign.

*Task 6.1.2* Review of the unbundling procedures and practices, which were used in the EU countries, especially in MS countries with similarities to the Ukrainian reality and preparation of dissemination report for the campaign.

*Task 6.1.3* Development of recommendations for the main steps of the unbundling process and preparation of a plan of actions for unbundling of Ukrainian distribution/supply companies, including:

- Recommendations on the allocation of roles and responsibilities for the service quality and call centers between two separate companies (distribution and supply).
- Recommendations on the allocation of receivables and payables (including the debts for electricity), profits, fixed assets of companies that have to be unbundled;
- Recommendations on the allocation of responsibilities for maintenance and operation of metering and control equipment, and meter reading;
- Mechanisms for information systems separation during unbundling, for providing interactive information between electricity distribution and electricity supply companies; for defining interfaces for companies' information systems to ensure the efficient operation of the market.

Based on the above, a comprehensive report to be disseminated in the information campaign will be prepared.

*Task 6.1.4* Based on the work and the material collected and prepared in Tasks 6.1.1 to 6.1.3, an information campaign to assist distribution companies on appropriate unbundling of activities of distribution and supply, generation will be organized and executed. The campaign will target on the dissemination of tangible and best practice experience, as it comes from the EU countries and could be adequately adapted to the Ukrainian reality, as well as on practical recommendations about the plan and the steps to be followed towards implementation of unbundling in due time.

#### ***Activity 6.2 Development of Compliance Monitoring in Unbundling Distribution from Supply***

The output of Activity 6.2 will be the Recommendations for monitoring of compliance in unbundling. This document will be drafted within the Twinning project by the relevant experts of both Twinning partners.

*Task 6.2.1* Review and identification of the unbundling stages to be monitored by NEURC; coordination with and examination of the proper incorporation in the broader monitoring functions of NEURC.

*Task 6.2.2* Development of recommendations for monitoring and ensuring DSO compliance with unbundling requirements, including appointment of compliance officer, preparation and establishment of a compliance programme on unbundling and reporting on its implementation to NEURC.

#### ***Activity 6.3 Development of legal framework for TSO unbundling according to the 3<sup>rd</sup> Energy Package***

The output of Activity 6.3 will be the draft documents and recommendations for TSO's unbundling implementation. These documents will be drafted within the Twinning project by relevant experts of both Twinning partners.

*Task 6.3.1* Review of relevant EU legislation and best practices on TSO unbundling, including unbundling model options for TSO and detailed features for implementation of each model; preparing recommendations to improve primary and secondary legislation of Ukraine concerning the unbundling of TSO activities from generation and supply with respect of "Third Energy Package".

*Task 6.3.2* Review of existing terms and conditions on licencing of TSO activity against compliance with TSO unbundling requirements; development of recommendations on amendments to TSO's license.

*Task 6.3.3* Development of recommendations to ensure enforcement of TSO's compliance with unbundling requirements, including monitoring of TSO's compliance with unbundling requirements, requirements for compliance officer (or body) and compliance program, reporting on its implementation.

#### ***Activity 6.4 Development of NEURC procedure for TSO certification***

The output of Activity 6.4 will be draft procedure and recommendations on TSO certification

*Task 6.4.1* Review of practical experience of EU NRA in TSO certification, including requirement for information and documents submitted to NRA, stages of certification process. Preparation of relevant recommendations and provision of practical advice on certification of TSO by NEURC.

*Task 6.4.2* Development of draft procedure for certification of TSO by NEURC including required framework on provision of relevant information and data

#### ***Activity 6.5 Organization and execution of Study Tour on TSO and DSOs unbundling implementation***

The output of the Activity 6.5 will be the report of Study Tour participants on the issues discussed within the Study Tour including the main conclusions on the experience presented by the visited EU Member State officials and organizations.

A Study Tour for one week and for 6 NEURC officials involved in Component 6 will be organized to an EU Member State with successful experience in unbundling of transmission and distribution from supply/generation. This event will occur after the discussion on EU experience has been completed and during preparation of relevant recommendations.

### **3.5 Means/ Input from the MS Partner Administration**

#### **3.5.1 Profile and tasks of the Project Leader**

The Project Leader (PL) will be responsible for the overall planning and implementation of the thrust of the MS inputs in this twinning project and will ensure the achievement of the mandatory results.

The PL is expected to devote working days for the progress of the project, including visits in Ukraine for attending the Steering Committee meetings and coordinating with the RTA and the BC Project Leader. It is also expected that the PL spends a number of working days in the phase of project preparation.



In cooperation with the BC Project Leader appointed by NEURC, PL will be responsible to coordinate, from the Member State side and with the Resident Twinning Adviser (RTA), the project activities.

**PROFILE**

**QUALIFICATION AND SKILLS**

- University high level education in engineering, economics, law or a related discipline
- Good English communication skills, both spoken and written
- Good inter-personal skills

**MANAGEMENT CAPACITY**

- Inter-personal and leadership skills;
- Experience in negotiations at the ministerial and intra-EU levels;
- Work experience in the ENPI region will be an asset.

**GENERAL PROFESSIONAL EXPERIENCE**

- Experienced Project manager, demonstrating good record in organisational leadership, staff motivation and communication;
- Civil servant from a Member State with experience in the field of power sector on implementing strategies, policies and regulations;
- Knowledge of EU legislative and operational activities related to the various components of the project;
- Knowledge of capacity building and strengthening of institutions related to the power sector (utilities, TSOs, MOs, Ministry in charge of electricity, etc.);
- Experience gained in similar international projects is highly desired.

**TASKS**

- The overall direction of the Project in cooperation with the BC Project Leader;
- The achievement of the mandatory results with the BC Project Leader;
- Supervision of project implementation;
- Mediation in the events of conflict;
- Overseeing financial management of the project;
- Supervision of the Resident Twinning Adviser (RTA) job;
- Preparation with the assistance of the RTA interim quarterly and final reports;
- Moderation in the Project Steering Committee meetings.

### **3.5.2 Profile and tasks of the RTA (24 Months)**

A Resident Twinning Adviser (RTA) on electricity regulation will provide advice and technical assistance to NEURC Commissioners and staff, coordinated through NEURC's Department of Strategic Planning and Energy Markets Development on clarifying, defining, improving and helping implement the different regulations, tools and procedures required to fulfill NEURC's mandate. The RTA will ensure that best European regulatory know-how is fed into the day-to-day activities and the decision making process at NEURC. The RTA will provide 24 working months input on site

within a period of 24 months. The RTA will be based full-time in an office in NEURC and will liaise closely with his counterpart in NEURC.

**PROFILE**

**QUALIFICATIONS AND SKILLS**

- University high level education in economics, engineering, business or law;
- Excellent English communication skills, both spoken and written.
- PC Computer literacy;
- Excellent inter-personal and team leadership skills;
- Command of Ukrainian or Russian will be an asset.

**TECHNICAL EXPERTISE**

- Strong analytical and managerial background;
- Inter-personal and communication skills; previous experience of managing multi-disciplinary and multinational team will be an asset;
- Previous experience in international projects will be an asset.

**PROJECT MANAGEMENT EXPERIENCE**

- RTA must be a civil servant or equivalent staff seconded to work in the BC;
- Hands on experience in developing and implementing strategies, policies and regulations in the power sector;
- Experience in planning developing, coordinating and conducting capacity building and information dissemination programmes for an electricity regulatory body in an EU Member State would be an asset;
- Experience within a European electricity regulatory body.

**TASKS**

- Make the necessary liaisons with the different parts involved;
- Manage day-to-day operations in cooperation with the RTA counterpart;
- Manage the short- and medium-term experts (STEs, MTEs);
- Contribute to tasks of the 6 Components
- Monitor project implementation and achievement of project objectives;
- Provide NEURC with training and advise on regulatory issues;
- Prepare interim quarterly reports and final reports to be submitted to the PL;
- Maintain close contact with the PAO and the EU Delegation;
- Prepare terms of reference (ToR) for all MTE/STE missions.

In addition to the above, an assistant and a full time translator-interpreter shall be appointed to assist the RTA. Allowance for this must be made within the project budget. Furthermore, the assistant and translator will facilitate the training activities. Where necessary (for example during training activities, translation of project documents/reports and materials, organizational activities) the project will hire an additional translator with costs covered by the project.

### **3.5.3 Profile and tasks of short and medium-term experts (STEs and MTEs)**

The tasks and responsibilities of the STEs and MTEs are those corresponding to the Activities to be developed in the Components 2-6, in order to reach the mandatory results. The team of experts acting as the STEs and MTEs on this project will be defined and mobilized by the MS partner. The STEs and MTEs should be civil servants or equivalent with a thorough expertise in the respective project areas. For each expert position, which is presented in Sections 3.5.4 – 3.5.9, one or more MTE / STEs might be assigned by the MS partner. One of the MTE/STE should be nominated as a leader for each Component 2-6.

In parallel, one or more counterpart competent experts will be assigned by NEURC for each expert position.

### **3.5.4 MTE/STE(s) for Component 2: Access of market actors to electricity networks**

#### ***PROFILE***

The MTE/STE(s) should be graduated in engineering or economics, or a related discipline must be fluent in written and spoken English language, command of Ukrainian or Russian will be an asset. One of the experts should be nominated as a leader for Component 2.

#### ***SPECIFIC PROFESSIONAL EXPERIENCE***

- Experience in the implementation of power sector reform;
- Experience in electricity market liberalisation process, in the EU countries;
- Experience in the regulation and operation of TPA and network connection rules.

#### ***TASKS***

The MTE/STE(s) will be responsible with the assistance of the RTA and the contribution of the BC Specialized Expert (s) for the fulfillment of Component 2 and will be significantly involved in the following tasks:

- Identification of the content of the TPA Rules;
- Collection and presentation of the relevant EU Member States examples with emphasis on best practice examples in TPA regulation;
- Presentation in the internal NEURC Workshop on analysis findings and main directions of synthetic work on TPA Rules;
- Contribution to preparation of detailed recommendations and/or draft Rules and related Standard Contracts;
- Main presentation in the consultation workshop on TPA draft final documents, addressed to NEURC and other interested market participants
- Incorporation of remarks and comments towards preparation of TPA final documents;

- Review of existing connection rules and check of compliance with the market reform legislation;
- Participation and main presentation of findings on connection rules in internal NEURC workshop;
- Finalization of connection rules documents.

### **3.5.5 MTE/STE (s) for Component 3: Switching electricity supplier, switching/appointment of default supplier / supplier of last resort**

#### ***PROFILE***

The MTE/STE(s) should be graduated in engineering, law or economics, or a related discipline, must be fluent in written and spoken English language, command of Ukrainian or Russian will be an asset. One of the experts should be nominated as a leader for Component 3.

#### ***SPECIFIC PROFESSIONAL EXPERIENCE***

- Experience in the implementation of power sector reform;
- Experience in electricity market liberalisation process, in the EU countries;
- Knowledge of electricity supply business and relevant regulations for selection, replacement of supplier and/or guaranteed supplier.

#### ***TASKS***

The MTE/STE(s) will be responsible with the assistance of the RTA and the contribution of the BC Specialized Expert (s) for the fulfillment of Component 3 and will be involved in the following tasks:

- Identification of the content of the Switching rules, Supplier replacement/appointment rules and Electricity Supply Rules on contracting of Electricity Supplier;
- Collection and presentation of the relevant EU Member States examples with emphasis on best practice examples in electricity supplier switching, appointment, substitution, contracting;
- Main part in the preparation of detailed recommendations and/or draft Rules and related Standard Contracts;
- Participation and presentation in the Workshop for draft final documents that is addressed to NEURC and other interested market participants;
- Incorporation of remarks and comments and preparation of project final documents;
- Contribution to the proper thematic organization of the Study Tour for electricity supply.

### **3.5.6 MTE/STE(s) for Component 4: Regulation of Default Supplier / Supplier of Last Resort operation**

#### **PROFILE**

The MTE/STE should be graduated in engineering, law, or economics/financing, or a related discipline and must be fluent in written and spoken English language, command of Ukrainian or Russian will be an asset. One of the experts should be nominated as a leader for Component 4.

#### **SPECIFIC PROFESSIONAL EXPERIENCE**

- Experience in the implementation of power sector reform;
- Experience in electricity market liberalisation process, in the EU countries;
- Experience in regulation of Guaranteed or Last Resort Supplier;
- Experience in the process and procedures for awarding licenses;
- Experience in regulatory accounting of supply business and preferably of Guaranteed or Last Resort Supply.

#### **TASKS**

The MTE/STE(s) will be responsible with the RTA and the BC Expert support for the fulfillment of Component 4, Activities 4.1, 4.2 and 4.3 focusing on the following tasks:

- Identification of the content of the Rules for Guaranteed Suppliers operation;
- Collection and presentation of the relevant EU Member States examples with similar approach in regulating Guaranteed or Last Resort Supplier;
- Contribution to preparation of detailed recommendations and/or draft Rules;
- Participation and main presentation in the Workshop for draft final documents that is addressed to NEURC and other interested market participants;
- Incorporation of remarks and comments towards preparation of project final documents on regulation of Guaranteed Supplier;
- Review of the existing licensing regulations and the relevant license templates for electricity supply;
- Collection and presentation of similar EU licensing experience;
- Preparation and presentation of terms and conditions of licenses for Guaranteed Suppliers in internal NEURC workshop;
- Incorporation of remarks and preparation of final project documents on licensing of Guaranteed Suppliers.
- Review of the existing and relevant tariff methodologies for electricity supply services and regulated retail prices;
- Selection of best practice examples of EU experience in tariff (price) methodologies for Default/Last Resort Supplier and presentation to NEURC in comparison with the Ukrainian practice;
- Definition of the approach to be followed and the content of the Guaranteed Supplier tariffs and the regulated retail prices;
- Participation in preparation of tariff methodology and presentation it in internal NEURC workshop;
- Incorporation of remarks and preparation of final project documents on tariff (price) methodologies for Default/Last Resort Supplier.

### **3.5.7 MTE/STE(s) for Component 5: Support in the development of Day-ahead Market Rules**

#### ***PROFILE:***

The MTE/STE(s) should be graduated in engineering, law or economics, or a related discipline and must be fluent in written and spoken English language, command of Ukrainian or Russian will be an asset. One of the experts should be nominated as a leader for Component 5.

#### ***SPECIFIC PROFESSIONAL EXPERIENCE***

- Experience in the implementation of electricity market reform;
- Experience in electricity market liberalisation process, in the EU countries;
- In depth knowledge of operation of electricity Day-ahead markets.

#### ***TASKS***

The MTE/STE(s) will be responsible with the assistance of the RTA and the contribution of the BC Specialized Expert for the fulfillment of Component 5 particularly he will be significantly involved in the following tasks:

- Definition of criteria and main points under assessment for the establishment of a Day-ahead market in Ukraine;
- Review of EU Day-ahead market reality and national regulatory framework of the EU Member State countries on the functioning of Day-ahead markets and/or of energy exchanges and spot markets in electricity;
- Contribution to comparative assessment of Ukrainian and EU legislation on the Day-ahead market functioning and recommendations on improving primary/secondary legislation of Ukraine concerning the functioning of the Day-ahead market.
- Review/advice on the practical implementation of all aspects/processes (organizational, economic, financial and technical) related to electricity trade at the Day-ahead market.
- Contribution to preparation of recommendations and draft Day-ahead market Rules in Ukraine;
- Analysis of the reasons and decisions affecting the liquidity of the Ukrainian Day-ahead market;
- Contribution to thematic organization of a Study tour to an EU country with relevant experience and successful operation of Day-ahead market;
- Contribution to preparation of guidelines and decision support analyses document for NEURC officials involved in decisions affecting liquidity of the Day-ahead market.
- Participation and main presentation in internal NEURC workshop of proposed guidelines.

### **3.5.8 MTE/STE(s) for Component 6: Support in the implementation of TSO and DSO unbundling**

#### **PROFILE**

The MTE/STE(s) should be a graduate in engineering, law or economics, or a related discipline and must be fluent in written and spoken English language, command of Ukrainian or Russian will be an asset. One of the experts should be nominated as a leader for Component 6.

#### **SPECIFIC PROFESSIONAL EXPERIENCE**

- Experience in the implementation of electricity market reform;
- Experience in electricity market liberalisation process, in the EU countries;
- Relevant experience and knowledge in depth of transmission, distribution and supply businesses;
- Experience in unbundling of TSO and DSO at EU level.

#### **TASKS**

The MTE/STE(s) will be responsible with the assistance of the RTA and the contribution of the BC Specialized Expert for the fulfillment of Component 6; particularly he will be significantly involved in the following tasks:

- Review of comparative assessment of Ukrainian and EU legislation on unbundling concerning TSO and DSO unbundling;
- Review of the TSO and DSO unbundling procedures and practices, which were used in the EU countries, especially in MS countries with similarities to the Ukrainian reality;
- Contribution to development of recommendations for the main steps of the unbundling process and preparation of a plan of actions for unbundling of Ukrainian distribution/supply companies;
- Participation in the organization and the execution of the information dissemination campaign to distribution companies' representatives on unbundling of distribution and supply activities.
- Review and identification of the unbundling areas to be monitored by NEURC;
- Participation in developing recommendations for monitoring and ensuring compliance of the rules of TSO and DSO unbundling including appointment of compliance officer, preparation and establishment of compliance programme and reporting on its implementation;
- Contribution to development of recommendations for the main steps of the TSO certification process and preparation of draft procedure for certification of TSO by NEURC.

### **3.5.9 Summary of activities and estimation of Working Days of MTE/STE**

Table 2 presents the summary of Components, Activities, the category of the MTE/STE involved in each Activity and indicatively the Working Days estimated for each MTE/STE(s). It is estimated that around 500 working days from experts involved as MTE/STE(s) and belonging to the class 2 or 3 will be required. The

candidate MS Twinning Partners might offer alternative appreciations of project implementation.

#### 4. Institutional Framework

The National Commission for State Energy and Public Utilities Regulation (NEURC) is the direct beneficiary of this twinning project. Its organizational structure and information about its activity is provided through its website: <http://www.nerc.gov.ua>. Indirect beneficiaries are the power market stakeholders, namely the generation companies, supply companies and the forthcoming institutions of Market Operator, network operators, Guaranteed Suppliers and Independent Suppliers.

The Department of Strategic Planning and Energy Markets Development of NEURC will be the coordinating unit within the BC structure. It is expected that for the 6 Components mentioned above the following NEURC Departments will be responsible and collaborate at project level with the RTA and the MTE/STE:

- Component 1: Departments of Strategic Planning and Energy Markets Development
- Component 2: Department of Retail Electricity Market
- Component 3: Department of Electricity Pricing Policy
- Component 4: Department of Electricity Pricing Policy
- Component 5: Energy Market Department
- Component 6: Department of Electricity Pricing Policy

For each project Activity one or more competent expert will be assigned by NEURC. Therefore, for each Activity one or more experts acting as MTE/STE will be defined by the MS and one or more counterpart competent experts will be assigned by the BC. Coordination will be carried out by the RTA and the RTA counterpart at the level of day-to-day work. At higher level, project management will be exercised by the PL and the BC Project Leader.

<b>Component/Activity</b>	<b>MTE/STE (s) Comp 1</b>	<b>MTE/STE (s) Comp 2</b>	<b>MTE/STE (s) Comp 3</b>	<b>MTE/STE (s) Comp 4</b>	<b>MTE/STE (s) Comp 5</b>	<b>MTE/STE (s) Comp 6</b>
<b>Activity 0.1 Organization of opening and closing workshops</b>	<b>20</b>					
<b>Component 2: Access of market actors to electricity networks</b>						
Activity 2.1 Development of Third Party Access Rules and Standard Contracts (Market part)		<b>40</b>				
Activity 2.2 Review and preparation of Amendments of connection rules (Physic. part)		<b>30</b>				
<b>Component 3: Switching electricity supplier, switching/appointment of default supplier/supplier last resort</b>						
Activity 3.1 Formulation of Rules for switching electricity supplier and of Standard Supply Contracts			<b>60</b>			
Activity 3.2 Organization and execution of Study Tour on switching, replacement and appointment of Electr. Supplier Regulation						
<b>Component 4: Regulation of Default</b>						



<b>supplier / Supplier of Last Resort operation</b>						
Activity 4.1 Preparation of Rules for Default/Last Resort Suppliers operation				<b>60</b>		
Activity 4.2 Identification of License conditions for Default/Last Resort Suppl.				<b>20</b>		
Activity 4.3 Preparation of Tariff (price) methodologies for Default/Last Resort Sup				<b>50</b>		
Activity 4.4 Organization and execution of Study Tour on electricity supply regulation						
<b>Component 5: Support in the development of Day-ahead Market Rules</b>						
Activity 5.1 Development of Rules of Day-ahead Market					<b>50</b>	
Activity 5.2 Development of Recommend. for Day-ahead Market operation					<b>40</b>	
Activity 5.3. Organization and execution of Study Tour on Day-ahead market operation						
<b>Component 6: Support in the implementation of unbundling of supply and distribution</b>						
Activity 6.1 Preparation and execution Information Campaign to Distribution Co.						<b>50</b>
Activity 6.2 Development of compliance Monitoring in unbundling Distribution from Supply						<b>20</b>
Activity 6.3. Development of legal framework for TSO unbundling according to the 3 <sup>rd</sup> Energy Package						<b>30</b>
Activity 6.4. Development of NEURC procedure for TSO certification						<b>30</b>
Activity 6.5 Organization, execution of Study Tour on TSO and DSOs unbundling implementation						
<b>EXPERT CATEGORY</b>	<b>2 or 3</b>	<b>2 or 3</b>	<b>2 or 3</b>	<b>2 or 3</b>	<b>2 or 3</b>	<b>2 or 3</b>

**Table 2: Estimation of Working Days per MTE/STE and Activity**

NEURC will provide the experts sent by the MS with the requisite facilities for professional use free of charge, which are thus not eligible for funding by the respective EU programme:

- adequately equipped office space,
- telephone, email services, fax,
- photocopiers, computer, internet access,
- secretarial support,
- venues for conferences, training and workshops,
- access to relevant information.

## 5. Budget

The total budget for the twinning project is 1,600,000 EURO.

## **6. Implementation Arrangements**

### **6.1 Implementing Agency responsible for tendering, contracting and accounting**

The Implementing Agency responsible for tendering, contracting and accounting is the European Commission represented by the Delegation of the European Union to Ukraine. The person in charge of this project at the Delegation of the European Union to Ukraine is:

**Ms. Olga Simak**

Sector manager  
Delegation of the European Union to Ukraine  
101 Volodymyrska Street, Kiev, 01033, Ukraine  
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Fax: +380 (44) 390 80 15  
E-Mail: [Olga.Simak@eeas.europa.eu](mailto:Olga.Simak@eeas.europa.eu)

The Programme Administration Office (PAO) under the National Agency of Ukraine on Civil service is an administration responsible for coordination of the preparation of Twinning projects and support for their implementation, provision of advisory and methodological support to public authorities in preparation and implementation of Twinning projects. The persons in charge at PAO in Ukraine are:

**Ms. Maryna Kanavets**

Director of the Twinning Programme  
Administration Office in Ukraine  
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## 6.2 Main counterpart in the BC

The National Commission for State Energy and Public Utilities Regulation (NEURC) is the BC institution.

Address: 19, Smolenska Str., Kiev, 03680, Ukraine.

### **The BC Project Leader: Mr. Volodymyr Ievdokimov**

Title: Commissioner

Tel: + 38044 204-48-06

Fax: + 38044 277-30-47

E-mail: [ievdokimov@necr.gov.ua](mailto:ievdokimov@necr.gov.ua)

### **The RTA Counterpart: Mr. Valerii Tsaplin**

Title: Head of the Department for Strategic Planning and Energy Markets Development

Tel: + 38044 204-70-81

Fax: + 38044 277-30-47

E-mail: [tsaplin@nerc.gov.ua](mailto:tsaplin@nerc.gov.ua)

## 6.3 Contracts

The Project will be implemented through one twinning contract.

## 7. Implementation Schedule (indicative)

### 7.1 Launching of the call for proposals

February 2015

### 7.2 Start of project activities

September 2015

### 7.3 Project completion

January 2018

### 7.4 Duration of the execution period

The duration of the execution period, corresponding to the full legal duration of the Twinning Contract, will be 28 months. The implementation period will be 24 months.

The implementation period will start one month after the date of notification by the Contracting Authority of the contract signed by all parties and will end 3 months after the end of the implementation period of the project.

## 8. Sustainability

The following points will help ensure the sustainability of the results:

- At governmental level there is an understanding and commitment to ensure that progress is made in the process of reform, modernization and updating of the Ukrainian power sector. This project will contribute to the development of the required capacities to perform a regulatory function of quality and efficiency.
- The Twinning project will work closely with NEURC, in cooperation with the institution's management and staff and the market players to ensure that particularly NEURC, but also the other players have a clear sense of ownership of the project.
- The Twinning project will also develop know-how and very specific capacities at staff level in NEURC. Dissemination of this knowledge with a philosophy of "training the trainer" and exploit useful amendments and remarks from open consultations and specialized workshops.
- The know-how will be transferred within NEURC; namely all outputs and technical documents will be prepared in partnership with NEURC professionals and will continue to be used after the project's completion; all materials and technical documents shall be translated into Ukrainian to maximize and ensure smooth dissemination.

## **9. Crosscutting issues**

Implementation of the project will have no adverse effect on environment. On the contrary, several aspects of the project will contribute to a better and more stable environment. Among the most relevant it can be mentioned:

- Ensuring an electricity market reform, which considers optimization of resources and internalization of environmental aspects, contributes to minimize the power sector impact on the environment.
- Promotion and appropriate incorporation of renewable energies, energy efficiency and co-generation through different plans and regulations strongly reduces environmental impacts.

Equal treatment of men and women in project implementation at all levels will be one of the most important principles in project management and implementation. Great attention will be given to having equal participation within the personnel that will be trained as well. Appropriate professional qualifications and experience will be the main decisive factors in personnel recruitment and evaluation. Both women and men have identical prospects.

The project will comply with EU equal opportunity policies. The project will seek to ensure that there is equal treatment accorded to male and female staff in NEURC and the other stakeholders participating in the project activities and training programs.

## **10. Conditionality and sequencing**

### **10.1 Conditionality**

It is crucial for the success of the Twinning project that there is a strong commitment at governmental level, at stakeholders' level and especially at NEURC for implementing the recommendations and actions needed to implement the reform

process in the Ukrainian power sector. It is recognized that the project implementation may result in enhancement of regulatory framework of the power sector, through technical analyses and drafting of necessary rules. These outputs are, however, necessary to achieve the targeted results, purposes and overall objective of the project which contributes to the national strategic objectives.

It is important that NEURC and other stakeholders recognize that the developments resulting from the Twinning project itself are part of a process of continuing improvement toward increasing the operational efficiency and effectiveness of the Ukrainian power sector in line with the EU 2<sup>nd</sup> and 3<sup>rd</sup> Energy Package and best practices. This process is also important to ensure that Ukraine will be able not only to comply with the Energy Community acquis, but will turn into a key player in this context.

## 10.2 Sequencing

The estimated sequencing of activities is presented in a Gantt diagram in Annex 2. This diagram is indicative but illustrates a reasonable organization of activities and the moment they should be carried out. Obviously there may be other possible scheduling of tasks, so this estimation should be not considered as binding. The detailed workplan should be developed in course of the Twinning contract preparation, where this proposed sequencing could be perfectly reviewed.

### **ANNEXES TO PROJECT FICHE**

1. Logical framework matrix in standard format
2. Detailed implementation chart (optional)
3. List of relevant laws and regulations