European Union, Austria and Georgia: Twinning For Updating the Electricity Tariff Methodology (E10/ENP-PCA/EY/11)

TWINNING

http://eeas.europa.eu/delegations/georgia/index_en.htm
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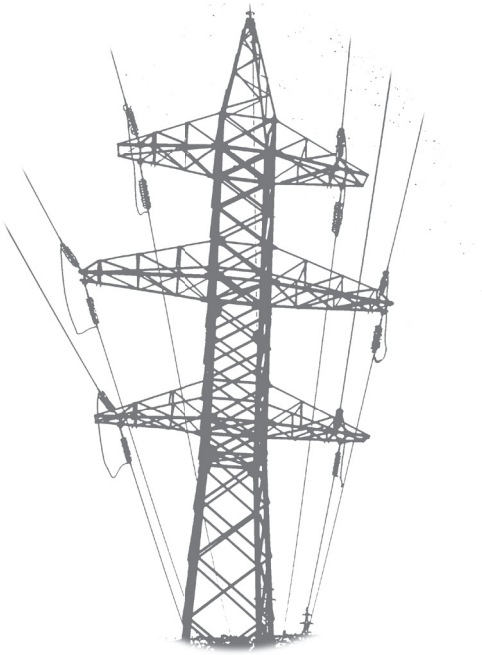

The European Union is made up of 28 Member States who have decided to gradually link together their know-how, resources and destinies. Together, during a period of enlargement of 50 years, they have built a zone of stability, democracy and sustainable development whilst maintaining cultural diversity, tolerance and individual freedoms. The European Union is committed to sharing its achievements and its values with countries and peoples beyond its borders.

TWINNING

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EXAA Energy Exchange Austria

E-CONTROL

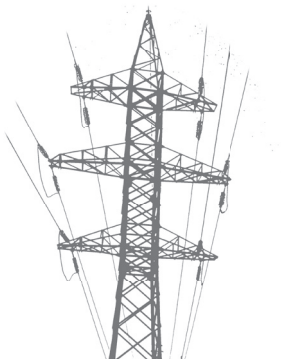
Executive Summary

The ENPI 2011 twinning project "Strengthening capacities of the Georgian National Energy and Water Supply Regulatory Commission (GNERC) in updating incentive based electricity tariff methodology" had as its purpose the strengthening of the – especially – regulatory and institutional capacities of the Georgian regulatory authority (GNERC) and develop jointly an incentive based electricity tariff methodology on the basis of EU requirements.

The project activities delivered the new incentive based methodology which was developed for Georgian circumstances on the basis of EU requirements and which helps the relevant companies to invest in the electricity network for its development. Furthermore, recommendations were made for the initial implementation of the mentioned methodology and BC experts were trained in order to ensure the correct application of the regulatory approaches.

The purpose of the project was successfully completed and all the mandatory results have been achieved to full extent.

Though, as a country that plans to sign the Association Agreement with the European Union and plans to become an Energy Community member and due to recent electricity market developments, Georgia should continue to implement rules on the independence of the NRA and further develop the regulatory methodologies. In order to do so, in the MS opinion further strengthening of the capacities of the NRA is necessary concerning regulatory audits, market monitoring and statistics. As gas market developments are not that progressed than the electricity market developments, further work is suggested in this area as well.



Find out more online

Twinning project	www.energy-twinning.at
European Union	http://europa.eu/index_en.htm
EU Delegation to Georgia	http://eeas.europa.eu/delegations/georgia/index_en.htm
EU Twinning website	http://ec.europa.eu/enlargement/tenders/twinning/index_en.htm
Energy Community	http://www.energy-community.org
E-Control Austria	www.e-control.at
GNERC	www.gnerc.org
EXAA	www.exaa.at
BnetzA	www.bundesnetzagentur.de
PUC	http://www2.sprk.lv/index.php?setl=2

Closing words of the project leaders

The Twinning project "Strengthening capacities of the Georgian National Energy and Water Supply Regulatory Commission (GNERC) in updating incentive based electricity tariff methodology" was a great success. All the mandatory results were attained and developed in close cooperation between the Georgian and Austrian partners. All participants were highly motivated and contributed knowledge, skills and enthusiasm to finalize the project.

Looking at what has been accomplished throughout this project, we must say that we are very proud and most pleased with the results. What E-Control, the Georgian National Energy and Water Supply Regulatory Commission, and the other Twinning partners have achieved over the last 21 months is Twinning at its best.

The concept of Twinning is based on cooperation, and from the very beginning of our project, the cooperation between GNERC and the partners from Austria worked extremely well. We have equally benefitted from each other by gaining new experience in our professional field of expertise, by getting to know each other's cultures and ways of living and by establishing new friendships which will last long into the future.

Let us express gratitude to the PAO, European Union and its Tbilisi based delegation, whose support to the project team has been truly enormous, and to congratulate all the involved partners on their great success in accomplishing the outlined project results.

Dietmar Preinstorfer

MS Project Leader
E-Control

Gocha Shonia

BC Project Leader
GNERC

Table of Content

List of Abbreviations

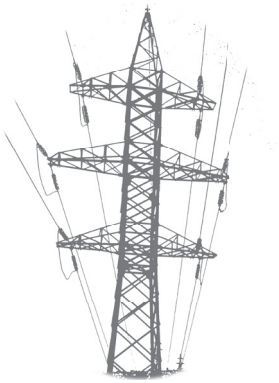
BNetzA	Bundesnetzagentur / Federal Network Agency (Germany)
CAPEX	Capital Expenditures
CPI	Consumer Price Index
EnC	Energy Community
ERRA	Energy Regulators Regional Association
EU	European Union
EUD	Delegation of the European Union to Georgia
EXAA	Energy Exchange Austria
GNERC	Georgian National Energy and Water Supply Regulatory Commission
ISET	International School of Economics at Tbilisi State University
MS	Member State
NRA	National Regulatory Authority
OM	Only Monitoring
OPEX	Operational Expenditures
OWG	Organisational Working Group
PAO	Project Administrative Office
PL	Project Leader
PSC	Project Steering Committee
PUC	Public Utilities Commission (Latvia)
QoS	Quality of Service/Supply
RAB	Regulated Asset Base
RTA	Resident Twinning Advisor
RWG	Regulatory Working Group
WACC	Weighted Average Cost of Capital

- Start data collection procedures
- Set up a central database
- Use further available resources through e-government services

SUSTAINABILITY

Ownership of the results at all levels of the BC administration and long-term visionary suggestions developed together within the project ensure that:

- GNERC can now optimize the data collection and analysis.
- GNERC can improve the quality of service activities.
- GNERC can easily simulate the updated methodology after collected the necessary data.
- The implementation process is designed for the follow-up actions set by GNERC.
- The exchange of expertise and experience will continue beyond the duration of this twinning project, thus strengthening the capacity of GNERC in the long run as well.



Commercial quality

- **Successful and full implementation of the existing regulation**
  In Georgia the first steps towards the establishment of an effective regulatory framework on commercial quality were made and developed during the last years. Some obstacles hindered the full implementation of rules set by the authority; therefore the successful and full implementation of the existing regulation should continue to be GNERC's priority at the moment.

- Compare performance standards, compensation payments and penalties to those in place in EU countries

- Set guaranteed payments and penalties associated with overall standards at levels which incentivize the companies to improve their performance in those areas in order to avoid incurring these payments

- Review the actual performance of the companies after a period of operation of the new requirements in the existing regulation

- Adjust the compensation payments and penalties if satisfactory progress towards meeting the performance standards is not being made or reduce the company's allowed revenue in the following price control period

Follow-up actions

- Set internal timeline for the implementation process

- Set clear responsibilities within GNERC

- **Communicate the regulatory activities clearly and in a transparent way to the market participants**
  According to Directive 2009/72/EC Art 36 National regulatory authorities should be able to fix or approve tariffs, or the methodologies underlying the calculation of the tariffs, on the basis of a proposal by the transmission system operator or distribution system operator(s), or on the basis of a proposal agreed between those operator(s) and the users of the network. In carrying out those tasks, national regulatory authorities should ensure that transmission and distribution tariffs are non-discriminatory and cost-reflective, and should take account of the long-term, marginal, avoided network costs from distributed generation and demand-side management measures. Furthermore, according to Art 12 any system for unbundling should be effective in removing any conflict of interests between producers, suppliers and transmission system operators, in order to create incentives for the necessary investments and guarantee the access of new market entrants under a transparent and efficient regulatory regime and should not create an overly onerous regulatory regime for national regulatory authorities.

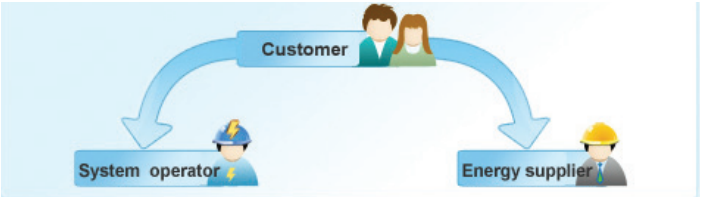
Definitions

Electricity regulation is a highly specialized business. Before looking at the details of tariff-set ting and the methodologies behind, it pays off to spend a little time on the technical terms most commonly used.

Natural monopoly

Natural monopolies are common in markets for 'essential services' that require an expensive infrastructure to deliver the good or service, such as in the cases of water supply, electricity, and gas, and other industries known as public utilities.

Because there is the potential to exploit monopoly power, governments tend to regulate them.



System operator

The system operator is responsible for operating and maintaining the electricity grid (e.g. lines and cables or substations) as well as all services regarding your meter, e.g. installation, maintenance and meter reading. The system operator takes care of the monopoly part of energy activities, which is why it is regulated.

Energy supplier

The supplier purchases electricity or generates it in its own power plants and supplies to its customers. Suppliers' activities are not necessarily regulated; instead, supply can be a competitive business and should therefore lead to lower energy prices.

Cost plus regulation

Cost plus regulation is a mechanism for calculating the costs that a regulated company will be allowed to recover from consumers (via tariffs). The allowed revenues for a period depend on approved historic costs (appropriate return on capital employed included). Thus, working with approved costs means that there is an inherent time lag, i.e. the operator recovers the costs, e.g. two years after the expenditure occurs.

Incentive based regulation

Incentive based regulation is an alternative to cost plus regulation. It can be defined as the conscious use of rewards and penalties to encourage good performance and cost efficiency in the utility sector. As of now, it is the "state-of-the-art" approach in European countries.

Twinning Project Factsheet

Title	**Strengthening capacities of the Georgian National Energy and Water Supply Regulatory Commission (GNERC) in updating incentive based electricity tariff methodology**
Partners	**Beneficiary:** Georgian National Energy and Water Supply Regulatory Commission (GNERC) **Lead Member State:** E-Control (Austria) **Contributors:** Federal Network Agency (BNetzA, Germany) Public Utilities Commission (PUC, Latvia) Austrian Energy Exchange (EXAA, Austria)
Duration	21 months on-site implementation (23/09/2012 - 22/06/2014) 24 months overall duration
Budget	€ 1.1 mio (financed by the EU)
Main actors	**Member State Project Leader (MS PL):** Mr Dietmar Preinstorfer (E-Control) **Beneficiary Country Project Leader (BC PL):** Mr Gocha Shonia (GNERC) **Resident Twinning Advisor (RTA):** Ms Eszter Süle (E-Control) **RTA Counterpart:** Mr Nugzar Beridze (GNERC)
Components	**Component 0:** Steering Committee Meetings **Component 1:** Capacity Building and Project Management **Component 2:** Updating of Incentive Based Tariff Methodology and Benchmarking **Component 3:** Creation of technical, economic and organisational preconditions

- Application of only monitoring (OM) standards for voltage quality except in cases where there is physical damage to customers' equipment
- Obligation for the companies to introduce adequate automatic monitoring devices at all voltage levels.
- Reports from the companies on actual performance in installing monitoring devices

- **Establish a system of auditing the accuracy of company reports on voltage quality**
  Voltage quality means the usefulness of electricity when there are no interruptions in the supply. If this usefulness is very poor, several problems may arise in the use of electrical equipment and consumers are dissatisfied. However, consumer satisfaction is crucial for ensuring the continuity of liberalization, therefore the regulator has to monitor voltage quality and incentivize or penalize companies if they do or do not meet the standards. In order to do so, the regulator should establish a system of auditing the accuracy of company reports which ensures the proper monitoring of voltage quality.

Continuity of supply

- Establishment of overall and/or guaranteed standards for customers for continuity of supply
- Create a penalty regime with the level of penalty encouraging action by the distribution companies whilst not undermining their ability to invest

- **Establishment of robust historic data set**
  Regulatory tools constitute a complete bundle of general regulatory instruments that the regulator can choose from. The use of these regulatory instruments might be constrained by the availability and reliability of the measured indicators. The first step might then be to ensure the collection of reliable data and to introduce binding instructions the network operators have to follow. This might be the most straightforward way to improve a system of quality regulation since the quality and reliability of the underlying data is one (if not the most) important necessity for developing and implementing a feasible regulatory system.
- Introduction of an incentive based arrangement in the longer term
  Implement audit processes ensuring the reliability of the data

- **Consideration of following steps: access rights, data verification, interoperability, costs, future expendability in case of purchasing a software for external data exchange**
  The procedure of purchasing software for the external data exchange should include the following steps in order to avoid future contradictions within the data collection and analysis process.
  Access rights - Groups with access to certain data have to be identified.
  Data verification - Automated data verification should be implemented, so that data quality can be assured.
  Interoperability - The interoperability with the existing software used by the authority and with the software of the regulated companies, as well as other stakeholders involved should be considered.
  Costs - In order to minimise costs, synergies with other authorities should be proved.
  Future expendability - As data collection and analysis depend on the changing framework of energy regulation, the expendability of the software should be kept in mind.

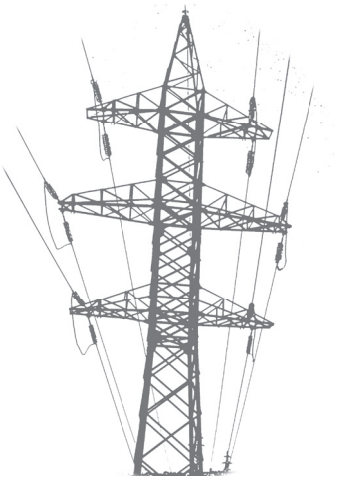
Figure 6:

HPP Gudauri, Energo Aragvi Ltd

Voltage quality

- Clear responsibility for regulating voltage quality for GNERC and appropriate powers for monitoring and enforcement
- Definition of voltage quality standards
- Initially build on existing voltage quality standards
- Focus on understanding the performance of the networks in relation to the current voltage quality standard

Working Groups (internal project organisation)	**OWG**	Organisational Working Group
	RWG	Regulatory Working Group
	LWG	Legal Working Group
Working group leaders	**Member State OWG Leader**	Mr Stephan Würzner
	Beneficiary Country OWG Leader	Ms Keti Berikashvili
	Member State RWG Leader	Mr Leo Kammerdiener
	Beneficiary Country RWG Leader	Mr Giorgi Pangani
	Member State LWG Leader	Mr Johannes Mrazek
	Beneficiary Country LWG Leader	Mr Malkhaz Dzidzikashvili



Foreword: E-Control

This brochure outlines the contents, activities and key achievements accomplished during the implementation of the EU funded Twinning project "Strengthening capacities of the Georgian National Energy and Water Supply Regulatory Commission (GNERC) in updating incentive based electricity tariff methodology", configured to support GNERC in adjusting its institutional capacity to the EU energy acquis, in particular the so-called 3rd energy package for electricity.

As the Association Agreement between the EU and Georgia is planned to be signed and the membership of Georgia in the Energy Community is scheduled for 2014, this Twinning project was perfectly timed to support our partners during this crucial phase. With this in mind, we at E-Control are even more delighted to have earned the trust to work alongside GNERC on transferring and adapting our knowledge and experience to best fit the needs of our Georgian colleagues.

We are aware that building upon all the positive advances and headways made in this project in the follow-up period will be a formidable challenge. However, looking at the results that have been achieved within this project, we are confident that our colleagues from GNERC will confront these complexities head-on and continue rolling forward this momentum that has been built up, spearheading the beneficiary country's continuing efforts toward EU rapprochement.

This project has given us the opportunity to contribute to the successful achievement of transforming the electricity market regulation in Georgia to the benefit of the local energy consumers.

We look forward to continued work with our Georgian partners in the framework of EU institutions like the Energy Community and other forms of cooperation.

Walter Boltz
Executive Director
E-Control

Martin Graf
Executive Director
E-Control

RESULTS, RECOMMENDATIONS AND SUSTAINABILITY

RESULTS

- Report on determining data, data formats, quality
- Assessment report on current quality of service regulation
- Recommendations on tariff simulation
- Recommendations report on data collection and analysis
- Conclusions of meetings with license holders
- Recommendations report on quality of service regulation in Georgia
- Recommendations for follow-up actions

RECOMMENDATIONS

Data organization

- Regularly collect data for regulatory purposes from the primary data owner (the stipulated company) and save the data in an editable electronic form
- Implementation of plausibility checks of the submitted data
- Structured data flow implementation
- Use of simple, standard tools
- Submission of data in an editable electronic format (e.g. Excel) by the regulated companies
- **Implementation of an internal network and storing data centrally** The implementation of an internal network and the possibility to store data centralized is an essential task, so that it is accessible by the GNERC staff. In order to establish the appropriate standards it is necessary that the IT equipment of the GNERC staff is uniform concerning the software in use. This is of great importance, as interoperability with other internet tools and software has to be ensured. Thus, software licenses have to be managed within GNERC accordingly. In this case it is recommended to cooperate with other state authorities to use financial synergies and to maximise the efficiency in the procurement process.
- Review of internal processes for data collection and analysis
- In-depth-data-analysis with the main aim to harmonize the data needs and analyzing methods

Component 3: Creation of technical, economic and organizational preconditions

This component aimed to

- Prepare an incentive tariff simulation model through which the updated methodology can be verified
- Support GNERC with the improvement of its quality of service activities and
- Prepare recommendations for a better organized and integrated data and information management system
- Recommend follow up actions after the project completion

ORGANIZATION

The component had seven activities with the following topics:

1. The existing data collection and analysis system/practice of GNERC with regard to the data determination
2. The existing quality of service/supply regulation and the relevant programme ongoing at GNERC
3. Tariff simulation model
4. Study tour regarding regulatory data and information management and quality of service regulation and monitoring to Italy & Slovenia
5. Regulatory data collection and analysis system, the core data centre of which can be used throughout the GNERC departments
6. The ongoing pilot quality of service regulation/monitoring system
7. Overall project recommendations for follow up actions

In total there were 94.5 expert days, delivered by 12 short-term experts during 23 missions within Component 3.

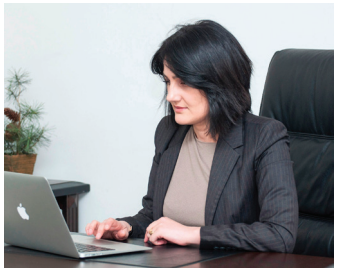
Foreword: GNERC

Countries that have the capacity and unshakable commitment to reforms are successful in paving the way to progress and prosperity.

Being aware of the challenges of energy market liberalization, the primary objective of the Twinning project "Strengthening capacities of the Georgian National Energy and Water Supply Regulatory Commission (GNERC) in updating incentive based electricity tariff methodology", which was implemented in conjunction with the Austrian energy regulatory authority E-Control, was to strengthen Georgia's institutional capacity in accordance with the European acquis, and to assist the implementation of EU rules for the regulation of the electricity market.

In September 2012, we initiated this project in an atmosphere charged with enthusiasm and optimism, as well as willingness to work hard, spurred on by the ongoing transformation of the Georgian regulation in line with the provision of the third energy package. Throughout the past 21 months, Georgia has provided full support to and played an active role in all project activities and tasks, thus successfully confronting the challenges and providing constructive input to achieving the set objectives and targets in keeping with best international practices. Moreover, the practical experience and knowledge gained from our Austrian partner, E-Control, as well as from the other partners participating in the implementation of this project, will be of great assistance.

Finally, I would like to express my heartfelt gratitude to the European Union for funding this project, and to extend my congratulations to the entire project team and to all participants in this project for their enormous efforts and selfless dedication that have led to the successful completion of this project and to achieving outstanding results, which are outlined in this brochure.



Irina Milorava
Chairwoman
Georgian National Energy and Water Supply Regulatory Commission

Project Cornerstones

Key objectives

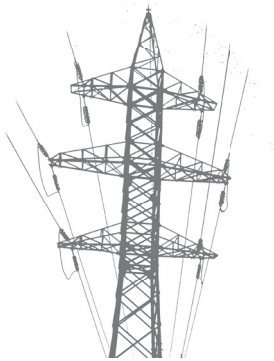
Improved Georgian electricity regulation that promotes long term investments and functions in line with European Union standards and best practices

Project purposes in general

To update the incentive based electricity tariff regulation and make recommendations for its initial implementation

Main project benchmarks

- Capacity Building
- Update the methodology for a multi-year incentive based electricity regulation
- Develop draft benchmarking methodology
- Assist in developing the existing data collection and analysis system of GNERC
- Prepare proposal for updating of the ongoing pilot quality of service regulation system
- Create technical, economic and organizational preconditions



- Estimation of individual component according to an administrative decision backed by an activity based costing approach
- Inflation adjustment based on consumer price index (CPI)
- No inclusion of continuity of supply in the regulatory formula at the moment
- No inclusion of voltage quality in the regulatory formula at the moment

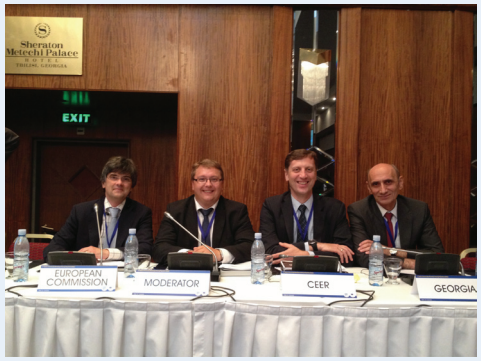


Figure 5:

Mr Massimo Lombardini, DG ENER,
Mr Martin Graf, Executive Director / E-Control,
Mr Dietmar Preinstorfer, MS PL / E-Control,
Mr Nugzar Beridze, RTA Counterpart / GNERC

SUSTAINABILITY

The results and recommendations developed in Component 2 facilitate the adaptation of the EU rules within the regulatory activities and cover important sustainability aspects, as well as support Georgia on the way towards Energy Community membership:

- All the provided tools and details are based on the requirements of the EU on the one hand, but fit Georgian circumstances and support investment on the other hand.
  The proposed methodology ensures that distribution tariffs
  - are non-discriminatory
  - are cost-reflective
  - are effective in removing any conflict of interests between producers, suppliers and transmission system operators
  - create incentives for the necessary investments
  - create a transparent and efficient regulatory regime

Project Milestones

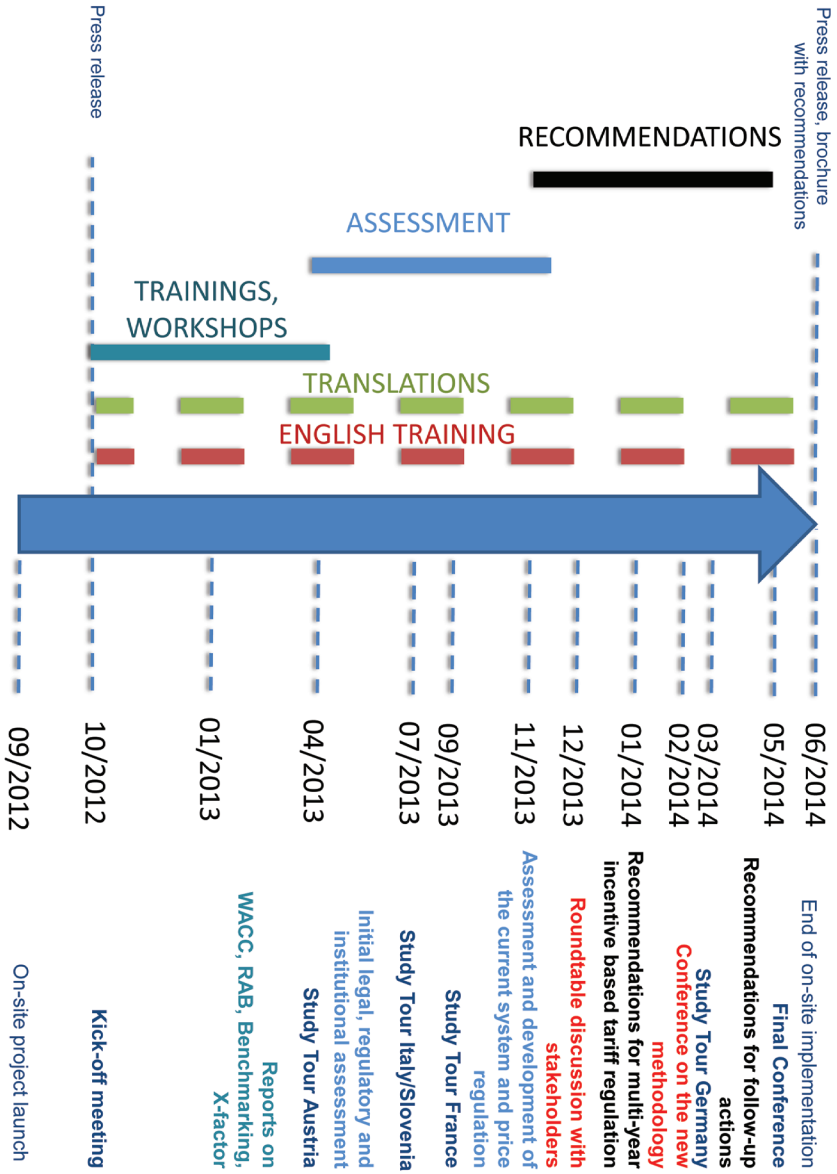


Figure 1: Project timeline showing the major project milestones

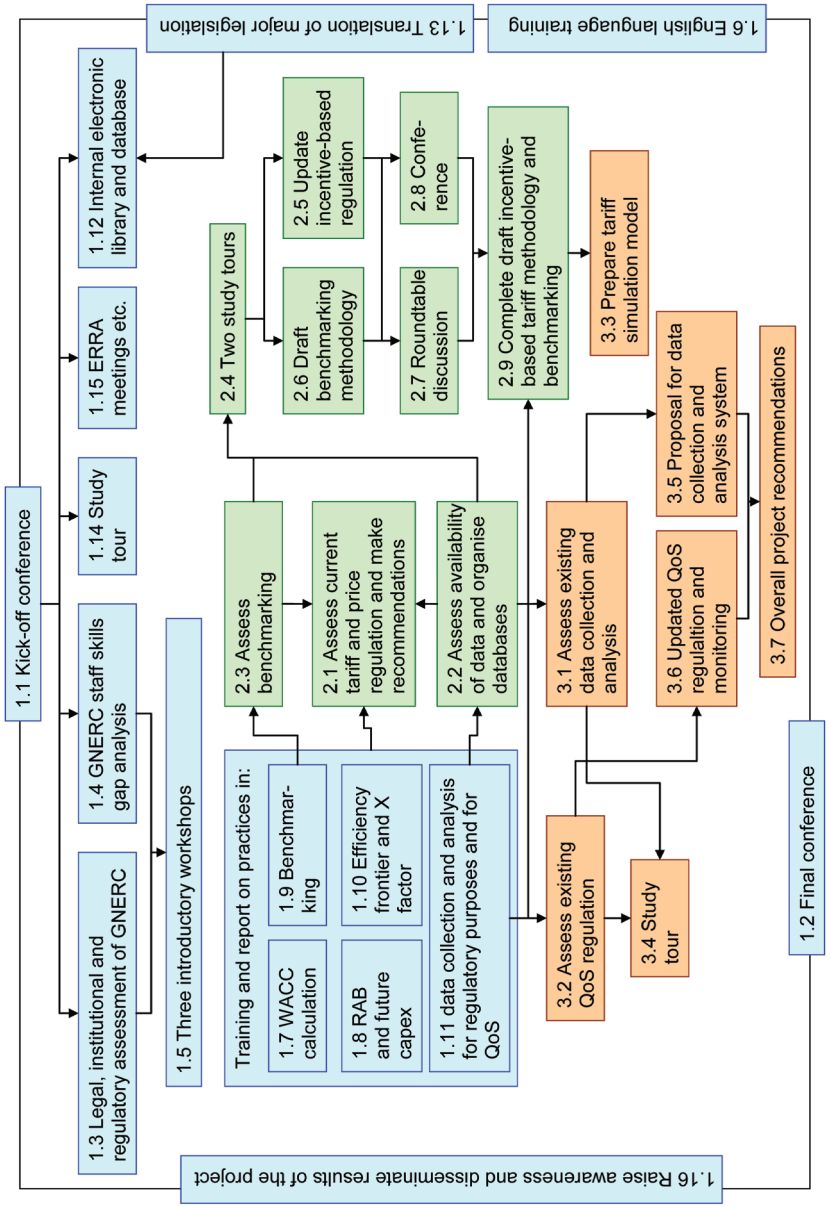


Figure 2: Project structure including the interaction of the project activities

allocation of costs towards respective activities in a way that it enables a different treatment of respective cost components, i.e. regulation of activities relating to a natural monopoly and market activities.

- Development of data collection methodology set by GNERC
- 3 years regulatory period (starting from 1.1.2015 to 31.12.2017)
- **Cost-plus regulation applied to Capital Expenditures (CAPEX)** One important target of the suggested methodology is the creation of incentives enabling adequate investments in the Georgian electricity network. In this sense, a cost-plus regulation on the basis of an annual cost audit related to CAPEX should be applied under the new methodology regime. In general, CAPEX should be evaluated on an annual basis as well as planned values regarding the following years to avoid the T-2 problem, which should support companies in their investment activities. It has to be mentioned, that if CAPEX are treated within a cost plus regime at the moment, that fact does not necessarily mean that there is no efficiency determination in the future regarding this kind of costs. It is very important, that the regulated companies are therefore aware that they should invest in an efficient way, even if a cost plus approach is applied at the moment.
- Regulation of non-controllable OPEX according to annual cost audits (remunerated on a pass-through basis)
- **Regulation of controllable OPEX according to a pre-defined regulatory cost path over a pre-defined regulatory period** In general, controllable costs reflect the core areas of network operation. They are all costs which are directly influenceable by the grid companies themselves - for example costs for maintenance and repair, personnel, etc. By increasing the efficiency, these costs can be reduced and consumers will benefit from lower tariffs. It is recommended that controllable OPEX should be regulated on the basis of a long-term and stable incentive based model. It should provide adequate incentives for an efficient decision making of regulated companies.
- Separate incentive based mechanism for the costs of network losses
- Implementation of price-cap regulation
- Application of well-developed cost auditing and cost allocation methodologies based on data collection scheme
- X-factor (Xgen+) evaluation should involve general and individual component
- Estimation of Xgen according to an administrative decision based on international comparison and respective studies

6. Draft benchmarking methodology
7. Roundtable discussion and recommendations for/by stakeholders
8. Discussion of draft methodology at a conference and recommendations for any subsequent improvements
9. Draft incentive based tariff methodology and draft methodology for benchmarking using the results of the discussions and recommendations

This Component had 152 expert days in total, 33 missions were organized and 14 short-term experts were involved.

RESULTS, RECOMMENDATIONS AND SUSTAINABILITY

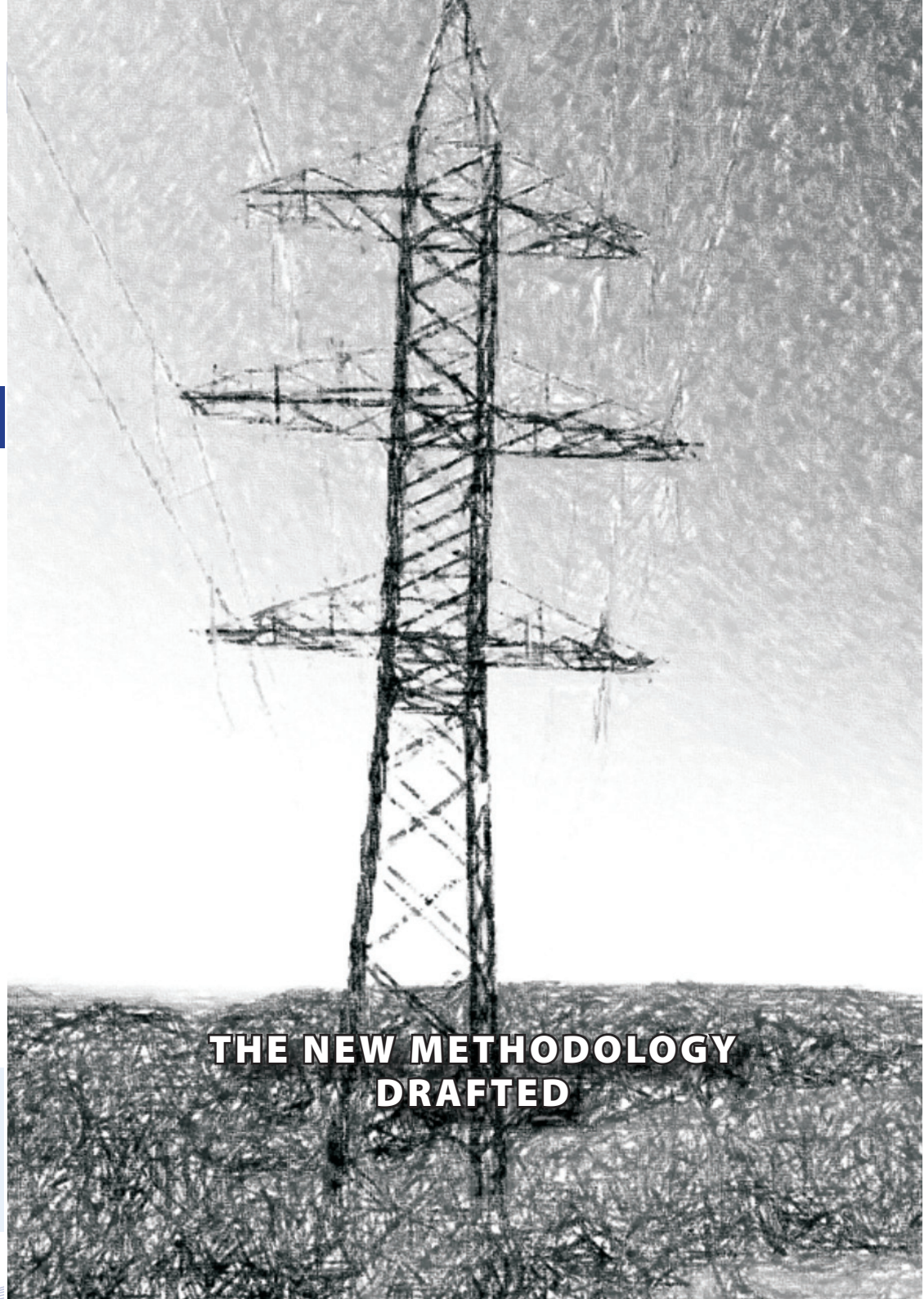
RESULTS

In line with the mandatory results from the Twinning contract, the experts worked on and delivered a wide range of concrete results:

- Technical report on the efficiency of the current system of tariff and price regulation used by the GNERC
- Recommendations for the database organization on the basis of data templates
- Assessment report of the applicability of benchmarking techniques in Georgia
- Recommendations for multi-year incentive based tariff regulation
- Recommendations on the benchmarking methodology
- Recommendations from the roundtable discussion
- Recommendations on the draft methodologies

RECOMMENDATIONS

- **Clear definition of regulated activities and requirements for legal and cost unbundling as well as publication of appropriate cost allocation methodologies**
  The most important pre-requisite for a successful market liberalization process and the determination of cost-reflective tariffs is the unbundling of activities of vertically integrated companies. Unbundling involves the



Component 0: Steering committee meetings

The administrative part of the project was handled in Component 0. This comprised meetings of the project's steering committee to discuss progress, take into account recent developments and adjust the project plan, to ensure optimal use of the resources. For most of the project duration, the GNERC was located outside the capital, and so this component also included the cooperation and liaison activities of the RTA with other stakeholders within the sector, which were concentrated in Tbilisi.

The milestones in this component were:

- Organisation of all seven Project Steering Committee (PSC) meetings
- Meetings, cooperation with stakeholders
- Representation of the project at conferences by the RTA

The MS Project Leader delivered 7 expert days in Georgia to achieve these results.

The steering committee consisted of the following members:

Chair

Co-Chair

Dietmar Preinstorfer, E-Control (MS Austria)

Co-Chair

Gocha Shonia, GNERC (Beneficiary)

EU Delegation in Georgia

Camilla Aberg (initial PSC)

Michel Jambou (initial and 1st PSC)

Francesca Mazzucco (2nd and 3rd PSC)

Muriel Lambert de Rouvroit (from the 4th PSC)

Project Adminstrative Office / Ministry of of Georgia on European and Euro-Atlantic Integration

Roman Kakulia

David Kalatozishvili

EU funded project "Support to the PAO in Application and Coordination of the Institutional Building Facilities"

Eka Baramidze

GNERC

Gocha Shonia, BC PL

Nugzar Beridze, RTA Counterpart

E-Control

Dietmar Preinstorfer, MS PL

Stephan Würzner, expert

Katharina Tappeiner, expert

Georgia Twinning team

Eszter Süle, RTA

Elena Gabedava, Project Translator/ Interpreter

Nino Nikoleishvili, RTA Assistant

Component 2: Updating the incentive based tariff methodology and benchmarking

The second Component of the project included activities which have supported GNERC in moving away from cost of service type regulation of electricity towards an approach using explicit incentives by

- Assessing the current tariff and price regulation methodologies used by the GNERC and pinpointing different possible options of development in view of the EU acquis and best practices
- Updating the methodology for a multi-year incentive based electricity regulation
- Discussing the recommendations for/by stakeholders

Figure 4:

Ms Karin Stubenvoll and Mr Ainars Mengelsons (MS Experts)

ORGANIZATION

This Component had nine activities with the following topics:

1. Current tariff and price regulation methodologies used by the GNERC, possibilities for development in view of the EU acquis and best practices
2. Availability of related data and templates for technical and economic data which can be used for the organization of the future database
3. Application of benchmarking within incentive based regulation
4. Two study tours to national regulatory authorities in two different EU MS countries
5. Update of methodology for a multi-year incentive based electricity regulation

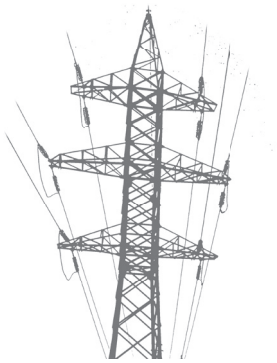
Figure 3:

Mr Roland Görlich and
Mr Leo Kammerdiener
(MS experts)

SUSTAINABILITY

The results of Component 1 have a major impact on the future activities of the BC partner and guarantee positive long-term effects. Component 1 implies the following sustainability aspects:

- The developed analysis and materials can be used to further optimize the institutional framework and the regulatory work of the BC.
- The training materials and the reports concerning the best practices in regulatory techniques (WACC, RAB, benchmarking, X-factor) provide the BC with the knowledge to bring the electricity regulation in line with EU rules.
- The materials concerning the EU third energy package can be used for internal education of the BC staff.
- The topics discussed in this Component represent a major contribution to strengthening the capacities of GNERC for its regulatory tasks and no less importantly they support Georgia on the way towards Energy Community membership.



Component 1: Capacity Building

The aim of this component was

- To assess the current regulatory framework and market environment in the electricity sector of Georgia
- To deliver training on each part of the regulatory methodology and to develop or reinforce GNERC's understanding
- To organize English language training on energy sector terminology
- To arrange for translation of major EU energy acquis to Georgian and major Georgian related regulation to English
- To raise awareness and disseminate the results of the project

ORGANIZATION

Component 1 was divided into sixteen activities with the following topics:

1. The kick-off conference
2. The final conference
3. An assessment of GNERC's situation in legal, institutional and regulatory terms
4. A skills gap analysis for further staff development
5. Three introductory workshops for training on basic project concepts
6. English language training with a particular focus on the energy sector and its terminology for core departments in GNERC
7. Training on parts of the regulatory methodology I: approaches taken by a variety of regulators to calculate and approve the weighted average cost of capital (WACC)
8. Training on parts of the regulatory methodology II: techniques undertaken by different EU regulators to determine regulatory asset base (RAB) and future capital investments
9. Training on parts of the regulatory methodology III: different benchmarking approaches and techniques used by EU regulators
10. Training on parts of the regulatory methodology IV: approaches taken by EU regulators to determine efficient path of costs and X efficiency factors

11. Training on parts of the regulatory methodology V: data collection and analysis for regulatory purposes and approaches taken by a variety of regulators for quality of service monitoring and assessment

12. Internal electronic library and an internal electronic database that serve basic information and data needs across GNERC departments

13. Translation of major EU energy (electricity regulation) acquis into Georgian and major Georgian electricity related regulation into English for supporting work of the project and the e-library

14. A one-week study tour to Austria, to understand the process that was completed in the Austria to comply with the electricity-related parts of the EU acquis and the working methods and procedures of E-Control with a focus on tariff regulation, data collection and analysis and quality of service management aspects

15. Study visits to meetings

16. Visibility

In total there were 170.5 expert days, delivered by 23 short-term experts during 53 missions within Component 1.

RESULTS, RECOMMENDATIONS AND SUSTAINABILITY

RESULTS

In line with the mandatory results of the Twinning contract, this component delivered a wide range of results:

- An assessment report on the status of the legal, institutional and regulatory framework of GNERC
- An assessment report about the skills of the GNERC staff
- Training materials on twinning, on legal, regulatory and market developments in the EU and in Austria
- Report on WACC and RAB calculation and on future capital investments
- Report on benchmarking approaches and on X-factor determination
- Training materials on experiences of the MS concerning data collection and analysis
- Training materials on approaches taken by a variety of regulators for quality of service regulation
- Report on data needs of GNERC for setting up an internal electronic database

Further results were achieved through voluntary contribution from MS experts and RTA initiatives:

- Presentation at ISET
- Establishment of contacts to other twinning projects to use synergic potential of e-government applications in connection with data collection procedures

RECOMMENDATIONS

- Unbundling of the energy sector into separate functional segments in full compliance with the 3rd package
- Revision of policy on renewables and increasing energy efficiency, adoption of relevant legal acts
- Further development of tariff methodologies to fully reflect "state-of-the-art" regulation principles and cost based tariffs
- **Increase and enhance GNERC status and rights on legislative level**
  In order to ensure the proper regulatory and market monitoring performance of GNERC, clear description of tasks and responsibilities should be set in the law.
- **Development of the energy market structure**
  According to EU rules the principle of freedom of choice of energy supplier for all household consumers should be applied. This objective needs further development of the Georgian market structure.
- Concentrate future organizational development on the following elements: strategy, systems and structure
- Develop appropriate IT standards and implement an internal network with the consideration of data security and disaster recovery
- Draw up internal processes for data collection and analysis, and adapt them to future tasks of GNERC