PROGRESS REPORT ON THE SECOND YEAR'S IMPLEMENTATION

EU Strategy for the Danube Region

Priority Area 2 ("to encourage more sustainable energy")

co-ordinated by Hungary and the Czech Republic



30 June 2013

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EUSDR Report June 2013

Priority Area 2

"to encourage more sustainable energy"

1. STATE OF PLAY

[Work done so far on policies, actions and projects; Any lessons learned, positive or negative; Next steps/ challenges? What, if anything, is missing in order to achieve the planned goals? Please describe the most important outcomes and explicitly highlight events/ discussions/ results that are happening or being speeded up because of the Strategy. Please also be as concrete as possible, while bearing in mind that progress that may seem obvious to you may not be obvious to outsiders. Please emphasise, when appropriate, the issues that are specific to your Priority Area]

The Energy Priority Area has achieved significant progress since the previous annual report by implementing many actions from the Strategy's Action Plan. Some of them are fully completed while others are on-going.

The Energy Priority Area (PA2) has three major objectives to follow during its work. First, PA2 coordinates regional energy polices in various topics in order to exploit the full potential of an integrated energy market. Second, PA2 is instrumental in the integration of the energy markets of the non-EU countries and supports them in the implementation of the EU energy acquis. Third, PA2 is committed to launch cutting edge technology developments, which will increase the energy efficiency of the region and enhance the use of renewable energy sources. This three-fold approach is represented in several initiatives, of which many are already completed while some of them are ongoing activities.

Energy is a typical issue in which macro-regional approach is essential in order to ensure the security of supply of the countries, market integration and more effective regional planning, as well as to jointly identify the most critical infrastructure developments, enabling the best use of the limited public funding. In 2012 the Priority Area concentrated mostly on gas issues taking into consideration the PCI identification process. By the end of 2012, with the support of the Steering Group, activities in several other areas were launched. Most importantly the Energy Priority Area has initiated the joint thinking of Danube countries on smart grids, renewables and energy efficiency issues. The work has already started by developing the Danube Region Biomass Action Plan, the Smart Grid Concept, the Geothermal Concept and the Energy Efficiency Concept.

Taking into consideration the importance of the effective involvement of the non-EU countries to the macro-regional cooperation, the Energy Priority Area has launched a systematic, tailor-made knowledge transfer training program. The first partner was the Republic of Moldova with systematic workshops on the implementation of the EU's energy "acquis communautaire". The concept was developed in close cooperation with the European Commission DG ENER, as well as the energy donor community in Moldova. The initiative that was implemented in the form of on the spot workshops in Chisinau enjoys the full support of the Moldovan Government, as well. The training program is considered to be the first initiative aiming to assist Moldova in the practical implementation of the 3rd Energy Package. Taking into consideration the positive

feedback received on this approach, the PA2 is committed to launch the 2nd phase of the concept in Moldova and implement this initiative in other non-EU countries as well.

The Priority Area has managed to develop regional position in several issues by accepting joint declarations to be directly channelled into the relevant decision making processes in Brussels. The first joint declaration on the outcomes of the Danube Region Gas Market Model was accepted before the previous annual report. The 6th Steering Group meeting endorsed two joint conclusions on 13 June, 2013, one on the findings of the Danube Region Gas Storage Analysis and the other on biomass sustainability.

Several new projects were identified and supported by issuing Letters of Recommendation (LoR) to them. With the support of PA2, a NER300 project titled "South Hungarian Enhanced Geothermal System (EGS) Demonstration Project" was approved by the European Commission with the total budget of 116 million Euros. PA2 also supported project proposals that were submitted to the May 2013 call of Intelligent Energy Europe programme. Besides issuing Letters of Recommendation to the request of project leaders, PA2 had also managed to attract and involve further project partners to these projects via its Steering Group members from various Danube countries.

The activity of the Steering Group is increasing continuously. The 6th Steering Group Meeting of the PA2 was attended by a record number of 12 member countries and regions. However, the involvement of countries in the daily work of the PA still remains a problem to overcome.

Priority Area 2 has achieved a significant progress up to date as it was able to bridge the missing gap between the EU and Member States in many areas of energy planning and implementation. However further work is needed in many sectors by implementing the actions of the Strategy as well as other concepts initiated by the PA.

COORDINATING REGIONAL ENERGY POLICIES

1.1.1. The Danube Region Gas Market Model (completed)

As it was already mentioned in the first annual report in 2012, the Danube Region Gas Market Model was the first tangible result of the Strategy implementation in the Energy Priority Area. Besides events in Budapest and the European Parliament, the model was also introduced at several other conferences, events, such as the 7th Gas Forum of the Energy Community. The Model is highly appreciated by all relevant experts, institutions as a tool which is able to measure the transnational spill-over effects of gas infrastructure projects and project packages. The Model was able to identify the six most crucial gas infrastructure projects of the Danube Region. The estimated EUR 560 million investments into these projects would result in EUR 1600 million annual saving on gas bills.

The enhanced version of this tool is being used for the evaluation of the Energy Community's PECI (Projects of Energy Community Interest) projects. The importance of the model is highlighted and echoed by the European Commission in the report to the Council and the Parliament on the progress of the Strategy.

1.1.2. The Danube Region Gas Storage Analysis (completed)

Based on the conclusions of the Danube Region Gas Market Model, a Danube Region Gas Storage analysis was developed and completed in April 2013 in order to help the

optimal use of the available gas storage capacities of the Danube countries. The analysis examined two research questions. Firstly, if there is sufficient natural gas storage capacity in the countries of Danube Region to provide security of supply and necessary flexibility for national markets. Secondly, if missing storage infrastructure (if there is any) on a national level can be supplied on a regional basis in the Danube Region.

The analysis gave a clear picture on the current state of play, underlying that the region already has sufficient storage capacity with substantial unused capacities. However, the distribution of storage is uneven across countries.

The importance of the first-of-its kind analysis was recognized by the European Commission thus the PA2 was invited to introduce results of the modelling exercise in several Gas Working Groups of the EU in February, 2013 assisting them in their PCI identification process. Final results of the initiative were presented in the 6th SG meeting of the PA2 on 13 June, 2013 in Budapest. Based on the findings of the analysis, the Steering Group accepted a joint declaration stressing the importance of regional approach when thinking about the development of gas storage capacities.

1.1.3. The Danube Region Biomass Action Plan (ongoing activity)

The Danube Region Biomass Action Plan project provides a comprehensive analysis of the biomass potential, current utilization and existing practices in the Danube Region and offers cross-border policy recommendations and an action plan to extend the use of biomass.

The project analyses the biomass potential, the current use, the legal framework and regulatory environment of biomass utilization of the Danube countries. Additionally the project collects and presents existing biomass practices in the Danube region countries in an electronic database.

Based on the results of the research, the aim of the project is to create synergies and coordination between existing policies and initiatives of the countries in the Region in order to extend the sustainable use of biomass. The Biomass Action Plan will contain policy recommendations and a regional roadmap for biomass utilization.

Later on, based upon the Action Plan, the Energy Priority Area will initiate biomass projects in the Danube region.

1.1.4. The Danube Region Energy Efficiency Concept for Public Buildings (ongoing activity)

The goal of the concept is to investigate the current practice of financing energy efficiency investments of public buildings in the Danube Region countries. The project will focus on sharing best practices and on the formulation of policy recommendations in order to create a more attractive environment for public building renovation projects.

The European Commission has listed some well-known obstacles to investments in energy efficiency projects in the European Union in general. According to the consultation paper of the European Community, the main barriers to initiating such projects are of market, financial and/or regulatory in nature. The Energy Priority Area believes that many of the detailed obstacles could be eliminated more effectively at a regional level. Therefore, there is a project proposal that would result in a retrospective analysis and state-of-play study dealing with energy-efficiency investments of public buildings in the Region.

The study will assess and analyse the energy efficiency potential, investments and financial sources of public buildings in the Danube Region countries while previous results are explained in detail too.

Main goal of the concept is to get transparent and trustworthy information about the current market situation in the related field. The project will present the untapped energy efficiency potential in the Region and promote market opportunities at the same time.

With the widespread investigation of the target field, the study will provide common challenges and gives recommendations how to deal with different issues. The concept will foster the realization of new investments; create new job opportunities for inhabitants and develop energy efficiency in public buildings which represent about 12% of the EU's final energy consumption.

1.1.5. The Danube Region Geothermal Concept (ongoing activity)

The TRANSENERGY project (Transboundary geothermal energy resources of Slovenia, Austria, Hungary, and Slovakia) was running in the frame of the Central Europe Program. Based on the experiences of TRANSENERGY, a large scale project is envisaged for the Danube Region in the 2014-2020 period.

The project would focus on the geothermal potential assessment based on a common understanding of resources (a joint geothermal database), as well as policy recommendations for the enhanced utilization of geothermal energy. Thus the existing regional cooperation (TRANSENERGY) could be expanded to a macro-regional level (Danube region).

The launch of such a big project and successful application for financial support require extensive preparatory work, therefore we have elaborated a two-phased approach: Phase 1 – establishment of a project consortium in 2013 (which is the aim of the below presented activity); Phase 2 – execution of the project from 2014 onwards supported by the funds of the 2014-2020 Multiannual Financial Framework.

The main output of the foreseen macro-regional project will be a uniform and transparent pool of information/database for the Danube region which will contain all necessary underground (geological and geothermal) data, as well as information on the regulatory, economic and social (including environmental) aspects, research roadmaps and training, energy demand and market analyses. The establishment of this data-pool ("Danube Region Geothermal Information Platform") will be a key factor for the future success of the geothermal projects planned in 2014-2020, therefore the above outlined work is essential.

DEVELOPING CUTTING-EDGE TECHNOLOGIES

1.1.1. The Danube Region Smart Grid Concept (ongoing activity)

The aim of the Danube Region Smart Grid Concept is to facilitate a common understanding on the rather complex notion of "smart grids" and assist the countries of the Danube Region to take the first steps towards the development of smart grid policies and action plans.

In order to meet the energy efficiency targets of the EU, the standardisation of smart appliances and the preparation of national plans for the swift deployment of smart grids are necessary.

The electricity systems and markets of the Danube Region countries are heterogeneous and their electricity networks are facing very different challenges due to specific production and consumption patterns. The goal of the Danube Region Smart Grid Concept is to identify the bottlenecks of smart grid developments in the Danube Region from infrastructural barriers through the integration of the increased energy production from supplying renewable sources into the grid to the ratio of non-payment.

The project is based on a series of workshops with key stakeholders - TSOs, DSOs, big consumers and suppliers – on desktop research and on regional survey. The workshops provide an excellent platform to discuss expectations on the prospects of smart grid developments in the different countries and share already existing practices.

By the end of the project Danube countries are expected to have an understanding of their own demand for smart grid solutions and the areas for policy and regulatory interventions.

Based on the concept, the Energy Priority Area aims to develop Smart Grid Pilot Projects with macro-regional impact as well.

INVOLVEMENT OF THE NON-EU COUNTRIES

1.1.2. Training Program in Moldova

The Energy Priority Area assists the non-EU countries of the Danube Region Strategy in their efforts to implement the Third Energy Package of the European Union, resulting in a fully integrated market in the long term.

The Energy Priority Area has started a series of trainings on the third energy package in the Republic of Moldova. In the first half of 2013, three tailor-made training sessions were organized in Chisinau on the practical implementation of the 3rd energy package of the European Union.

Senior experts from public institutions, regulatory authorities, academia, private sector, and knowledge centres from several EU Member States were invited to share their experiences, knowledge and insight with decision and policy makers, as well as experts of the relevant public bodies and companies of the Republic of Moldova.

The Energy Priority Area aims to extend the training program to other non-EU countries of the Danube Region Strategy, as well as to continue the project in the Republic of Moldova.

2. RELATIONS WITH OTHER STRUCTURES

The PA2 has an observer status in the Regional Energy Strategy Task Force of the Energy Community as well as the North-South Gas Working Group of the European Union. Cooperation with both organizations has developed significantly by directly channelling the results of the work of the PA2 into their decision making processes.

Since the 1st Annual Report the PA2 has started cooperation with the Joint Research Centre of the European Commission.

2.1.1. Cooperation with the EU's Joint Research Center

The Joint Research Centre (JRC) is coordinating an initiative aiming to provide scientific support to the EU Strategy for the Danube Region (EUSDR). Through an integrated approach relying on different flagship clusters, the JRC and its scientific partners will gather essential scientific expertise and data to help decision-makers and other stakeholders of the Danube Region to identify the policy measures and actions needed for the implementation of the EU Strategy of the Danube Region. Representatives of JRC and PA2 have met in May 2013 in Bratislava at the 'Scientific Support to the Danube Strategy' event to initiate cooperation and to take advantage of synergies. Representative of the JRC attended the 6th Steering Group meeting of the PA2 in order to introduce the DRS supporting activities of the institution in detail.

3. Process

[Work done so far on governance: PACs, Steering Groups, links with stakeholders; Significant changes in your work/network approach resulting from the Strategy (e.g. larger networks, more visibility), including any problems encountered and any solutions found; Links with projects from other Priority Areas; Publicity measures (such as website, stakeholder seminars, publications, ...) etc. Please emphasise, when appropriate, the issues that are specific to your Priority Area]

3.1.1. Governance Structure

The Priority Area 2 is co-ordinated by Hungary and the Czech Republic. From the Hungarian side the PA2 is led by Ms Anita Orbán, Ambassador at-Large responsible for energy security issues of Hungary in the Ministry of Foreign Affairs and the Czech side is represented by the Ministry of Industry and Trade.

In order to effectively implement the Strategy, the Hungarian side has enlarged its staff progressively. At the moment, the Priority Area Coordinator is assisted by 4 colleagues working full time and one part-time employee.

3.1.2. Steering Group Meetings

The activity of the Steering Group is slowly but continuously increasing. The 6th Steering Group Meeting of the PA2 was attended by a record number of 13 member countries and regions. However, the involvement of countries in the daily work of the PA still remains a problem to overcome.

After the 1st Annual Report, two steering group meeting were held:

• 5th Steering Group Meeting of the PA2 – 5 December 2012 – Budapest (*see ANNEX3: AGENDA AND MINUTES OF THE 5th SG MEETING*)

Main activities:

progress report on the first year's implementation

progress report on the cooperation with the Energy Community

developments of the Danube Region Gas Market Model

conclusions of the First Annual Forum of the EUSDR

presentation of the TRANSENERGY project

introduction of new project proposals accepted: EGS NER 300 geothermal concept and Green Chemistry Belt

new roadmap for implementation accepted: geothermal energy

introduction of the preliminary results of the Danube Region Gas Storage Study

introduction of the Danube Region Smart Grid Concept, the Danube Region Biomass Concept and the Assistance Program Concept to the Republic of Moldova for the implementation of specific provisions of the third energy package

• 6th Steering Group Meeting of the PA 2 – 13 June 2013 – Budapest (see ANNEX 4: AGENDA AND MINUTES OF THE 5th SG MEETING) Main activities:

progress report on the Danube Region Strategy by the European Commission

progress in the North-South Gas Working Group and the way ahead

report of the priority area coordinator since the last Steering Group Meeting

report on the Danube Region Gas Storage Analysis, the SG accepted a joint declaration on its findings (see ANNEX 10)

progress report on the Danube Region Smart Grid Concept

new project proposals accepted: Energy Performance Contracting in the Danube Region and SUSBANAT: Good Neighbours for Sustainable Development in the Banat Region

progress report on the initiatives of the PA: Danube Region Biomass Concept, Danube Region Geothermal Concept, Training Program in Moldova

the SG accepted a joint declaration on biomass sustainability (see ANNEX 11)

concept proposals accepted: Danube Region Energy Efficiency for Public Buildings, Danube Region Renewable Energy Concept

progress report on the activities of the Budapest Danube Contact Point

3.2. Meetings/events attended by the PA2 after the 1st Annual Report

Date	Place	Event			
06/2012	Brussels	Conference of the PA2 at the European Parliament on the introduction of the Danube Region Gas Market Model			
07/2012	Brussels	North-South Gas Working Group Meeting			
09/2012	Sofia	Energy Diplomacy Seminar			
09/2013	Salzburg	Alpine Space Conference			
09/2013	Brussels	South-East Europe Gas Working Group Meeting			
09/2012	Bled	Energy Community Gas Forum			
10/2012	Budva	10 th Ministerial Council Meeting of the Energy Community			
10/2012	St. Pölten	Informal Meeting of Foreign Ministers in the framework of the EUSDR			
11/2012	Brussels	Danube Network Meeting			
11/2012	Regensburg	1 st Annual Forum of the EUSDR			
11/2012	Zagreb	Consultation with key energy experts			
12/2012	Chisinau	Consultations with key players on the Training Program of the PA2			
12/2012	Novi Sad	Introduction of the activities of the PA2			
01/2013	Chisinau	Fact Finding Mission of the Training Program of the PA2 in Moldova			

01/2013	Brussels	North-South Gas Working Group Meeting
01/2013	Belgrade	2 nd Danube Financing Dialogue Conference
01/2013	Vienna	Regional Energy Strategy Task Force Meeting of the Energy Community
01/2013	Brussels	3 rd Meeting of National Contact Points and Priority Area Coordinators of the EUSDR
02/2013	Chisinau	1 st Training Program of the PA2
03/2013	Brussels	Joint Expert Group Meeting (EU-Moldova)
03/2013	Vienna	1 st Vienna Forum on European Energy Law
03/2013	Vienna	7 th Energy Task Force Meeting of the Energy Community
03/2013	Brussels	Meeting with cabinet members of Commissioner Oettinger on Danube Smart Grid
03/2013	Chisinau	2 nd Training Program of the PA2
04/2013	Brussels	Making the Internal Energy Market Work Conference
04/2013	Pécs	Presentation at the University of Pécs on the EUSDR PA2
04/2013	Sofia	Priority Coordinators Meeting of the EUSDR
05/2013	Vienna	Field Trip – delegation visiting electric bus

		technology of Wiener Linien
05/2013	Vienna	8 th Energy Task Force Meeting of the Energy Community
05/2013	Bratislava	Scientific Support to the Danube Strategy by JRC
05/2013	Ljubljana	Workshop of the EUSDR Priority Area Coordinators and ETC Danube Programme Task Force
05/2013	Chisinau	3 rd Training Program of the PA2
06/2013	Brussels	Hearing on the Internal Energy Market in the European Parliament
06/2013	Stuttgart	The European Union Strategy for the Danube Region in the programming process for 2014 -2020: Second Joint Meeting
06/2013	Vienna	Final Event of the Project TRANSENERGY

3.3. Funding

[Work done so far on identifying funding opportunities and sources: use of existing funds, new financial instruments, etc.. Please emphasise, when appropriate, the issues that are specific to your Priority Area]

Concepts of the Energy Priority Area are implemented from the PA's own resources provided by the European Parliament (TA) other EU sources and the Hungarian Government. The concepts serve also as basis for identifying comprehensive, transnational projects with real Danube relevance that could be financed by the future Danube Transnational Program.

The Danube Region Gas Market Model and Gas Storage analysis are unique tools for identifying the most needed, critical infrastructure developments. This is with crucial importance when taking into consideration the limited public funding that will be available, for example, in the Connecting Europe Facility.

In the 2007-2013 MFF period projects with Danube relevance, initiated by various stakeholders in the Danube Region are mainly financed by the current running transnational and cross-border programs as well as the Intelligent Energy Europe fund.

The Priority Area has high expectations from the newly created Danube Transnational Program.

3.4. Next steps

Priority Area 2 in the forthcoming months will focus its resources on completing the ongoing activities. Many concepts are under implementation as it was already introduced in the field of energy efficiency and renewable energies. The 7th Steering Group Meeting is scheduled for second half of 2013 together with the 2nd Annual Stakeholder Seminar of the PA2.

3.5. Publicity Measures

3.5.1. Website of the Priority Area 2

The website of PA2 has been completely redone. It has received a new graphic layout, new administration procedures and it is regularly updated with articles about the activities of PA2. It serves as a publicity measure to inform the public and experts about the work done in the field of sustainable energy development in the Danube Region. Posts are accompanied by presentations, photos and documents to ensure professional content and proper visibility. Strategic partners of the PA2 are now linked directly on the main page. The site will soon receive its own domain name under www.danube-energy.eu to have a private domain and to achieve a higher page rank.

3.5.2. Publication about the results of PA2

A short leaflet will be published soon by the Priority Area to present the most important results of the work done in the field of sustainable energy development. The publication will discuss the most important projects and the state of play in the Danube Region Strategy Energy Priority Area. Accompanied by images, diagrams and professional content, the leaflet will be handed out at events, meetings and conferences to all relevant stakeholders.

3.5.3. Second Annual Stakeholder Seminar of the Sustainable Energy Priority Area

The annual stakeholder seminar is currently under planning and will be realized in the second part of 2013 in Budapest. The main topics will include renewable energy development, smart grid systems and energy efficiency initiatives. A detailed program will be available at a later date.

Besides the above mentioned publicity measures, the PA2 has taken part in many events where it could present its activities and the implementation done so far. Publicity measures are important to achieve proper visibility for the priority area.

3.6. Network of the Priority Area 2

The Priority Area continued to develop its contact list from the sector including experts from companies, associations, European, regional and national institutions, authorities

and NGO's. The database is undergoing continuous expansion and helps the PA2 to keep in contact with relevant organizations.

3.7. Other activities

3.7.1. Sharing best practices

At the request of Budapest's Castle district, Priority Area 2 organized a field trip for the representatives of the Budapest Transport Company, the Budapest Transport Centre and the Castle district to the Vienna Transport Company (Wiener Linien). The meeting took place on 2 May, 2013 in Vienna with the aim to visit the electric midi bus installed by Wiener Linien in the autumn of 2012.

The participants received a 2-hour presentation, during which they discussed various technical details with the representatives of Wiener Linien, then they had a one-hour trip with the electric bus in Vienna's city centre. The visit was an important step in the evolution of a new environment-friendly and energy-efficient transport concept in the Castle district of Budapest by sharing best practices in the Danube region and providing an occasion to build professional relationship between the experts of Vienna and Budapest.

4. PROGRESS BY TARGET

[Remark: Please link the actions of the Action Plan to the targets proposed. If this link is difficult to establish, please indicate what needs to be done/ what is planned to solve this. Please also link the projects to the actions.]

4.1. "Achievement of national targets based on the Europe 2020 climate and energy targets".

Associated Actions

ACTION GROUP 8-11-16

ACTION 8– To extend the use of biomass (e.g. wood, waste), solar energy, geothermal, hydropower and wind power

ACTION 11 - To explore the possibility to have an increased energy production originating from local renewable energy sources to increase the energy autonomy

ACTION 16 - To facilitate networking and cooperation between national authorities in order to promote awareness and increase the use of renewable energies

ACTION 10 – To implement the National Renewable Energy Action Plans and to prepare a Danube Region Renewable Energy Action Plan

ACTION GROUP 12-13

ACTION 12 – To develop a comprehensive action plan for the sustainable development of the hydropower generation potential of the Danube River and its tributaries (e.g. Sava, Tisza and Mura Rivers)

ACTION 13 - To develop and set up pre planning mechanism for the allocation of suitable areas for new hydro power projects

ACTION GROUP 14-17

ACTION 14 – To promote energy efficiency and use of renewable energy in buildings and heating systems including by renovating district heating and combined heat and power facilities as required by Energy Performance of the Buildings Directive and Renewable Energy Directive

ACTION 17 - To provide local authorities, businesses and citizens in the Danube Region consultative support with issues relating to mitigation of climate change and energy efficiency"

ACTION 15 – To encourage the Energy Community members/ observers in adopting and implementing the Renewable Energy Directive

Since the previous annual report was drafted in 2012, significant progress has been achieved concerning the target via the implementation of relevant roadmaps and accepting a new one. Taking into consideration the limited resources of the PA, the Steering Group decided to prioritize the implementation of actions. Regarding renewables, the 5th SG meeting agreed on to develop a Danube Region Biomass Action Plan aiming to summarize and present the current status of the Danube Region on the use of biomass as well as to promote the elaboration of a common position and formulate specific recommendations on the use of biomass at EU, regional and national level. The activity is ongoing, however, based on the preliminary results of the study on the biomass action plan a joint declaration was adopted by the SG on biomass sustainability that may have a real policy impact on decision making bodies in Brussels. Final results of the Action Plan are expected for October, 2013.

In order to start the work in other areas of renewables, a roadmap was developed and accepted by the 5th SG meeting for the extension of the use of geothermal energy in the Danube Region. The Danube Region Geothermal Concept builds upon the results of the TRANSENERGY project, financed by the Central Europe Program, and aims to create a unified methodology and geothermal database for the whole Danube Region.

Regarding Action 10, the leadership of the PA initiated a new concept in the framework of the 6th SG meeting aiming to identify obstacles hindering the penetration of renewable energies as well as market and technical gaps. It shall also point out ways of energy saving and best practices identified in the EUSDR countries regarding mainly the implementing measures and support schemes. The Danube Region Strategy is an effective platform to establish a common macro-regional cooperation for the upgrading of national RES energy supporting policies.

Actions related to Energy Efficiency are also top priority for the PA2 in 2013. Recent EU data shows that the continent is not on track to reach its 2020 energy efficiency goals. According to the EU Energy Efficiency Directive (EED) Member States shall establish a long-term strategy for mobilizing investment in the renovation of the national stock of residential and commercial buildings, both public and private (Building Efficiency Strategy). A first version of the strategy shall be published by 30 April 2014. PA2 intends to provide a useful input to such analyses in connection to energy efficiency of buildings. In order to help this process a concept called "Danube Region Energy Efficiency for Public Buildings" was introduced to the 6th SG meeting.

Implementation of actions is continuously coordinated with DG ENER, the Energy Community and other relevant stakeholders in order to ensure full coherence with other ongoing activities.

4.2. "Remove existing bottlenecks in energy transport in countries of the EU Strategy for the Danube Region in order to allow reverse flow of gas by 2015"

ACTION 1 – To develop a joint position of the region regarding the changes which could be introduced in the framework of the TEN-E policy review and the modalities of the new Energy Security and infrastructure instruments, especially regarding the energy infrastructure gaps.

ACTION 3 – To enforce regional cooperation with a view to develop and implement the North-South gas interconnection projects

ACTION 4 – To develop gas storage capacities. A secure energy supply for Europe cannot rely on the construction of pipelines only. Additional flexibility through storage capacity is therefore necessary as well. Support should be given to the realization of storage projects to ensure that all countries of Central and Eastern Europe have adequate access to such facilities. The regional approach to planning the storage facilities should in particular apply to ensure that the new infrastructure is developed in the most efficient manner.

The Danube Region Gas Market Model had a real policy impact on the PCI (Projects of Common Interest) selection process. The results of the modelling analysis were directly channelled into the work of the North-South Gas Working Group where the PA2 had an observer status. The Model, as a unique tool was able to identify the top 6 gas infrastructure projects in the Danube Region.

Based on the findings of the Model, a Danube Region Gas Storage analysis was completed in April 2013. Preliminary results were also introduced in several Gas Working Groups, chaired by the European Commission. The first-of-its kind analysis pointed out that unused storage capacities are significant in the Danube Region thus, the use of already available storage capacities should be encouraged before investing in new facilities.

Both the Model and the Gas Storage Analysis were highly welcomed by countries of the Danube Region and the European Commission. The two concepts outlined the importance of regional energy planning.

As a significant step in the macro-regional cooperation, countries of the DRS in the 6^{th} Steering Group meeting of the PA2 accepted a joint declaration on the results of the gas storage analysis. The joint declaration states that in a security of supply situation the physical reverse flow possibilities are of utmost importance; the exemption from the obligation to allow physical bi-directional gas flows on pipelines is undermining the efforts to ensure continuous supply in a crisis situation. The declaration significantly contributed to the achievement of the specific target.

4.3. "Strengthen cooperation of the Energy Community countries with international financial institutions to upgrade the EC countries' energy infrastructure and energy markets by 2015".

ACTION GROUP 2-5

ACTION 2 – To ensure that actions are coherent with the general approach of the Energy Community and explore synergies between the Energy Community and the Danube Strategy processes"

ACTION 5 – To tap possible cooperation opportunities with the Energy Community"

Non-EU countries are of utmost importance to achieve the goals of the Strategy. One of the main objectives of the PA2 is to boost the integration of the energy markets of the non-EU countries by supporting them in the implementation of the EU energy acquis. The PA2 has achieved significant progress regarding the target in question. A specific, tailor made training program was launched by the Energy Priority Area in the Republic of Moldova on the implementation of the 3rd Energy Package of the European Union. The first phase of the concept was implemented in the first half of 2013 by organizing on the spot workshops in Chisinau by involving the best experts of the DRS countries. Based on the positive feedbacks from the Government of the Republic of Moldova and the European Commission, the PA2 is ready to launch the 2nd phase of the concept in Moldova as well as in other non-EU countries of the Strategy.

In order to help energy infrastructure investments in the Danube Region, the PA2 has established strategic partnership with the Budapest Danube Contact Point that was established in 2012 by the European Investment Bank and the Hungarian Ministry of National Economy in order to assist the realization of Danube-relevant transnational projects (including energy).

5. ANNEXES

ANNEX 1: ROADMAPS TO IMPLEMENT EACH ACTION

ROADMAP FOR AN ACTION ACTION GROUP 1-3

Action - "To develop a joint position of the region regarding the changes which could be introduced in the framework of the TEN-E Policy review and the modalities of the new Energy Security and Infrastructure Instrument, especially regarding the energy infrastructure gaps" "

Action - "To enforce regional cooperation with a view to develop and implement the North-South gas interconnection projects"

The implementation of the specific action has significantly progressed in the last months. As it was already mentioned, the Energy Priority Area had asked and received an observer status in the relevant Gas Working Groups of the European Union. This fact enabled the Priority Area to directly channel its coordinated opinion on gas infrastructure developments to the PCI (Project of Common Interest) selection processes. In order to establish the joint position of the Danube countries, two modelling exercises were completed up to date.

The Danube Region Gas Market Model (completed)

As it was already mentioned in the first annual report in 2012, the Danube Region Gas Market Model was the first tangible result of the implementation in the Energy Priority Area. Besides events in Budapest and the European Parliament, the model was also introduced at several other conferences, events, such as the 7th Gas Forum of the Energy Community. The Model is highly appreciated by all relevant experts, institutions as a tool which is able to measure the transnational spillover effects of gas infrastructure projects and project packages. The Model was able to identify the six most needed, critical gas infrastructures projects of the Danube Region. The estimated 560 million Euro investment into these projects would result in 1600 million EUR annual saving on gas bill.

The further developed version of this tool is being used for the evaluation of the Energy Community's PECI (Projects of Energy Community Interest) projects. The importance of the model is highlighted and echoed by the European Commission in the report to the Council and the Parliament on the progress of the Strategy.

The Danube Region Gas Storage Analysis (completed)

Based on the conclusions of the Danube Region Gas Market Model, a Danube Region Gas Storage analysis was developed and completed in April, 2013 in order to help the optimal use of the available gas storage capacities of the Danube Countries. The analysis examined two research questions. First, if there is sufficient natural gas storage capacity in the countries of Danube Region to provide security of supply and necessary flexibility for national markets. Secondly, if missing storage infrastructure (if there is any) on a national level can be supplied on a regional basis in the Danube Region.

The analysis gave a clear picture on the current state of play, underlying that the region already has the sufficient storage capacity with substantial unused capacities. However, the distribution of the storages is uneven across countries.

The importance of the first-of-its kind analysis was recognized by the European Commission thus, the PA2 was invited to introduce results of the modelling exercise in several Gas Working Groups of the EU in February, 2013 assisting them in their PCI identification process. Final results of the initiative were presented in the 6th SG meeting of the PA2 on 13 June, 2013 in Budapest. Based on the findings of the analysis the Steering Group accepted a joint declaration (ANNEX 10) stressing the importance of regional approach when thinking about the development of gas storage capacities.

As a next step, the Priority Area will initiate joint thinking about regional cooperation mechanisms in order to overcome the existing mistrust between countries when security of supply is ensured by facilities outside of the territory of the given Member State.

ROADMAP FOR AN ACTION ACTION GROUP 2-5-15

Action - "To ensure that actions are coherent with the general approach of the Energy Community and explore synergies between the Energy Community and the Danube Strategy processes".

Action - "To tap possible cooperation opportunities with the Energy Community".

Action - "To encourage the Energy Community Members/observers in adopting and implementing the Renewable Energy Directive".

PA2 has observer status in the Regional Energy Strategy Task Force of the Energy Community. The PA2 was invited to the Ministerial Council Meeting of the EnC in Budva, Montenegro where we introduced the Danube Concept. The Deputy-Director joined our panel in Regensburg at the First Annual Conference of the EUSDR.

The Assistance Program Concept of the PA2 to the Republic of Moldova for the implementation of the third energy package

The Steering Group of the PA2 on its 4th Meeting in February accepted a concept paper on the cooperation between the EU and non-EU MSs. This paper serves as a basis for the concept of the DRS PA2, which was presented at the 5th SG meeting held in December, 2012. It focuses on knowledge transfer from EU MSs to non-EU countries in order to help them in the implementation of the EU energy acquis. Taking into consideration the specific situation of the country, PA2 decided to start the implementation with Moldova.

A ToR was developed in cooperation with the European Commission DG ENER. This concept offers tailor-made training programs to Moldova on the implementation of specific provisions of the Third Energy Package of the EU. The implementation of this concept is conducted by the Energy Regulators Regional Association, which institution has wide knowledge on the issue.

As a first step, a Fact Finding Mission took place in Chisinau during 16-18th of January, 2013. During the Mission the Priority Area Coordinator met with the representatives of the Moldovan energy sector and state actors. They agreed on the professional content of the first two training programs (see ANNEX 5).

Three training programs have been implemented in three sessions so far, 26-28 February, 26-28 March and 25-27 May, involving experts from the Danube Region Countries. (see ANNEXES 6-8).

The assessment of the training program and the feedback from the Moldovan side has shown a great interest and a positive impact. (see ANNEX 7) Based on the experience of the workshops so far and the interest of the Moldovan partners the training program will be continued in September, 2013.

ROADMAP FOR AN ACTION ACTION 4

Action -4. To develop gas storage capacities. A secure energy supply for Europe cannot rely on the construction of pipelines only. Additional flexibility through storage capacity is therefore necessary as well. Support should be given to the realization of storage projects to ensure that all countries of Central and Eastern Europe have adequate access to such facilities. The regional approach to planning the storage facilities should in particular apply to ensure that the new infrastructure is developed in the most efficient manner.

Based on the conclusions of the Danube Region Gas Market Model, a Danube Region Gas Storage analysis was developed and completed in April, 2013 in order to help the optimal use of the available gas storage capacities of the Danube Countries. The analysis examined two research questions. First, if there is sufficient natural gas storage capacity in the countries of Danube Region to provide security of supply and necessary flexibility for national markets. Secondly, if missing storage infrastructure (if there is any) on a national level can be supplied on a regional basis in the Danube Region. The study has shown that the Danube Region as a whole has sufficient storage capacities but with uneven distribution across countries. As the markets become more interconnected and competitive, storage can be substituted partly by other means of flexibility, which are new interconnectors.

At the moment there is about 4 bcm existing spare storage capacity not utilized in the region (2012). On a competitive basis this would be about 9 bcm according to the modelling. Further investment into storage and the progressing interconnectivity would increase the unused storage capacities in the region substantially. Social welfare analysis justifies the need for Moldovan and Polish storage investments.

A cost-benefit analysis of the individual investment projects shall be carried out at first. Government or regulatory incentives to overcome the existing mistrust amongst countries is essential when security of supply is ensured by facilities outside the territory of the given state.

The importance of the first-of-its kind analysis was recognized by the European Commission thus, the PA2 was invited to introduce results of the modelling exercise in several Gas Working Groups of the EU in February, 2013 assisting them in their PCI identification process. Final results of the initiative were presented in the 6th SG meeting of the PA2 on 13 June, 2013 in Budapest.

The Steering Group accepted a joint declaration (ANNEX 10) focusing on the importance of international cooperation when dealing with gas storage developments.

As a next step, the Priority Area will initiate joint thinking about regional cooperation mechanisms in order to overcome the existing mistrust between countries when security of supply is ensured by facilities outside the territory of a given Member State.

ROADMAP FOR AN ACTION ACTION 7

Action - "To build a working relationship with the Central Eastern European Forum for Electricity Market Integration; this could be enlarged to neighbouring countries.

The main target of CEEE Forum (CEEEF) is to create a ministerial level East Central European platform for the policy level support of regional electricity market integration within a framework of integrated European electricity market. Extension of the market integration on further states, namely Energy Community countries, is one of the envisaged goals of other Danube Region Countries. The integration requires specific harmonization of legislation and market rules, which can be best coordinated at regional level.

From this reason, the Central European countries (Austria, Czech Republic, Germany, Hungary, Poland, Slovakia and Slovenia) agreed on establishing of "Central Eastern European Forum for Electricity Market Integration". Although the Memorandum of Understanding was signed in 2009, the main CEEEF activities in the field of electricity were fostered in the second half of the year 2011 and the first half of 2012.

In relation to Danube Strategy (EUSDR), in spring 2012 the CEEEF and EUSDR agreed on close direct cooperation of both initiatives. The EUSDR representative since then has an observer status in CEEEF, which will contribute to wider dissemination of information in whole EUSDR scope. The other Danube Strategy countries that are not CEEEF members (i.e. Energy Community countries) will thus be able to prepare for joining the European integrated electricity market.

The ministries responsible for energy, Transmission System Operators (TSOs), Market Operators and National Regulatory Authorities (NRAs) participate in the CEEEF meetings. The representatives of EFET and EIB have also been invited to the meetings.

The CEEEF activities concentrate upon the creating of market development. The CEEEF is also focused on solution of grid construction in the region. From this reason it closely cooperates with the North-South Interconnection Initiative as for the physical interconnection and building of new transmission facilities.

In 2010-2011, one of main activities was the development of Flow based (FB) method calculation of cross border available capacity in CEEE region. The common grid model was agreed and flow based method calculation with cross-borderer capacity explicit auctions was prepared for testing.

The further key activity of CEEEF in this period was to discuss future Integrated day-ahead electricity market by the year 2014 and support the Joint declaration of ACER and NRAs, signed in March 2012, as well as to support stakeholders to find common agreement on next steps towards EU integrated market with electricity.

The Visegrad Countries confirmed their commitment toward extending the successful Czech-Slovakian-Hungarian market integration to Poland at the closing meeting of the Hungarian presidency of the CEEEF held in Budapest on 18 June 2013 (the presidency-in-office currently held by Hungary will be taken over by Poland as from 1 July 2013).

Along with the representatives of the line ministries, regulatory authorities, system operators and power exchanges of the regional countries the delegates of the European Commission and the Agency for the Cooperation of Energy Regulators (ACER) also participated in the meeting. The Czech-Slovakian-Hungarian project operating since September 2012 with an aim to integrate electricity markets may be expanded to Poland and Romania. The commitment confirmed by the V4 countries at the closing meeting was a step toward the extension of the successful Czech-Slovakian-Hungarian market integration to Poland. The project is a significant move toward creating a European internal electricity market whose target date of 2014 was accepted by the heads of states and governments of the European Union in February 2011.

In addition to promoting regional market integration the presidency-in-office held by Hungary provided an opportunity to initiate the earliest efficient management of loop flow related problems at regional and European level. The participants of the CEEE Forum agreed that loop flows had a negative effect on the safe operation of the electricity systems of the neighbouring countries, resulting from the significant increase of renewable energy sources based intermittent electric power generation in relation to the gradual shut-down of German nuclear power stations. These phenomena do not only make the safe operation of the member states' electricity systems difficult, but also reduce international commercial turnover by engaging the capacity of electric cables crossing the borders.

For this reason the Hungarian presidency prepared a draft action plan for the management of loop flow related problems at the meeting of the CEEE Forum held last October. Raising and keeping the subject on the agenda provided a significant contribution to seeking solutions at European Union level. In the recent period several initiatives to identify and manage problems and to find a more optimal cost sharing solution have been started with the involvement of the European Commission, the ACER and the European Network of Transmission System Operators for Electricity (ENTSO-E).

Recent development:

CEE Target Model Implementation Roadmap (CEE FB MC project) indicates that the time needed to FB market coupling is 27 months from the start of work; the roadmap is still subject of negotiation among TSOs, ACER and PXs (Power exchanges). Roadmap (Milestone $n^{\circ}6$) will thus not be met in 2014.

Extension of the present trilateral CZ-SK-HU day-ahead Market Coupling to five states (5M MC project), i.e. including Poland and Romania, is under discussion as the possible interim step until implementation of target model.

CEEEF meeting on 10th October 2012 - progress report, draft action plan on loop flows.

EC at the two high level conferences in 2012 expressed the view that loop flows is serious problem. The recognition of the problem of circular flows by the European Commission as a European problem and the involvement of the Commission's participation in its solution is one of the achievements of the CEE region in the period 2011-2012.

On the loop flows CZ - DE negotiations have been running in parallel with PL - DE negotiations (outside CEEEF, on the administrative and technical problem solving).

June 18, 2013 - the plenary meeting of the Forum and the meeting of the Steering Group (Budapest) – see above.

ROADMAP FOR AN ACTION ACTION GROUP 8-11-16

Action - "Action - "To extend the use of biomass (e.g. wood, waste), solar energy, geothermal, hydropower and wind power."

Action - "To explore the possibility to have an increased energy production originating from local renewable energy sources to increase the energy autonomy"

Action - "To facilitate networking and cooperation between national authorities in order to promote awareness and increase the use of renewable energies".

Danube Region Biomass Action Plan

On the 5th Steering Group Meeting of the PA2 in December, 2012 ÉMI Nonprofit Ltd., the contracted partner of the PA2 presented the Biomass Concept. The aim of the Concept is to fulfil the Actions listed in the Roadmap approved by the Steering Group of the PA and develop a Danube Region Biomass Action Plan.

The project investigates the biomass potential, the current use, the legal framework and regulatory environment of biomass utilization of the Danube countries. Additionally the project collects and presents existing biomass practices in the Danube region countries in an electronic database.

Based on the results of the research, the aim of the project is to create synergies and coordination between existing policies and initiatives of countries in the Region in order to extend the sustainable use of biomass. The Biomass Action Plan will contain policy recommendations and a regional roadmap for biomass utilization.

During the preparation of the Biomass Action Plan, the countries of the Danube Region unanimously accepted a joint declaration on biomass sustainability on the 6th Steering Group Meeting of the PA2 in June, 2013, stating among others that the countries of the Danube Region Strategy do not see an urgent need to develop additional sustainability criteria for solid biomass on EU level.

Later on, based upon the Biomass Action Plan, the Energy Priority Area plans to initiate biomass projects in the Danube region.

The Danube Region Geothermal Concept

The TRANSENERGY project (Transboundary geothermal energy resources of Slovenia, Austria, Hungary, and Slovakia) was running in the frame of the Central Europe Program. Based on the experiences of TRANSENERGY, a large scale project is envisaged for the Danube Region in the 2014-2020 period.

The project would focus on the geothermal potential assessment based on a common understanding of resources (a joint geothermal database), as well as policy recommendations for the enhanced utilization of geothermal energy. Thus the existing regional cooperation (TRANSENERGY) could be expanded to a macro-regional level (Danube region).

The launch of such a big project and successful application for financial support require extensive preparatory work, therefore we have elaborated a two-phased approach:

- Phase 1 establishment of a project consortium in 2013 (which is the aim of the below presented activity);
- Phase 2 execution of the project from 2014 onwards supported by the funds of the 2014-2020 Multiannual Financial Framework.

The main output of the foreseen macro-regional project will be a uniform and transparent pool of information/database for the Danube region which will contain all necessary underground (geological and geothermal) data, as well as information on the regulatory, economic and social (including environmental) aspects, research roadmaps and training, energy demand and market analyses. The establishment of this data-pool ("Danube Region Geothermal Information Platform") will be a key factor for the future success of the geothermal projects planned in 2014-2020, therefore the above outlined work is essential

ROADMAP FOR AN ACTION ACTION 10

Action - "Action - "To implement the National Renewable Energy Action Plans and to prepare a Danube Region Renewable Energy Action Plan". These should be prepared in light of a Strategic Environmental Impact Assessment where appropriate.

Until drafting this report, the implementation of the roadmap has not yet started. However, PA2 is about to finalize its first concept aiming to help the implementation of the action.

ROADMAP FOR AN ACTION ACTION GROUP 12-13

- ➤ Action ""To develop a comprehensive action plan for the sustainable development of the hydropower generation potential of the Danube River and its tributaries (e.g. Sava, Tisza and Mura Rivers)". The plan would pave the way for the coordinated and sustainable development of new power stations in the future and retrofitting the existing ones in the way that would minimise the environmental impact and the impact on the transportation function of the rivers (navigation). The options for using hydropower to respond to fluctuations in the electricity demand should be explored using dams to maintain high water level in preparation for the demand peak.
- Action "To develop and set up pre planning mechanism for the allocation of suitable areas for new hydro power projects29". This pre planning mechanism and its criteria would pave the way for new hydropower plants by identifying the best sites balancing economic benefits and water protection. It should also take into account climate change impacts (e.g. lower or higher water levels). This should be based on a dialogue between the different competent authorities, stakeholders and NGOs. In the suitable areas, the permits process could be streamlined.

The Steering Group of the Priority Area in its 4th meeting decided to prioritize the implementation of the roadmaps taking into consideration the limited resources of the PA. The implementation of the action group 12-13 has not yet started. However, as it was stressed several times by the Priority Area, the implementation will build on the results of the work done by all relevant institutions. Most importantly the Priority Area will take into consideration the work of the ICPDR especially its strategic document on the issue titled "Guiding Principles on Sustainable Hydropower Development in the Danube Basin" that was adopted at the 11th Standing Working Group Meeting on 18-19 June 2013 in Sarajevo.

ROADMAP FOR AN ACTION ACTION GROUP 14-17

Action - "To promote energy efficiency and use of renewable energy in buildings and heating systems including by renovating district heating and combined heat and power facilities as required by Energy Performance of the Buildings Directive and Renewable Energy Directive"

Action - "To provide local authorities, businesses and citizens in the Danube Region consultative support with issues relating to mitigation of climate change and energy efficiency".

The Danube Region Energy Efficiency Concept for Public Buildings

The goal of the concept is to investigate the current practice of financing energy efficiency investments of public buildings in the Danube Region countries. The project will focus on sharing best practices and on the formulation of policy recommendations in order to create a more attractive business environment for public building renovation projects.

The European Commission has listed some well-known obstacles to investments in energy efficiency projects in the European Union in general. According to its consultation paper, the main barriers to initiating such projects are of market, financial and/or regulatory in nature. Priority Area 2 believes that many of the detailed obstacles could be eliminated more effectively at a regional level, therefore the project proposal would result in a retrospective analysis and state-of-play study dealing with energy-efficiency investments of public buildings in the Region.

The study will analyse the energy efficiency potential, investments and financial sources of public buildings in the Danube Region countries. Main goal of the concept is to have trustworthy information about the current market situation in the related field. The project will present the untapped energy efficiency potential in the Region and promote market opportunities at the same time. With the widespread analysis of the target field, the study will outline common challenges and provide recommendations on how to deal with them. The concept will foster the realization of new investments, create new job opportunities and improve energy efficiency in public buildings.

ANNEX 2: LIST OF ATTENDANCE

SG Meeting:	AT	BIH	BG	\mathbf{CZ}	DE	HR	HU	MD	MNE	RS	SK	SI	RO	UA	Total
5th SG Meeting on 5 December 2012	Emb		X	X	x (BW)	X	X	X			X	X	Emb		10
6th SG Meeting on 13 June 2013	X		X	X	(BY,BW)	X	X	X		X	X	Emb	X	X	12

ANNEX 3: AGENDA AND MINUTES OF THE 5 TH STEERING GROUP MEETING	ANNEX 3: A	GENDA AND	MINUTES OF	THE 5 TH STEERIN	G GROUP MEETING
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AGENDA

5th Steering Group Meeting of the Priority Area 2

Budapest, 05.12.2012 Ministry of Foreign Affairs of Hungary (1027 Budapest, Bem rakpart 47; Room BC 112)

ARRIVAL AND REGISTRATION OF THE PARTICIPANTS (MAIN ENTRANCE OF THE MFA'S BUILDING AT BEM SQUARE)

10:00-10:45

1. OPENING REMARKS

10:45-

11:00

- Anita ORBÁN and Eva SLOVAKOVA, Priority Area Coordinators for the PA2
- Balázs MEDGYESY, Government Commissioner Responsible for the EUSDR
- Katerina MIKLOSOVA, Office of the Government of the Czech Republic

2. RESULTS OF THE FIRST YEAR'S IMPLEMENTATION AND THE CHALLENGES AHEAD 11:00-11:10

- Irina CRUCERU, European Commission, DG REGIO
- 3. REPORT OF THE PRIORITY AREA COORDINATORS: PROGRESS SINCE THE $4^{\rm TH}$ STEERING GROUP MEETING, CHALLENGES AHEAD

11:10-11:25

- Progress report on the cooperation with the Energy Community
- Developments of the Danube Region Gas Market Model
- Conclusions of the First Annual Forum of the EUSDR (Regensburg, 27-28 November 2012) (ANNEX 1 DRAFT PRESENTATION of Anita ORBÁN, PAC; ANNEX 1A PROGRAMME OF THE WS2)
- 4. PROGRESS REPORT ON THE SELECTED ONGOING AND PLANNED DANUBE-RELEVANT ENERGY PROJECTS, SELECTION OF FURTHER DANUBE-RELEVANT PLANNED INITIATIVES

11:25-12:00

- Progress reports (ANNEX 2 PROGRESS REPORT)
 - Presentations by the countries
 - Presentation on the TRANSENERGY PROJECT
- New project proposals (ANNEX 3)
 - o Green Chemistry Belt
 - o Presentation on the EGS NER300 geothermal project by the project leader
- 5. NEW ROADMAP FOR IMPLEMENTATION GEOTHERMAL ENERGY 12:00-12:15
 - . New roadmap for implementation geothermal energy (ANNEX 4)
- 6. CURRENT AND FUTURE WORK OF THE PA2 FIRST PART 12:15-13:00
 - a. Introduction of the preliminary results of the Danube Region Gas Storage Study PRESENTATION

NETWORKING BUFFET LUNCH (VENUE: MFA, PANORAMA ROOM) 13.00-13:50

7. CURRENT AND FUTURE WORK OF THE PA2 – SECOND PART 13:50-16:00

- b. Introduction of the Danube Region Smart Grid Concept
- c. Introduction of the Danube Region Biomass Concept
- d. Introduction of the Assistance Program Concept of the PA2 to the Republic of Moldova for the implementation of specific provisions of the third energy package (ANNEX 5 – TERMS OF REFERENCE)

8. PROGRESS IN THE NORTH-SOUTH GAS WORKING GROUP AND THE WAY AHEAD

16:00-16:15

• presentation by Ms Mónika ZSIGRI, European Commission, DG ENER

9. AOB **16:15- 16:30**

CLOSURE OF THE STEERING GROUP MEETING 16:30

MINUTES

5th Steering Group Meeting of the EUSDR Priority Area 2 (to encourage more sustainable energy) 5 December 2012 Budapest, Ministry of Foreign Affairs

On 5th December, 2012 the Hungarian coordination hosted the 5th Steering Group meeting of the PA2.

1. OPENING REMARKS

The meeting was chaired by Ambassador Anita Orbán, Priority Area Coordinator (PAC). Ms Orbán welcomed the participants of the event, especially Moldova who attended the SG meeting the first time and she initiated an introduction round.

Ms Orbán introduced the new colleagues of the PA2, Mr Szilárd Árvay and Ms Szilvia Nagy.

The SG unanimously agreed to digitally record the meeting.

Balázs Medgyesy:

- PA2 had high visibility in Regensburg,
- energy was highlighted in Regensburg as an area with political impact,
- established platform of professional and political planning,
- platform for economic development,
- innovation is an important element of the implementation of the Strategy,
- Gas Market Model is an essential tool as well as the study focusing on the gas storage capacities of the region,
- Gas Market Model made an impact,
- welcomed Moldova in the Steering Group Meeting.

Katerina Miklosova welcomed the participants and gave some information on the reorganization process in the Czech Ministry of Industry and Trade which affected the PA2's coordination in the Czech Republic. She thanked the Hungarian side for preparing and organizing the 5th SG meeting. Ms Miklosova hoped that the new Czech coordinator will be appointed soon.

Lukas Hlavaty on behalf of the Czech Ministry of Industry and Trade also thanked the Hungarian side for preparing the meeting. He highlighted the priorities of the Czech side during the implementation of the Strategy such as the cooperation with the Energy Community in order to extend the European market to the non-EU countries. He hoped that the ongoing "Ostrava Smart City Initiative" will contribute to the cooperation of the cities in order to inspire similar projects as well as the objectives of the Strategy.

2. RESULTS OF THE FIRST YEAR'S IMPLEMENTATION AND THE CHALLENGES AHEAD

On behalf of the European Commission DG REGIO Irina Cruceru welcomed the participants and she gave some remarks on the results on the first year's implementation of the Strategy:

- during the first year more than 40 SG meetings were organized,
- the adequate political support for the Strategy is essential,
- the Strategy has the visual identity, all the PAs are using the website which is the center of information,
- 70 project concepts had been developed such as the Danube Financing Forum
- financing of projects are the most challenging during the implementation,
- macro regional perspective is included in the new regulations of the 2014-2020, and hopefully it will be reflected in the partnership contracts as well as in the national OPs
- the programing will be top priority of 2013 therefore the support of politicians is essential in the forthcoming period
- the Commission is proposing a new Danube Region Transnational Program replacing the current running SEE Transnational Program. The CBCs and the CE Transnational Program will remain the same.

Anita Orbán offered the PA's assistance to the European Commission for the work related to the programing of the next MFF.

3. REPORT OF THE PRIORITY AREA COORDINATORS: PROGRESS SINCE THE $4_{\rm TH}$ STEERING GROUP MEETING, CHALLENGES AHEAD

Anita Orbán gave some information on the progress achieved since the 4th Steering Group Meeting held in May 2012:

Danube Region Gas Market Model

- we organized an event in Brussels at the European Parliament for the introduction of the Model; this was the first thematic DRS event in the EP which was followed by an internal briefing at the European Commission DG ENER in order to discuss the results of the Model,
- the European Commission invited the Model for introduction in the North South Gas Working Group on 20 July 2012,
- it was presented at the 7th Gas Forum organized by the Energy Community,
- the REKK, who developed the Model in cooperation with the PA2, applied for an open tender aiming to choose the expert who will evaluate the Project of Energy Community's Interest (PECI),

Danube Region Gas Storage Analysis:

• as it was requested, the PA2 and the REKK is working on the analysis,

Several other studies are under development such as the PA2's biomass and Smart Grid concepts.

The PA2 submitted its progress report to the Commission in July 2012. It can be downloaded from the website, as well.

The PA2 chaired the Workshop 2 of the Regensburg Annual Forum. The first panel focused on the Danube Region Gas Market Model. The 2nd part was dedicated to smart grids and energy efficiency issues. The conclusion of the 2nd part was that 80 percent of the companies doing engineering of smart grids are actually in the Danube Region which means that the Region could be leader of the smart appliances. That's why –as result of the WS2 – the PA2 is initiating a Study on Smart Grids with the approval of the Steering Group as well as a pilot project at a later stage.

Energy Community

PA2 has observer status in the Regional Energy Strategy Task Force. The PA2 was invited to the Ministerial Council Meeting of the EnC in Budva, Montenegro where we introduced the Danube Concept. We attended the Annual Gas Forum and we started cooperating in biomass issues. The Deputy-Director joined our panel in Regensburg.

North-South Gas WG

The PA2 has observer status in the WG. The Danube Region Gas Market Model was introduced to the group in July, 2012.

Ms Natasa Mihajlovic indicated that a Croatian Institute would like to join the activities of the PA2, especially the Studies of the PA2.

4. PROGRESS REPORT ON THE SELECTED ONGOING AND PLANNED DANUBE-RELEVANT ENERGY PROJECTS, SELECTION OF FURTHER DANUBE-RELEVANT PLANNED INITIATIVES

Progress Reports on the selected Danube projects

The progress of the TRANSENERGY project was introduced by Ms Annamária NÁDOR, representative of the lead partner, the Geological Institute of Hungary.

- the project which was financed by the Central Europe Program is looking for trans-boundary geothermal resources in 4 countries in Central Europe,
- the 4 countries established a joint harmonized database available on the webpage of the project,
- the project could be easily extended to the whole Danube Region, since the potential is huge in this area.

Anita Orbán asked about the timeline of the project.

<u>Annamária Nádor</u>: The project will be finished in September 2013 and the major output will be a web map service (comparing the legislation of the participating countries as well as the geothermal potential and possible limitations for their use). Ms Nádor expressed her hope that the results of the project will be incorporated in the European legislation.

Irina Cruceru: the extension of the project to the whole Danube Region should be channeled in due time into the next financial period.

5. NEW ROADMAP FOR IMPLEMENTATION – GEOTHERMAL ENERGY

Following the introduction of the TRANSENERGY Project, Anita Orbán initiated to discuss agenda point no5 which is new roadmap for the implementation of the Action Plan of the DRS. The roadmap 8-11-16 focuses on the geothermal use of the region. The concept will build on the results of the TRANSENERGY project and aims at creating unified methodology and geothermal database for the whole Danube Region.

The Steering Group unanimously accepted the sub-roadmap 8-11-16 developed for the extension of the use of the geothermal resources in the Danube Region. PA2 will start the implementation of the concept by choosing the adequate partner and mapping out the financial needs of the roadmap. SG members are asked to name the adequate partner(s) in their country such as institutions as well as experts from the responsible ministries.

4. SELECTION OF FURTHER DANUBE-RELEVANT PLANNED INITIATIVES

New project proposal:

EGS NER300 project was introduced by the representative of the project leader MANNVIT Mr Sigurdur Larus Holm.

- Innovative demonstration project as it is requested by the NER300 scheme,
- NER300 grant scheme is on a member state basis but the concept was developed by the Consortium
- Final decision is expected to be taken in mid-December by the European Commission.
- Non-conventional geothermal project,
- Primarily the project is for electricity production,
- The Pannonian Basin was targeted in the NER300 call for proposal.

The Steering Group unanimously supported the project by issuing a Letter of Recommendation. The Priority Area Coordinator will inform the responsible services of the European Commission as soon as possible.

Progress report on the selected ongoing and planned projects:

Bulgaria-Serbia Gas Interconnector Project:

The progress report on the Bulgaria-Serbia Gas Interconnector Project was introduced by the Bulgarian representatives.

Bulgaria-Romania Market Coupling Project:

The progress report on the Bulgaria-Romania Market Coupling project was introduced by the Bulgarian representatives.

Anita Orbán asked the Steering Group Members to follow the implementation of the projects in their respective countries and also to inform the SG by providing progress reports on the projects.

New project proposal:

Green Chemistry Belt (Submitted by Germany)

Anita Orbán: The project proposal was discussed in the 4th SG meeting but the Czech Republic asked for more detailed information on the financial background of the project that was provided by the project leader.

The Steering Group unanimously supported the project by issuing a Letter of Recommendation.

6. CURRENT AND FUTURE WORK OF THE PA2 - FIRST PART

Danube Region Gas Storage Study

Anita Orbán: The Study is being developed as result of the Danube Region Gas Market Model. PA2 asked the REKK (Regional Center for Energy Policy Research) to prepare the Study and introduce the preliminary results to the Steering Group.

The preliminary results were introduced by Ms Borbala Toth from REKK. She stressed that the countries could significantly contribute to the successful analysis by providing the following data, information:

- Stock level of the storages at the beginning and at the end of the heating season,
- Typical transport routes the countries currently use and also future planned alternative routes (if there is any) should be suggested for evaluating by REKK which could help calculating the cost of planned storage projects.

Mr Vadim Ceban on behalf of Moldova stressed the importance of the concept and he offered his assistance and the missing information for completing the Study since Moldova is highly interested in using the region's gas storage potential.

Ms Monika Zsigri (European Commission, DG ENER) invited the PA2 and REKK to introduce the analysis in the meeting of the North-South Gas Working Group due in mid-January 2013 in Brussels.

Anita Orbán welcomed and thanked the invitation.

----BREAK----

Danube Region Smart Grid Concept

Ms Anita Orbán stressed the importance of smart grid deployment in the Danube Region. The PA2 had several meetings, discussions in order to involve partners for the implementation of the concept such as meeting with Minister Peter Friedrich (minister for EU affairs, Baden-Württemberg) and Mr Vladmimir Sucha, Deputy-director of JRC.

The concept was introduced by Ms Zsuzsanna Pató from REKK (Regional Center for Energy Policy Research).

Anita Orbán: the PA2 had identified 3 pillars. The first is the policy; the second is the integration of the EU and non-EU markets and the third is that how the PA2 can become leader in cutting edge technology development. The Smart Grid Concept can be a typical example for the 3. pillar. We identified three major reasons why the PA2 needs to deal with the issue of smart grids and why the region has huge potential in smart grid development:

- the region has significant electricity development potential,
- the region is extremely energy inefficient,
- the German "Energiewende" causes problems in the electricity grids of Central Europe.

Ms Anita Orbán reminded that the internal market communication makes mandatory for every MS to compile its own Smart Grid Action Plan at latest by the end of 2013. The regional study which the PA2 is developing could facilitate this work significantly. Basic findings will be introduced in the framework of the next SG meeting.

Ms Monika Zsigri reminded the participants that the European Commission had established a group for the identification of Smart Grid PCIs.

Ms Anita Orbán proposed that the PA2 should start developing the Study which was unanimously supported by the Steering Group. The consultant will develop a questionnaire in early January 2013 that needs to be filled in by the countries.

Mr Cveto Kosec asked if there was room for other partners to take part in the development of the concept.

Ms Anita Orbán reflected that everybody is more than welcome who would like to join the process.

Ms Anita Orbán: the presentation on the concept will be sent out to the SG members in order to circulate it in their countries for mapping out the possible project partners from the Danube countries.

Danube Region Biomass Action Plan

Ms Anita Orbán: The concept is based on the roadmap 8-11-16 that was accepted by the PA in the 4th Steering Group Meeting. The DRS Action Plan has already included the 4Biomass project and the PA2 asked the HU project partner to develop a preliminary concept for the extension of the project to the whole Danube Region.

The concept was introduced by Ms Dorottya Hujber from ÉMI Nonprofit LLC.

Ms Anita Orbán: the concept is based on the roadmap. The study will be finished in mid-September 2013, but preliminary results will be introduced in the framework of the next SG meeting. Ms Anita Orbán: Steering Group Members are welcome to suggest institutions, experts who could be involved in the work. SG members will receive a questionnaire in order to provide information for the development of the Action Plan.

Introduction of the Assistance Program Concept of the PA2 to the Republic of Moldova for the implementation of specific provisions of the third energy package

Ms Anita Orbán: the SG meeting held in February, 2012 accepted a concept for knowledge transfer from the EU MSs to the non-EU countries in order to help them in the implementation of the EU energy acquis. The implementation of the concept had started by circulating a questionnaire in order to match the needs and knowledge available.

The partner for the implementation of this concept is the ERRA (Energy Regulators Regional Association) which institution has wide knowledge on the issue.

Taking into consideration the specific situation of the country, the PA2 decided to start the implementation with Moldova. We developed a ToR in cooperation with the European Commission DG ENER. This concept will offer specific training programs to Moldova on the implementation of specific provisions of the Third Energy Package. The PA2 introduced the concept in the EnC Ministerial Council's meeting in Budva as well as in the EU27 round in the Energy Council. Mr István JOÓ is going to present the concept in Chisinau in the Energy Coordination Group's meeting.

Mr Vadim Ceban welcomed the initiative as well as the involvement of ERRA and he gave information on the implementation of the third energy package in Moldova.

Ms Anita Orbán stressed that the aim of the PA2 is to avoid duplications and build on synergies. The ToR was shared with the Energy Community and it was coordinated with the DG ENER as well. She thanked the support of the DRS countries in the Energy Working Party meeting in Brussels.

Ms Anita Orbán asked the DRS countries to suggest institutions, experts who could be involved in the training programs.

8. PROGRESS IN THE NORTH-SOUTH GAS WORKING GROUP AND THE WAY AHEAD

Ms Mónika Zsigri from the European Commission DG ENER gave a deep overview on the work of the North South Gas Working Group especially the status of the PCIs selection.

9. AOB

- Ms Anita Orbán informed the participants that the PA2 received a letter from ICPDR which was distributed to the SG members. ICPDR is offering cooperation which is very welcome by PA2. Ms Orbán informed the representatives that she met with Mr Philip Weller in Regensburg. Ms Orbán stressed that the PA2 will involve the ICPDR when the implementation of the roadmaps 12-13 will start.
- Next Steering Group meeting is due in May/June 2013 in Prague or in Budapest possibly together with the Annual Conference.
- The topic of the Annual Conference possibly will be smart grids taking into consideration the internal market communication by the European Commission.

Ms Anita Orbán thanked the participation to all SG members and closed the session.

• New project proposals can be continuously submitted.

ANNEX 4: AGENDA AND MINUTES OF THE 6 TH STEERING GROUP MEETI	ANNEX 4: AG	ENDA AND MI	NUTES OF THE	E 6TH STEERING	GROUP MEETIN
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AGENDA 6th Steering Group Meeting of the Priority Area 2

Budapest, 13 June 2013 Ministry of Foreign Affairs of Hungary (1027 Budapest, Bem rakpart 47; Room BC 112)

13 June, 2013

ARRIVAL AND REGISTRATION OF THE PARTICIPANTS (MAIN ENTRANCE OF THE MFA'S BUILDING AT BEM SQUARE)

9:00-9:30

10. OPENING REMARKS

9:30-9:45

- Balázs MEDGYESY, Government Commissioner
- Anita ORBÁN, Priority Area Coordinator for the PA2 (Hungary)
- Petra STASTNA, National Contact Point (Czech Republic)
- 11. REPORT ON THE PROGRESS OF THE DANUBE REGION STRATEGY BY THE EUROPEAN COMMISSION

9:45-10:00

- Ann-Jasmin KRABATSCH, European Commission, DG REGIO (VIDEO CALL)
- 12. PROGRESS IN THE NORTH-SOUTH GAS WORKING GROUP AND THE WAY AHEAD

10:00-10:15

- Mónika ZSIGRI, European Commission, DG ENER
- 13. REPORT OF THE PRIORITY AREA COORDINATOR: PROGRESS SINCE THE 5^{TH} STEERING GROUP MEETING, CHALLENGES AHEAD

10:15-10:30

14. PROGRESS REPORT OF THE INITIATIVES OF THE PA2 - FIRST PART

10:30-12:15

- . Results of the Danube Region Gas Storage Analysis (ANNEX 2 and 2A)
- a. Progress report of the Danube Region Smart Grid Concept
- 15. PROGRESS REPORT ON THE SELECTED ONGOING AND PLANNED DANUBE-RELEVANT ENERGY PROJECTS, SELECTION OF FURTHER DANUBE-RELEVANT PLANNED INITIATIVES (ANNEX 1)

12:15-12:45

- New project proposals
 - o EPCDR (Energy Performance Contracting in the Danube Region)
 - o SUSBANAT: Good Neighbours for Sustainable Investments in Banat Region

NETWORKING BUFFET LUNCH (VENUE: MFA, PANORAMA ROOM) 12:45-13:45

16. PROGRESS REPORT ON THE INITIATIVES OF THE PA2 $\,$ - SECOND PART $\,$ 13:45-16:00 $\,$

- Progress report of the Danube Region Biomass Concept (ANNEX 3)
 - Introduction of the DRS supporting activities of the Joint Research Centre (JRC)
- Progress of the Danube Region Geothermal Concept
- Danube Region Renewable Energy Concept Proposal
- Progress report of the Training Program of the PA2 in Moldova
- Danube Region Energy Efficiency for Public Buildings Concept Proposal

17. PROGRESS REPORT ON THE ACTIVITIES OF THE BUDAPEST DANUBE CONTACT POINT

16:00-16:20

- Presentation by Dávid PELECH, Head of the Budapest Danube Contact Point
- Presentation by Christina DIEGELMANN, Staatsministerium, Baden-Württemberg, Former seconded expert to the BDCP

AOB, CLOSURE OF THE STEERING GROUP MEETING 16:20-16:30

The Minutes of the 6^{th} Steering Group meeting is under acceptance procedure during the writing of this report.

ANNEX 5: FINAL AGENDA AND EXECUTIVE SUMMARY OF THE REPORT ON THE FACT FINDING MISSION TO THE REPUBLIC OF MOLDOVA

Danube Region Strategy Energy Priority Area Fact Finding Mission to the Republic of Moldova Chisinau, 16-18 January, 2013

Executive Summary of the Report on the Fact Finding Mission

Background and preparation of the Fact Finding Mission

In February 2012, the Steering Group of the Energy Priority Area (represented by the 14 Danube countries) unanimously accepted a concept aiming to assist the non-EU countries of the Strategy through knowledge transfer training programs on the EU energy "acquis communautaire".

Taking into consideration its specific situation, the Energy Priority Area decided to choose the Republic of the Moldova as first benefiter of the concept.

In October 2012, the Energy Priority Area in close cooperation with the European Commission Directorate General for Energy as well as the Republic of Moldova, elaborated a detailed Terms of Reference for the implementation of the concept.

The Energy Priority Area's overall objective is to offer tailor-made training programs to the Republic of Moldova by involving the expertise, knowledge of the MSs. As a coordination platform, the Energy Priority Area considers it especially important to coordinate with other on-going initiatives implemented currently in the Republic of Moldova.

The Fact Finding Mission

The Danube Region Strategy Energy Priority Area (represented by Ambassador Anita ORBÁN, Priority Area Coordinator and István JOÓ, Chief Advisor) preliminary agreed in December 2012 with the representative of the Ministry of Economy of the Republic of Moldova (Vadim CEBAN) on those general topics, which could have high relevance and importance during the transposition and implementation of the EU 3rd Energy Package:

- General transposition and implementation issues (process, scope, management, schedule, involved stakeholders)
- Unbundling requirements, designation and certification procedure
- Independence of the NRA, duties and powers of Regulator (among others supporting competition, monitoring market, supporting cross border trade)
- Consumers' rights and protection (simplification of the process of changing suppliers' process, last resort supplier, dispute settlement)

The Energy Priority Area has already selected a contractor, ERRA (Energy Regulators Regional Association), for this project which has deep knowledge in energy regulation, in the implementation of the 2nd and 3rd Energy Package and good cooperation with regulators and government officials in the region (especially in the Republic of Moldova, Romania and Ukraine). The Energy Regulators Regional Association [ERRA – www.erranet.org] was deeply involved in some projects funded by the European Commission (like the European Union's INOGATE Programme; "Capacity Building for Energy Regulators in Eastern Europe and Central Asia") organising and performing knowledge transfer, training programs and workshops for these countries.

Preparing the professional content of the Fact Finding Mission, the ERRA analysed the following materials, proposals and took into consideration (where appropriate and where fit into the scope of this Mission):

- The European Union's INOGATE Programme; "Capacity Building for Energy Regulators in Eastern Europe and Central Asia" – Report on Regulatory Peer Review at the National Regulatory Agency (ANRE) of Moldova, December 2009
- Energy Community Secretariat: Annual Report on the Implementation of the "Acquis" under the Treaty Establishing the Energy Community, 1 September, 2012
- The Report on "Independent and Regulatory Agencies in Moldova and their interaction with Parliament" prepared by Franklin De Vrieze and Ludmila Ieseanu, 2011 (in the framework of the "Support to the Parliamentary Development in Moldova" project, funded by DANIDA, SIDA and UNDP)
- The Parliament of the Republic of Moldova: Electricity Act
- The Parliament of the Republic of Moldova: Gas Act
- List of decisions issued by ANRE

Based on the analysis of the above mentioned documents the mission had a mixed view on the status of general legal and regulatory framework (especially on the implementation of them) and on the market structure and operational model constraints in Moldova.

- The transposition process of the EU 2nd Energy Package and especially the implementation of the legal requirements into the real practice have a lot of substantial results, but beside these developments has some shortages as well.
- The market structure (very concentrated "small" national market; limited chance to create regional market; lack of flexible electricity generation units for balancing; one dominant gas supplier) and the technical constraints (lack of synchronous operation with the electricity markets of EU Members before 2017, low utilisation factor of gas transit pipeline without congestion the implementation of new congestion management methods could not bring immediate benefits) limit the possibility to create functioning wholesale and retail competition for the benefit of the economy, the end-users and the general social welfare even with the full implementation of some sophisticated methods and processes (like common coordinated congestion management method and procedure for allocation of capacity; market opening for all non-household customers).

This mixed picture determined one important role of the Fact Finding Mission; answering to some of the open questions. Based on these circumstances, what should be the scope and focus of the trainings of the project supported by the Danube Region Strategy Energy Priority Area

- Do the training sessions have to focus on the identified gaps of the 2nd Package as priority (instead of the already agreed, 3rd Package transposition and implementation oriented intention)?
- Is it more useful to focus on those elements of the identified gaps/shortages of implementation of the 2nd Package, which could bring short/medium term benefit for the Moldovan economy and social welfare (taking into consideration of the market structure constraints and the technical limitations)? (Without underestimating the importance of the transposition and implementation of the whole EU "Acquis", but this project cannot handle all open issues, and does not want to duplicate the effort of some already existing initiatives and engagements!)
- Do the training sessions have to give priority and highlighting the critical new elements of the 3rd Package, as requested by the Moldovan government?

Before starting the technical meetings, Ambassador Anita ORBÁN had –on site – high level discussions/ bilateral meetings with the following leaders, representatives:

- Iurie LEANCA, Deputy Prime Minister, Minister of Foreign Affairs and European Integration,
- Valeriu LAZAR, Deputy Prime Minister, Minister of Economy,
- Dirk SCHUEBEL, Ambassador, Delegation of the European Union to Moldova,
- Ingrid TERSMAN, Ambassador, Embassy of Sweden in the Republic of Moldova,
- Mátyás SZILÁGYI, Ambassador, Embassy of Hungary in the Republic of Moldova,
- Artur Michalski, Ambassador, Embassy of Poland in the Republic of Moldova,
- Ion GRIU, Advisor to the Prime Minister in energy field,
- Patrik STALGREN, First Secretary, Embassy of Sweden in the Republic of Moldova.
- Iulian GROZA, Deputy Director, General Directorate for European Integration, Ministry of Foreign Affairs and European Integration.

Main conclusions of the high level meetings

- the concept of the Energy Priority Area enjoys the support of all interested stakeholders,
- all representatives agreed in the importance of avoiding duplications with other on-going and planned initiatives as well as stressed the intention to work together for the benefit of the Republic of Moldova,

- all representatives welcomed the recently approved the "Energy Strategy to the Republic of Moldova until 2030" as a good basis for further development.
- the project of the Energy Priority Area coordinates with other on-going initiatives under the umbrella/leadership of the energy donors' community led by the Swedish Embassy in Chisinau,
- The Minister of Economy welcomed the program and highlighted the importance of incorporating the energy industry into the trainings and discussions.
- The representatives of the Ministry of Economy have high expectation for the planned training program, and expressed their interest to learn practical implementation examples and different solutions of unbundling and safeguards of the independency of TSOs, and independent functioning of regulator (ANRE).

Achievements of the Fact Finding Mission and its main findings

The above mentioned political guidance gave very good basis for the technical meetings of the Fact Finding Mission, in which different stakeholder representatives (ANNEX1: Agenda of the Fact Finding Mission) showed their interest and with active participation supported the mission identifying the priorities of the Moldovan side, understanding their preference of the knowledge transfer methods, and their suggestions allocating the limited resources among issues related to the implementation of the 2nd and 3rd Package. Participants of the "technical" meetings represented the Delegation of the EU to the Republic of Moldova, the Embassy of Sweden, the General Directorate for European Integration, Ministry of Foreign Affairs and European Integration, the Ministry of Economy, ANRE, electricity and gas TSOs and distribution/suppliers.

All of the "technical" meetings were chaired by the Director of GDESE, Ministry of Economy (Vadim CEBAN) and the presentations and discussions were managed by the General Secretary of ERRA (dr. Gábor SZÖRÉNYI – former regulator).

Guiding the discussion and generating debate, three Power Point presentations (ANNEX3) were introduced on the following topics:

- General transposition and implementation issues
- Unbundling requirements, designation and certification procedure
- Independence of the NRA, duties and powers of Regulator

The customer protection related issues were discussed based on the relevant Articles of the Directives (Gas and Electricity) and on some practical case studies and examples on consumer's switching, last resort supply, and support of vulnerable customers.

The general agreed points

- The previously selected main issues, related to the transposition and implementation of the 3rd Package remain priority during the training sessions.

- The members of the Fact Finding Mission and the representatives of the Moldovan side will determine those issues of the 2nd Package, where
 - the different former reports (e.g. Energy Community Secretariat: Annual Report on the Implementation of the "Acquis") identified some gaps between the EU requirements and the Moldovan regulation and where at the same time;
 - o the implementation of the relevant EU requirements could give short/medium run benefit to the market conditions, competition, security of supply and social benefit
 - these commonly identified issues of the 2nd Package will also be incorporated into the training program, which mainly focusing on the 3rd Package.
- The representatives of the Moldovan industry will be invited to the relevant training programs and industry experts with the same functions will be invited as consultation partners on the trainee side.
- The preferred issues, as necessary focus of the training programs, which were already identified during the Fact Finding Mission, are listed in the <u>ANNEX2</u> (under finalisation).
- The Project will not identify all the gaps between the EU "Acquis" and the Moldovan legislation/regulation. The Project under the present scope will not prepare the drafts of the Moldovan legislation/regulation, which should transpose the 3rd Package, but assist the Moldovan side to understand the reasons behind and demonstrate some practical solutions of the implementation.

Agreed follow up of the Fact Finding Mission

- The members of the Mission prepare an executive summary of the Fact Finding Mission's Report (this report) until 22nd of January and send for commenting to the Moldovan partners at the Ministry of Economy.
- The commented and finalised executive summary of the Fact Finding Mission's Report will be sent to the European Commission, the Secretariat of the Energy Community, the representatives of the Moldovan Government, the involved Embassies and the Steering Group members of the Danube Region Strategy Energy Priority Area.
- Members of the Mission prepared a detailed questioner and handed over during the Mission to the representative of the Ministry of Economy of Republic of Moldova. The Ministry will collect the requested answers from the involved Moldovan stakeholders, after then summarise, finalise and send to the members of the Mission until 21st of January.
- Members of the Fact Finding Mission will analyse the answers and prepare the detailed topics, curricula and list of experts for the trainings.

- The targeted date and topics were preliminary agreed for the first two trainings;
 - o 26-28 February, 2013:
 - Independence, tasks, responsibilities and necessary statutory power of the regulator (ANRE) [targeted audience: Government and ANRE],
 - Supporting competition (methods and possible interactions in a concentrated markets) [targeted audience: Government and ANRE],
 - Regional market building possibilities (gas and electricity), including cross border capacity calculation and congestion management methods [targeted audience: Government, ANRE and TSOs]
- 26-28 March, 2013:
 - Unbundling, separation of activities, designation and certification procedure of TSOs (gas and electricity) – the procedure and the necessary legal requirements [targeted audience: Government and ANRE],
 - Detailed discussion and practical examples on separation of activities, on Supervisory Body and Compliance Monitor (involved in the knowledge transfer team practicing TSO experts as well) methods [targeted audience: Government, ANRE and TSOs],
 - Requirements of DSO unbundling methods [targeted audience: Government, ANRE and DSOs, suppliers].

Prepared by Gábor SZÖRÉNYI and István JOÓ

ANNEX1: Agenda of the Fact Finding Mission

Danube Region Strategy Energy Priority Area

Fact Finding Mission to the Republic of Moldova

Chisinau, 16-18 January, 2013

FINAL AGENDA

The Danube Region Strategy Energy Priority Area's delegation is led by Ambassador Anita ORBÁN, Priority Area Coordinator.

Members of the delegation:

Gábor SZÖRÉNYI General Secretary Energy Regulators Regional

Association

István JOÓ Chief Advisor Ministry of Foreign Affairs of

Hungary

Further invitees:

Patrik STALGREN First Secretary Embassy of Sweden to the Rep. of

Moldova

Oleg HIRBU Project Manager Delegation of the EU to Republic of

Moldova

Arrival of the delegation to Chisinau:16 January, 2013; 15:15 OS 655 via Vienna

Accommodation: Hotel Codru (organized by the Hungarian Embassy)

Transport to the Hotel: organized by the Hungarian Embassy

Departure of the Delegation from Chisinau:

Anita ORBÁN 17 January, 2013; 15:10 OS 656 to Vienna

Gábor SZÖRÉNYI, István JOÓ 18 January, 2013; 15:10 OS 656 to Vienna

Transport to the Airport: organized by the Hungarian Embassy

Program

16 January, 2013

19:00 Dinner hosted by Ambassador Mátyás SZILÁGYI (list of participants to be finalized by the Hungarian Embassy)

17 January, 2013

08:00-11:00 High level bilateral meetings, consultations (organized by the Hungarian Embassy)

08:00-09:00 Working breakfast with His Excellency Ambassador Artur Michalski (Head of Mission, Embassy of Poland in the Republic of Moldova)

venue: Hotel Codru

09:15-09:45 Meeting with Patrik STALGREN, First Secretary, Embassy of Sweden to the Republic of Moldova

venue: Hotel Codru

10:00-10:45 Meeting with Ion GRIU, Advisor to the Prime minister in energy field (TBC)

venue: State Chancellery, room nr. 451

10:45-11:00 Meeting with Deputy Prime – minister Valeriu LAZAR, Minister of Economy,

venue: The Ministry of Economy (meeting room nr. 244)

Expert Meetings, Consultations

Opening session

Venue: Ministry of Economy, meeting room nr. 246

Interpretation: provided by the Ministry of Economy

Technical facilities (laptop, projector): provided by the Ministry of Economy

11:00-13:00 Opening remarks by the Moldovan side

Opening presentation by Ambassador Anita ORBÁN

List of participants:

Patrik STALGREN First Secretary Embassy of Sweden to the Republic of

Moldova

Oleg HIRBU Project Manager Delegation of the EU to the Republic of

Moldova

Gábor SZÖRÉNYI General Secretary Energy Regulators Regional Association

István JOÓ Chief Advisor Ministry of Foreign Affairs of Hungary

Vadim CEBAN Director GDESE Ministry of Economy

Victor PARLICOV General Director ANRE

Ion GRIU Advisor to the Prime minister in energy field

Iulian GROZA Deputy Director, General Directorate for European

Integration, Ministry of Foreign Affairs and European Integration

Ina CRETU Advisor to the Deputy Prime – Minister, Ministry of Economy

Valentin LESNIC Chief of Division for Energy Infrastructure (DEI), Ministry

of Economy

Ruslan CEMIRTAN Expert, DEI Ministry of Economy

Denis VASILIEV Expert, DEI Ministry of Economy

13:00-16:00 Lunch break, free time

16:00-18:00 Expert meetings – First session

Chaired by: Vadim CEBAN and Gábor SZÖRÉNYI

Venue: Ministry of Economy, meeting room nr. 246

Interpretation: provided by the Ministry of Economy

Technical facilities (laptop, projector): provided by the Ministry of Economy

Suggested list of participants: From the Delegation:

Gábor SZÖRÉNYI

István JOÓ

From the Republic of Moldova:

Vadim CEBAN, Director of the General Directorate for Energy Security and Efficiency (GDESE)

Ina CRETU, Advisor to the Deputy Prime-minister, Minister of Economy for

Energy Policies

Aurelia SARARI Advisor to the Deputy Prime-minister, Minister of Economy for

Coordination of Technical Assistance

Valentin LESNIC of Economy

Chief of Division for Energy Infrastructure (DEI), Ministry

Ruslan CEMIRTAN Expert, DEI Ministry of Economy

Denis VASILIEV Expert, DEI Ministry of Economy

Andrei SULA main specialist ANRE

Valentin TONU chief of gas supply department (GSD), JSC "Moldovagaz"

Dumitru BICEC deputy chief of GSD, JSC "Moldovagaz"

Iurie CAZACU chief of electricity operation regimes, SOE "Moldelectrica"

Topic 1.: General legal/regulatory framework of the Moldavian energy sector

- representative(s) of the Ministry responsible for energy and for the implementation of the energy related elements of "acquie communitare"> ,
- representative(s) of the Regulator
- Topic 2.: Unbundling requirements: Unbundling of transmission system operator within a vertically integrated undertaking, guarantees of the unbundled operation (independent decision making, independent management, compliance program and compliance officer) within the TSO; designation and certification of the TSO

- representative(s) of the Ministry responsible for energy and for the implementation of the energy related elements of "acquie communitare « ,
- representative(s) of the Regulator
- representative(s) of the gas vertically integrated company
- representative(s) of the electricity vertically integrated company
- representative(s) of the gas system operator (license holder/ separated function)
- representative(s) of the electricity system operator (license holder/ separated function).

18 January, 2013

Expert Meetings, Consultations

09:00-12:00 Expert Meetings – Second session

Chaired by: Vadim CEBAN and Gábor SZÖRÉNYI

Venue: The Ministry of Economy, meeting room nr.

246

Interpretation: provided by the Ministry of Economy

Technical facilities (laptop, projector): provided by the Ministry of Economy

Suggested list of participants:

- From the Delegation:
 - Gábor SZÖRÉNYI
 - István JOÓ
- From the Moldavian side:
 - Topic 3.: **Independence of the NRA**, duties and powers (Government, Regulator) + Regulatory statutory power for network/system tariff setting (Government, Regulator)
 - representative(s) of the Ministry responsible for energy and for the implementation of the energy related elements of "acquie communitare « ,
 - Stratulat ELENA, ANRE, lawyer

- Topic 4.: Consumers' rights and protection, simplification of the process of changing suppliers (Government, Regulator, DSOs, Suppliers, Consumer representative bodies).
 - Vadim CEBAN, Director of the General Directorate for Energy Security and Efficiency (GDESE)
 - Ina CRETU, Advisor to the Deputy Prime-minister, Minister of Economy for Energy Policies
 - Aurelia SARARI Advisor to the Deputy Primeminister, Minister of Economy for Coordination of Technical Assistance
 - Valentin LESNIC Chief of Division for Energy Infrastructure (DEI), Ministry of Economy
 - Denis VASILIEV Expert, DEI Ministry of Economy
 - Ruslan CEMIRTAN Expert, DEI Ministry of Economy
 - Stratulat Elena lawyer ANRE
 - Valentin TONU chief of gas supply department (GSD), JSC "Moldovagaz"
 - Dumitru BICEC deputy chief of GSD, JSC "Moldovagaz"
 - Iurie CAZACU chief of electricity operation regimes, SOE "Moldelectrica"
 - Representatives of electricity supply companies.

ANNEX 2: Attachment to the Executive Summary of Report on the Fact Finding Mission of the delegation of the Danube Region Strategy Energy Priority Area to the Republic of Moldova, Chisinau, 16-18 January, 2013 - Priority issues of the Training Programme agreed during the Fact Finding Mission

Priority issues of the Training Programmeagreed during the Fact Finding Mission

<u>Topic 1</u>.: General implementation issues of the EU 3rd Energy Package into the legal/regulatory framework of the Moldavian energy sector

The discussed main issues during the Fact Finding Mission:

- 1.1.Concept of implementation
- 1.2.Planned amendments of the market structures and operational models of gas and electricity industry (if any)
- 1.3.General issues related to the statutory power of ANRE
- 1.4. "Technical" issues of legal harmonization (scope of transposition)
- 1.5. Timing issues
- 1.6.Responsibilities
- 1.7. Managing knowledge transfer

The agreed points and main priority issues during the trainings:

Topic 1, issue 1.1. Concept of implementation of the EU 3rd Energy Package

- The present legal concept remains (content and structure of acts [energy, gas and electricity]); there will be no new special act for regulation [ANRE]).
- The ANRE Bylaws "Regulation on the National Energy Regulatory Agency" was approved by the Parliament, which did not create any new situation in ANRE's responsibilities, compared to the different energy laws.
- According to the Law on Public Utilities, No. 1402/24 October 2002; the ANRE's approval of the tariff methodologies and tariff setting procedures related to district heating should be in coordination with the Government could influence

- the electricity market. A suggestion will be prepared regarding the limitations of the potential governmental influence.
- The Government plan amendments of the present energy acts (there are not any legal (law making) limitations regarding amendments (e.g. volume of changes).
- The status of ANRE (central public regulatory authority) based on the opinion of ANRE is in compliance with the EU 3rd Energy Package' requirements. Some issues (re. autonomous, independent decisions, internal structure, staffing, budget approval, location and other conditions allowing the adequate operation and decisions) will be discussed under the Topic 3.

<u>Topic 1</u>, issue 1.2. Planned amendments of the market structures and operational models of gas and electricity industry (if any)

- The planned market structure related issues possibly influencing the content of the Act. Further unbundling (DSO, trade, regulated supply) related issues, and potential asset separation will be discussed under the Topic 2.
- The planned operational model related issues [among others: system operation (transmission + "dispatch"), export/import limitations, some other restrictions (purchase obligation from local generators, access to hydro power, single importer,...), TSO and Power Exchange responsibilities], which possibly influencing the content of the Act, shall be discussed during the first training.

<u>Topic 1</u>, issue 1.3. General issues related to the statutory power of ANRE

- This issue will be generally discussed under the Topic 3.
- The potential intention of the Government to partially monitor/approve/agree/set the rules of Third Party Access to the network/system will be discussed under the Topic 3. [Regulating connection of the generators and end-users to the network/system; system integration (e.g. outsourcing cross border capacity allocation function of TSO to CEO)]
- Relations with ACER (schedule of implementation of the ACER related EU Regulation) will be discussed during the first training.

Topic 1, issue 1.4. "Technical" issues of legal harmonization (scope of transposition)

- The Moldovan version of the EU 3rd Energy Package is the basis for the transposition and implementation. The cases, when there would be translation mistakes/misunderstandings, should be handled.
- The Ministry of Economy is focusing on the following EU legislation elements of the 3rd Energy Package to be transposed and implement;
 - o Electricity Directive (2009/72/EC)
 - o Gas Directive (2009/72/EC)

- Regulation (No. 714/2009) on conditions for access to network for crossborder exchange in electricity (former 1228/2003)
- Regulation (No. 715/2009) on conditions for access to natural gas transmission networks
- The transposition and implementation of the Regulation (No. 713/2009) establishing an Agency for Cooperation of Energy Regulators (ACER) is not planned in short term.
- The other EU legislation elements will be the responsibility of different ministries and/or the same ministry, but outside the present scope of this Project;
 - Renewable Directive (Directive 2009/28EC (23 April 2009) on promotion of the use of energy from renewable sources....) – potential harmonisation requirements, which relates to the electricity and gas acts: e.g.: priority and/or guaranteed access to grid-system, priority dispatch, guarantees of origin,
 - REMIT (Regulation on Wholesale Energy Markets Integrity and Transparency – No. 1227/2011) – potential harmonisation requirements, which relates to the electricity and gas acts: e.g.: new responsibilities of ANRE (reporting, market monitoring, market analysis,
 - Energy Efficiency Directive (Directive 2012/27/EU on energy efficiency...) – potential harmonisation requirements, which relates to the electricity and gas acts: e.g.: Efficiency in Energy Supply chapter, network tariff system, certification schemes,
 - o Infrastructure Package.

<u>Topic 1</u>, issue 1.5. Timing issues of preparation approval and entering into force

- The Ministry of Economy is planning to prepare the amendments of laws (gas and electricity) transposing the EU 3rd Package in one step and the entering into force of the different requirements (paragraphs) will be scheduled step by step (e.g.: gas TSO unbundling). The scheduling will be discussed during the second training (Topic 2.)
- The concept and practice of the preparation of secondary legislation parallel with the preparation of laws will be discussed during the trainings (especially the necessary deepness of different issues).

<u>Topic 1</u>, issue 1.6. **Responsibilities**

- The preparation of the amendments of laws is rather complex, time-consuming, and multi-player task, for which the project form was recommended by the members of the mission.

- During the preparation of the draft regulations there is a need to have approval of conceptual issues (e.g. tariff setting and unbundling concept). The practical examples will be discussed during the first training.
- Consultation with industry and consumer representatives during preparation of drafts is important and useful (to be determined the frequency, purpose, deepness, potential outcome).

<u>Topic 1</u>, issue 1.7. **Managing knowledge transfer (training)**

- The representatives of ERRA and the Danube Region Strategy Energy Priority Area together with the Ministry of Economy, will determine (before each training depending on the topic/issues) which way of assistance is the most appropriate during the knowledge transfer period;
 - o Focus on different implementation solutions (introducing examples)
 - Introducing deep reasons of new requirements (introduction and discussion of "Interpretative Notes")
 - o Presentation based "guided" discussion
 - o Bilateral discussions (both sides are prepared in advance)
- It was agreed, that in case of early (3 weeks in advance) messages (coming from the Ministry of Economy) the composition of experts (trainers/lecturers) travelling to Moldova could focus on specific issues and questions (which are including into the scope of the project).
- The wide range of experts/trainers/lecturers is depending on the voluntary assistance (participation) of different EU countries in the project!
- The training program will focus on electricity and gas (not on district heating, water supply and oil)!

<u>Topic 2</u>.: Unbundling requirements, designation and certification procedure

The discussed main issues during the Fact Finding Mission:

- 2.1. The concept of implementing the EU TSO's unbundling requirements into the Moldovan legislation
- 2.2. The schedule of events related to unbundling specific legislation, designation, certification and EC opinion procedures
- 2.3. Regulatory tasks during the certification process and after
- 2.4. Certification in relation to third countries

- 2.5.Independence of system operators
- 2.6. Supervisory body

The agreed points and main priority issues during the trainings:

<u>Topic 2</u>, issue 2.1. The concept of implementing the EU TSO's unbundling requirements into the Moldovan legislation

- There is a high priority for the Ministry of economy to deeply understand the unbundling requirements and the TSO certification process. There is a need to specify how to introduce in the laws the possible unbundling models to be selected by the TSO's owners.
- Detailed explanation is requested on the necessary legal framework if the owners of the TSOs are selecting the Independent Transmission Operator model (ITO) [TSO with transmission asset is within vertically integrated undertaking];
 - o it is necessary to put into the law all the model possibilities (ITO, ISO and OUSO) to choose and the related requirements (giving the possibility to the TSO' owner to choose the OUSO model later on, if it wish to do so [Article 9 (11)]; "moving to the "right" direction" + allowing the NRA to allocate all the system operation responsibilities to an appointed ISO, in case the ITO breaches the rules [Article (37) h in electricity and Article (41)h in case of gas]).
- The unbundling (separation of activities) issues shall be identified during the pretransposition phase.

<u>Topic 2</u>, issue 2.2. The schedule of events related to unbundling specific legislation, designation, certification and EC's opinion procedures

- The foreseen schedule of events related to the transposition of TSOs' unbundling rules into the gas and electricity law and put into force later on giving adequate time for the necessary preparation of TSOs.
- Enforcement of TSO's owners to designate the TSOs and specify one of the unbundling models (OUSO, ISO, ITO) applying for the certification process (What to do, if the owner of TSO does not ask for certification?)

<u>Topic 2</u>, issue 2.3. Regulatory tasks during the certification process and after

- Introducing the Interpretative Notes of the EC regarding unbundling requirements
- Introducing the Commission Staff Working paper on Certification

- Introducing the ERGEG advise on the Certification process
- Introducing some case studies (examples) on the separation of asset, activities, responsibilities, corporate structure, independent decision making, independent management, compliance program and compliance officer

Topic 2., issue 2.4. Certification in relation to third countries

Introducing some case studies (examples) on the certification procedure.

<u>Topic 2.</u>, issue 2.5. **Independence of system operators**

• Introducing some case studies (examples) on the independence of system operators regarding the Article 14., 15., 16., and 19. of the Directives?

<u>Topic 2.</u>, issue 2.6. **Supervisory body**

- Introducing some case studies (examples) on the Supervisory Body, regarding the Article 20 of the Directives.
- Identification of possible necessity to adjust the national corporate law to the requirements of the Directives.

Topic 3.: Independence of the NRA, duties and powers

The discussed main issues during the Fact Finding Mission:

- 3.1. Designation and Independence of regulatory authority
- 3.2. General objectives of the regulatory authority
- 3.3. Duties and powers of the regulatory authority
- 3.4. Regulatory regime for cross-border issues

The agreed points and main priority issues during the trainings:

Topic 3., issue 3.1. Designation and Independence of regulatory authority

"The National Regulatory Agency in Moldova (ANRE) is an independent regulatory authority that is not subordinated to any other public or private authority, except that case stipulated in the law." (According to the Report on "Independent and Regulatory Agencies in Moldova and their interaction with Parliament" prepared by Franklin De Vrieze and Ludmila Ieseanu, 2011 (in the framework the "Support to the Parliamentary Development in Moldova" project, funded by DANIDA, SIDA and UNDP)

- the cases of exceptions will be collected and analysed during the discussion.
- The Ministry of Justice (MoJ) review and sometimes reject the ANRE' decisions (based on the Government decision: No. 1104/28 November 1997);
 - the MoJ analysis the necessity and the content of ANRE' decisions, and there was a case, when did not accept the ANRE decision
 - the MoJ analysis (30 days procedure) delaying the entry into force of decisions
 - o the official publication could create additional delays
 - The arguments and suggestions shall be prepared to ensure the independent decision making process of ANRE regarding electricity and gas market. [Article 39 (5) a) + (4) b (ii) of Gas Directive]
- There is a special Committee, which control/evaluate the special burden on the entrepreneurs. This Committee could also limit the independent decision making process of ANRE regarding electricity and gas market. The relevant legislation shall be analysed and suggestions shall be prepared.
- "The Member States shall guarantee.... adequate human and financial resources to carry out its financial duties" [Article 39 (5) a) Gas Directive]. Could the ANRE's annual budget approval process in the Parliament and the legal limitations of the size of the budget (0,15% limit) could endanger the operation of ANRE and to fulfil the responsibilities of ANRE, described in the laws and in the Directives. The last two years' practice (approving the ANRE budget with substantial delay) could necessitate some changes in the approval process. The arguments and suggestions shall be prepared ensuring safe and independent operation of ANRE.
- "Member States shall guarantee ...the regulatory authority...act independently from any market interest" [Article 39 (4) b) (i) Gas Directive]. ANRE is functioning at the same building as one of the petroleum license-holder has offices (using or hiring premises from one market player).

Topic 3., issue 3.2. General objectives of the regulatory authority

"In carrying out the regulatory tasks... the regulatory authority shall take all reasonable measures....promoting competitive ... internal market." [Article 40 a)]
 + "...promoting effective competition..." [Article 40 g)]

- The highly concentrated markets (gas and electricity; wholesale and retail) could require some regulatory interaction supporting competition and reducing entry barriers
- The European and US examples will be introduced how to impose special obligations for those market players, who have Significant Market Power (SMP); supporting competition
- "In carrying out the regulatory tasks... the regulatory authority shall take all reasonable measures....eliminating restrictions on cross-border trade.." [Article 40 c)].
 - The existing legislation (government resolution) shall be analysed, identifying, which elements of it limits the actions of ANRE regarding this task.

Topic 3., issue 3.3. Duties and powers of the regulatory authority

- The Article 41 (3) a) and (4) c), d) requires, that the regulator shall have power to impose penalties in case of non-compliance. ANRE could identify the non-compliance, but "only" a Court decision could authorize ANRE imposing sanctions. This limitations shall be analysed and suggest any changes, if necessary.
- The Article 41 (4) a) requires, that the regulator shall have power to issue binding decisions. In case the decision of ANRE appealed by any of the interested parties (license holders, investors, end-users, other stakeholders) the competent Court could suspend the decision of ANRE. This legal framework shall be analysed and suggest any changes, if necessary.

Topic 3., issue 3.4. Regulatory regime for cross-border issues

- There are existing government regulations limiting free access to the cross border networks. This legal framework shall be analysed and suggest any changes, if necessary.
- Some practical advice shall be introduced regarding "close cooperation" with the neighbouring regulators.
- Some practical advice shall be introduced regarding the coordination of the development of network codes and congestion management rules with the stakeholders and with the neighbouring regulators. The TSOs shall be involved into the discussions!
- Some practical advice shall be introduced regarding conditional approval to allow the TSOs outsourcing some part of the congestion management tasks to a regional "Central Allocation Office (CAO)".

<u>Topic 4</u>.: Consumers' rights and protection (simplification of the process of changing suppliers' process, last resort supplier, dispute settlement)

The agreed points and main priority issues during the trainings:

- Introducing regulatory practice saving the interest of small and medium end-users regarding contractual conditions (changing supplier process)
- Introducing regulatory practice saving the interest of small and medium end-users regarding DSO's misbehaviour (discrimination).
- Introducing the concept of Consumer Checklist.
- Introducing the benchmark of European practice on Dispute settlement procedure (CEER advise)
- Introducing some case studies on identification of and support for the vulnerable consumers.
- Introducing some case studies on last resort supplier concept and the process selecting/ appointing new supplier (in case of bankruptcy of former supplier).
- Discussing separation of activities, tasks and responsibilities between DSOs and suppliers.
- Introducing the practice of direct networks.
- Introducing the details of the switching process.
- Review the draft rules on the customers' rights to switch suppliers in three weeks.

ANNEX 6: FINAL PROGRAM OF THE 1ST WORKSHOP IN MOLDOVA

Danube Region Strategy (DRS) Energy Priority Area

1st WORKSHOP PROGRAMME

February 26-28, 2013 Chisinau, Moldova

AGENDA-AT-A GLANCE

February 26,	Topic I:	
2013 (15:00 –	Independence, Tasks, Responsibilities and	
17:30)	Necessary Statutory Powers of the	
	Regulator	
February 27,	Topic II (Parallel Meeting):	
2013 (09.00 -	Regional Market Building Possibilities	
17:30)	(Gas and Electricity); Cross-Border	
	Capacity Calculation and Congestion	
	Management	
February 27,	Topic I (Parallel Meeting):	
2013 (10:00 –	Independence, Tasks, Responsibilities and	
12:00)	Necessary Statutory Powers of the	
	Regulator	
February 27,	Topic III:	
2013 (13:45 –	Supporting Competition (Possible	
15:15)	Regulatory Interactions in Concentrated	
	Markets)	
February 28,	Topic II:	
2013 (09:00 –	Cross-Border Capacity Calculation and	
12:00)	Congestion Management (Gas and	
	Electricity)	

Tuesday, February 26, 2013: <u>Topic #1</u>: Independence, Tasks, Responsibilities and Necessary Statutory Powers of the Regulator Necessary Statutory Powers
Venue: MOLDELECTRICA, str. V. Alecsandri, 78.

15:00	Discussion on Independence, Tasks, Responsibilities and Necessary Statutory Powers of the Regulator: Key elements of the national legal/regulatory framework ensuring autonomy, authority for the National Regulatory Authority (NRA) required by the 3rd EU Package	-Representatives of the Ministry of Economy of Republic of Moldova and ANRE -Possible invitees: MPs of Rep. Moldova -DRS' delegation (István Joó, Szilvia Nagy, Gábor Szörényi, Representative of the Swedish and Polish NRA)
15:00 – 15:15	Introduction	Gábor Szörényi
15:15 – 16:00	Country Case Study of Poland (including Q&A)	Andrzej Szpakowski, Expert, legal Office, Energy Regulatory Office of Poland
16:00 – 17:00	Discussion of issues related to autonomy and authority of the Moldovan National Regulator (where gaps between the 3rd EU Package' requirements and the national legal/regulatory framework have been detected)(Attached to this Agenda please find the detailed List of the issues for discussion)	Moderator: Gábor Szörényi The members of the DRS' Delegation (based on their own national practice) could comment the issues listed in the Attachment.
17:00	Meeting concludes	

Wednesday, February 27, 2013

<u>Topic #2</u>: Regional Market Building Possibilities (for Gas and Electricity), including Cross-Border Capacity Calculation and Congestion Management

(Parallel Meeting):

Venue: MOLDELECTRICA, str. V. Alecsandri, 78.

Marris	CAC & ELECTRICITY	Danragantativas of the
Morning	GAS & ELECTRICITY	-Representatives of the Ministry of Economy of
Session	Regional Market Building Possibilities	, ,
		Republic of Moldova and ANRE
		- Representatives of the
		electricity and natural gas
		TSOs of Moldova
		-DRS' delegation (István
		Joó, Szilvia Nagy, Gábor
		Szörényi, Pál Ságvári,
		Zoltán Gellényi, Zoltán
		Gyulay, and
		Representative of Union
		Fenosa)
09:00	General market building tendencies in	Pál Ságvári, Head of
09:45	the CEE region (concept of gas and	Department (Strategy and
	electricity target models)	Energy Policy), Ministry
	 Presentation of regional initiatives in 	of National Development,
	market building (EU internal market	Hungary
	concept, CEE, SEEE, V-4, North-	Tungary
	South Corridor)	
	Infrastructure development concepts	
	(new potential gas transit routes, PCI	
	concept)	
09:45	– Q&A	
10:30		
10:30	Coffee break	
10:45		
10:45	Regional gas market building process	Zoltán Gellényi, Head of
11:45	(SEEE working groups, ENTSOG, Ro-	Business Development,
	Hu initiatives, other initiatives)	FGSZ Natural Gas
	Harmonization of gas market rules and	Transmission Closed
	market operations (development of gas	Company Limited by
	target model, framework guidelines,	Shares (ITO), Hungary
	network codes)	Shares (110), Hungary
	 Concept and practice of ENTSOG' 	
	Ten Years Network Development Plan	
	(TYNDP) related to gas transmission	
	networks	
11:45	– Q&A	
12:30		
12:30	Lunch break	
14:00		

Afternoon	ELECTRICITY	
Session 14:00 - 15:00	 Regional electricity market building process (CEE working groups, ENTSO-E, trilateral market coupling, other initiatives) driving forces and impediments Harmonization of electricity market rules and market operation (concept of different target models, framework guidelines, network codes) Concept and practice of ENTSO-E' Ten Years Network Development Plan (TYNDP) – related to electricity transmission networks 	Zoltán Gyulay, Head of Market Operation, MAVIR Hungarian Independent Transmission Operator Company (ITO), Hungary
15:00 – 1545	Q&A	
15:45	Meeting concludes	

Wednesday, February 27, 2013

<u>Topic #1</u>: Discussion on Independence, Tasks, Responsibilities and Necessary Statutory Powers of the Regulator (cont'd) and

<u>Topic #3</u>: Supporting Competition (methods and possible regulatory interactions in concentrated markets)

10:00 – 12:00	Topic #1: Discussion of issues related to autonomy and authority of the Moldovan National Regulator (where gaps between the 3rd EU Package' requirements and the national legal/regulatory framework have been detected) (cont'd) Parallel Meeting with Regional Market Building! venue: ANRE's meeting room; str. Columna 90,	-Representatives of the Ministry of Economy of Republic of Moldova and ANRE -DRS' delegation (István Joó, Szilvia Nagy, Gábor Szörényi, Andrzej Szpakowski, Expert, legal Office, Energy Regulatory Office of Poland)
12:00 –	Lunch break	
13:45 –	<u>Topic #3</u> : Supporting Competition (methods and possible regulatory interactions in concentrated markets)	
13:45 –	The idea and practical implementation of ex-ante regulation of market players with significant market power in Hungary	Gábor Szörényi, General Secretary of ERRA (former Director of the Hungarian Energy Office)
14:15 –	Q & A	
14:45 –	Discussion on regulatory tools supporting competition (some practical advice from the national and international practice)	Moderator: Gábor Szörényi
15:45	Meeting concludes	

Thursday, February 28, 2013

 $\underline{\textbf{Topic \#2:}} \ \textbf{Cross-Border Capacity Calculation and Congestion Management (Gas and Electricity)}$

		Cross-Border Capacity Calculation and Congestion Management (Gas and Electricity)	
09:00 09:45	_	Development of gas cross-border capacity allocation rules (methods, rules) and responsibilities of TSOs	Zoltán Gellényi, Head of Business Development, FGSZ Natural Gas Transmission Closed Company Limited by Shares (ITO), Hungary
09:45 10:00	_	Q&A	
10:00 10:15	_	Coffee break	
10:15	_	Development of electricity cross-border capacity allocation rules (methods, rules) and responsibilities of TSOs	Zoltán Gyulay, Head of Market Operation, MAVIR Hungarian Independent Transmission Operator Company (ITO), Hungary
10:45	-	Q&A	
11:00	_	Evaluation of the first workshop session	

ATTACHMENT:

DETAILED LIST OF THE ISSUES FOR DISCUSSION for <u>Topic #1</u> (Tuesday, February 26: from 16:15 to 17:30 and continue on Wednesday, February 27: from 10:00 to 12:00)

- 1. The Ministry of Justice (MoJ) review and sometimes reject the ANRE' decisions [regulatory acts] (based on the Government decision: No. 1104/28 November 1997) potential harm of regulatory independence in decision making
- 2. There is a special Moldovan Committee, which control/evaluate the special burden on the entrepreneurs. This Committee could also limit the independent decision making process of ANRE regarding electricity and gas markets. The relevant legislation shall be analysed and suggestions shall be prepared.
- 3. The ANRE's annual budget' approval process in the Parliament and the legal limitations of the size of the budget (0,15% limit) could endanger the operation and the fulfilment of the responsibilities of ANRE, described in the laws and in the Directives. The last two years' practice (approving the ANRE budget with substantial delay) could necessitate some changes in the approval process.
- 4. "Member States shall guarantee ...the regulatory authority...act independently from any market interest" [Article 39 (4) b) (i)]. ANRE is functioning at the same building as one of the license-holder has offices (using or hiring premises from one market player). Recommendation could be prepared
- 5. "In carrying out the regulatory tasks... the regulatory authority shall take all reasonable measures....promoting competitive ... internal market." [Article 40 a)] + "...promoting effective competition..." [Article 40 g)]. The highly concentrated markets (natural gas and electricity; wholesale and retail) could require some regulatory interaction supporting competition and reducing entry barriers: recommendation could be prepared (e.g. SMP concept)
- 6. TPA- and market rules are prepared and issued by ANRE. This practice shall be discussed due to the more and more sophisticated, technical cross border capacity calculation/allocation-, congestion management-, day ahead-, balancing- and intraday rules. *The division of responsibilities among ANRE and TSOs could be re-evaluated*.
- 7. "In carrying out the regulatory tasks... the regulatory authority shall take all reasonable measures....eliminating restrictions on cross-border trade.." [Article 40 c)]. Has ANRE adequate power to do so? There are existing legislation, and/or government decisions, which limit the actions of ANRE regarding this task. Recommendation could be prepared
- 8. The Article 41 (1) of the gas Directive lists all the duties, in which ANRE has to have authority. We should identify those duties on that list, in which ANRE has no authorization as present. Recommendation could be prepared on the potential necessary new duties, which should be included in the process of transposition of the 3rd package into national legislation.

- 9. The Article 41 (3) a) and (4) c), d) of the gas Directive require, that the regulator shall have power to impose penalties in case of non-compliance. ANRE could identify the non-compliance, but "only" a Court decision could authorize ANRE imposing sanctions. This limitations shall be analysed and suggest any changes, if necessary.
- 10. The Article 41 (4) a) of the gas Directive requires, that the regulator shall have power to issue binding decisions. In case the decision of ANRE appealed by any of the interested parties (license holders, investors, end-users, other stakeholders) the competent Court could suspend the decision of ANRE. This legal framework shall be analysed and suggest any changes, if necessary.
- 11. Some practical advice shall be introduced regarding "close cooperation" with the neighbouring regulators.
- 12. Some practical advice shall be introduced regarding the coordination of the development of network codes and congestion management rules with the stakeholders and with the neighbouring regulators. The TSOs shall be involved into the discussions during Topic # 2!
- 13. Some practical advice shall be introduced regarding conditional approval to allow the TSO's outsourcing some part of the congestion management tasks to a regional "Central Allocation Office (CAO)".

Annex 7: Report on the $\mathbf{1}^{\text{st}}$ workshop in Moldova

Danube Region Strategy (DRS) Energy Priority Area

REPORT

on the

1st WORKSHOP

February 26-28, 2013

Chisinau, Moldova

Lessons learned during the First Workshop on Organization issues:

- Representatives of two EU member states transferred their knowledge to the Moldovan experts;
 - the following workshops should be organised in time allowing more divers participation on trainee side,
 - the active DRS members should be convinced to provide political support for more wide participation
- Two parallel session was organised because of the two different topics (regulatory independence and necessary authorization and congestion management, regional market building) and two different lecturers (TSOs and government official responsible for energy policy). Our expectation was the two different audiences for the different sessions, but we realised during the workshop, that the representatives of the Ministry and ANRE are interested in both issues. Because of the limited number of managers and experts (familiar with and responsible for these issues) at the Ministry and ANRE side the parallel sessions should be avoided in the future!
- At the Fact Finding Mission we identified the limited language skills of some company experts (TSOs, DSOs, suppliers), who prefer the Moldovan and Russian language and hardly follow the English presentations and technical discussions. During the discussion of the rather sophisticated congestion management issues we provided simultaneous English Moldovan interpretation (due to the lack of interpreters' booths and related headset equipments) through whispering simultaneous interpretation ("chuchotage"). 3-4 Moldovan experts used this possibility and asked questions through the interpreter. We would like to offer this possibility in the future as well in case of sophisticated issues (if the budget allows us).
- The audience and the Moldovan consultation partners preferred to receive the presentations in advance (in electronic format). We will distribute them in the future before the meeting.
- There was active participation on Moldovan side during discussion of different case studies, practical solutions. This should be the core of the knowledge transfer in the future as well (instead of introduction of requirements of the EU 3rd Package). In case of introduction of legal requirements they are interested in the different solutions and the flexibility of implementation.

<u>Lessons learned during the First Workshop on Regulatory and Technical issues:</u>

Moldova is now in the implementation process of EU Directives no. 2003/54/CE and no. 2003/55/CE, transposed in December 2009 when Electricity and Natural Gas Acts were adopted, , that is why the ANREs' legal experts - deeply involved in the preparatory work – have several transposition and implementation related question based on the practice of EU member countries. These questions sometimes different from the workshop' topics, but the lecturers were flexible

- answering to these questions and providing practical solutions or offering written answer following the workshop. Based on this situation the scheduling of the future workshop programs should be flexible enough dealing with these useful discussions, exchange of views, introduction of best practices and transfer of knowledge on those issues, which are outside of the selected workshop-topics, but inside the general scope of transposition and implementation of the EU 3rd Energy Package.
- During the Fact Finding Mission we discovered and during the First Workshop we discussed in details those issues, which limit the operational independence of ANRE both legal/authority and financial terms. In each of every case based on the international practices we provided some examples for the solutions and proposed the way of solving the problems. All of the potential solutions require amendments of the Moldovan legal framework (See; Findings on Topic #1: Discussion of issues related to autonomy and authority of the Moldovan National Regulator). Some issues of high importance:
 - **ad. 1.,** Legal expertise' control of Ministry of Justice on ANRE decisions before allowing publication **potential harm of regulatory independence in decision making**
 - **ad. 2.,** There is a special Moldovan State Commission, its Working Group and its Secretariat for Regulatory Impact Assessment which control/evaluate the special burden on the entrepreneurs. This Working Group **could also limit the independent decision making process of ANRE** regarding electricity and gas markets.
 - ad. 3., The ANRE's annual budget' approval process in the Parliament could endanger the operation and the fulfilment of the responsibilities of ANRE, described in the laws and in the Directives. The last two years' practice (approving the ANRE budget with substantial delay) could necessitate some changes in the approval process.
 - **ad.5.,** The **highly concentrated Moldovan markets** (natural gas and electricity;) could require some **regulatory interaction supporting competition and reducing entry barriers**: recommendation was prepared. The relevant Moldovan law should authorize ANRE to identify those players who have significant market power and to impose ex-ante obligations on them (avoiding the chance of abuse market power)! The relevant Hungarian legal framework was delivered to ANRE.
 - ad. 6., The Third Party Access (TPA)- rules are prepared and issued by ANRE. This practice shall be evaluated due to the more and more sophisticated, technical cross border capacity calculation/allocation-, congestion management-, day ahead-, balancing- and intraday rules. The division of responsibilities among ANRE and TSOs should be reevaluated and the Government should require from the TSOs more active involvement in the analysis, understanding and implementation of EU TPA and Market Rules.
 - ad. 9., The EU Directives require, that the regulator shall have power to impose penalties in case of non-compliance. ANRE could identify the non-

compliance, but "only" a Court decision could authorize ANRE imposing sanctions. This limitations shall be analysed and suggest any changes, if necessary. The relevant best practice will be introduced.

ad. 10., The EU Directives require, that the **regulator shall have power to issue binding decisions**. In case the resolution or decision of ANRE appealed by any of the interested parties (license holders, investors, end-users, other stakeholders), nevertheless it was issued to approve normative acts, tariffs or to solve individual disputes, the competent Court could suspend the decision of ANRE. **This legal framework was analysed and we provided country case, which could be the basis for the suggested amendments**.

- On the issue of **Regional Market Building Possibilities** (Gas and Electricity) the following main issues were introduced:
 - General market building tendencies in the CEE region (concept of gas and electricity target models)
 - Presentation of regional initiatives in market building (EU internal market concept, CEE, SEEE, V-4, North-South Corridor)
 - Infrastructure development concepts (new potential gas transit routes, TYNDP, PCI concept)
 - Some regional market building elements of the Hungarian Energy Policy and its planned implementation
 - Harmonization of gas market rules and market operations (development of gas target model, framework guidelines, network codes)
 - Case study introducing the draft rules of Capacity Allocation Management Network Code (CAM NC) in Hungary and
 - Case study on Trilateral electricity Market Coupling
 - Main challenges of regional and EU-wide market integration (unexpected flows [loop flows], impact of renewable support schemes, time-pressure)
 - Both on electricity and gas the different **cross-border capacity allocation** and **congestion management methods** were introduced and evaluated.

<u>Findings and Suggestions on Topic #1:</u> Discussion on Independence, Tasks, Responsibilities and Necessary Statutory Powers of the Regulator

<u>The Polish Case Study</u> was introduced demonstrating some existing and missing safeguards of independence and statutory power of ERO. The following main topics were discussed:

- Legal basis
- Polish Regulator basic facts
- The President of ERO appointment procedure
- The Vice President of ERO
- New regulation under the proposed amendment to the Energy Law

- The Energy Regulatory Office
- Supervision of the Minister of Economy
- Independence of the Regulator
- Tasks of the President of ERO under the Energy Law
- Statutory Powers of the Regulator
- There was detailed discussion on the following issues:
 - What does it mean "Supervision by the Minister of Economy"? (The Minister has no formal instruments to exert influence over the decision process of ERO)
 - Appointment Procedure of the President of ERO; who is not elected for a fixed term and the Minister of Economy is eligible to dismiss the President of ERO (ensuring the full compliance [fix term appointment and limited cases of dismissal; regulated by law] with the EU 3rd Energy Package' requirements the relevant Polish legal framework is under amendment)
 - Financial independence of ERO (the budget of ERO is approved by the Parliament) No common European solution regarding the financial independence of the NRAs (in most of the cases a supervisory body [Government, Parliament] approve the budget of the NRAs; the license fee type of income of the NRAs could give more comfort for the Regulator, compared to the State Budget; regardless of the source of income of the NRAs the Government could set limitations on the financial operations of the NRA [budget cut, employee limitations, travel expenses limits]).
- The important regulatory possibility/tool and statutory power of ERO exists: imposing penalties this direct possibility (exclusive right) of ANRE is missing (should be provided)!

<u>Suggestion:</u> The relevant Moldovan law should authorize ANRE imposing penalties (see the detailed discussion on this issue below!)!

<u>National Regulator</u> (where gaps between the 2nd and 3rd EU Package' requirements and the national legal/regulatory framework have been detected)

ad. 1., The Ministry of Justice (MoJ) review and sometimes reject the ANRE' resolutions [regulatory acts] (based on the Government decision: No. 1104/28 November 1997) – *potential harm of regulatory independence in decision making*

The Law regarding the normative acts of the Government and of other central and local public administration authorities, nr. 317 –XV, of July 18, 2003:

Article 25. State registration of normative acts

(4) Normative acts of the central public administration authorities are registered, in established manner, by the Ministry of Justice in the State register of the departmental normative acts.

Article 75. Expertise of the normative acts

Normative acts of the central public administration authorities undergo the legal expertise by the Ministry of Justice, in the manner established by the Government.

<u>Suggestion:</u> The relevant Moldovan law should be analysed and amended accordingly:

- Clarify and make clear the legal obligations of ANRE (as Central Public Regulatory Authority) under the law that impose obligations on central and local public administration authorities regarding legal expertise' control and publication of normative acts. The special status of ANRE (required by the Electricity and Gas Directives of the EU 3rd Energy Package) should be taken into consideration in case of amending the relevant Moldovan legal background.
- The possibility to give exemptions from legal expertise' control of MoJ to ANRE should be analyzed regarding exclusive responsibilities of regulators required by the Electricity and Gas Directives of the EU 3rd Energy Package (e.g.: decision as a result of certification procedure; decision setting the system usage and connection charges; and decisions approving or setting rules of system usage and connection)
- The possibility to give priority to ANRE in case publications of urgent decisions

ad. 2., There is a special Moldovan State Commission for regulating entrepreneurial activity, its Working Group and its Secretariat for Regulatory Impact Assessment which control/evaluate the special burden on the entrepreneurs (including energy end-users and regulated and market based energy companies as well). - This Working Group **could also limit the independent decision making process of ANRE** regarding electricity and natural gas markets.

The Law regarding the basic principles for regulating entrepreneurial activity, nr. 235 – XVI of July 20, 2006:

"Article 19. State commission for the regulation of the entrepreneurial activity

(1) The <u>State Commission for regulating entrepreneurial activity</u> (hereinafter – <u>Commission</u>), set up based on regulation approved by the Government, shall ensure continuity in the process of optimisation of the

<u>legal framework for business regulation</u>. The <u>Commission and its</u> <u>Working Group</u> shall be assisted by the Secretariat for Regulatory Impact Assessment.

- (2) The Commission shall have the following attributes:
- a) <u>monitor</u> the manner of enforcement of the present law by the <u>public</u> <u>administrative authorities</u> and report to the Parliament and Government on a quarterly basis;
- b) verify and make proposals based on the reports presenting an <u>analysis</u> of the regulatory impact of draft normative acts, and issue reviews;
 c) propose, in the manner set forth in the law, to <u>revise or abrogate</u> normative acts that do not comply with the regulatory principles;
 d) supervise the measures for monitoring the efficiency of normative acts."

Based on our understanding the original, well founded purpose of this law was avoiding useless administrative bureaucracy (red-tape) and preventing the expropriation of authorities. On the other hand this is questionable whether the decisions of energy regulatory authorities (ANRE) related to regulated monopolies could be "analyse, monitor, optimise, or revise" by a different Commission and its Working Group. This activity **could limit the independent decision making process of ANRE** regarding electricity and gas markets (which is against the requirements of the EU 3rd Energy Package). The Moldovan Government designated ANRE as competent authority (based on the Article 4 (1) of Gas Directive) – so no room for any control or revise of the decisions of ANRE in those responsibilities, in which ANRE is the competent authority (except the Court)!

There are some special articles of this law, which cannot be relevant in the energy regulation, such as;

- Article 11.: The concept of "tacit approval" could be dangerous in case of very complex energy licenses, authorizations.
- Article 13.: The adequate "impact analysis" in case of network/system tariff regulation could be questionable. The cost and benefit analysis as requirement could be very challenging for ANRE take into consideration the wide range of interested entrepreneurs (energy companies, large, medium and small business as energy end-users), who are benefiting and bearing the cost of network/system tariff.
- Article 14, (2): "Public administrative authorities shall not adopt primary norms for the regulation of the start-up, running and liquidation of a business." this rule limits the power of ANRE setting license conditions, third party access rule and TSO' certification requirements.
- Article 15: "Public administrative authorities shall not take actions in excess of the need to achieve societal objectives." this requirement is a hardly defined condition, which could be the basis for endless debates (e.g.: required level of security of supply or network reliability [number, duration and frequency of supply outages where is the "need to achieve societal objectives"?]) between ANRE and the Commission (or its Working Group).
- Article 16, (3): "Control of business activity, except for financial and fiscal control, shall be <u>consultative in character</u>." this is not relevant in the field of energy regulation especially in case of discovering abuse of market power, withholding generation capacity, misleading end-users, ensuring access and connection to networks, separation of activities

(unbundling). The paragraph (4) limit the possibility of authority' control, which limitation cannot be the interest of the society.

All the above mentioned arguments (which is not a full list) are evident for the **necessity of a revision** of this **regulation of the entrepreneurial activity.**

<u>Suggestion:</u> The relevant Moldovan law (regulation of the entrepreneurial activity) should be analysed and amended accordingly:

Clarify and make clear the relevance of this law in the field of energy regulation and the legal obligations of ANRE. The special status of ANRE (as competent authority required by the Electricity and Gas Directives of the EU 3rd Energy Package) should take into consideration in case of amending the relevant Moldovan legal background.

ad. 3., The **ANRE's annual budget' approval process in the Parliament could endanger the operation** and the fulfilment of the responsibilities **of ANRE**, described in the laws and in the Directives. - The last two years' **practice** (approving the ANRE budget with substantial delay) could **necessitate some changes in the approval process**.

The effective operation and independence of national regulatory authorities is a central element to the EU 3rd Energy Package. The ensured condition (financial conditions as well) of operation is necessary to implement such new rules, as unbundling requirements, congestion management, and saving the interest of end-users. The continuous operation of the regulator with high level expertise could be ensured by safe, predictable and timely financial conditions. The high level performance of the complex regulatory activity could give a lot of benefit for the country in term of security of supply, competitiveness and the social welfare.

The main source of funding of ANRE is the regulatory fees. By law this fee cannot exceed 0,15% of turnover generated from regulated activities of licensees (but this cap was not a real limit during the last three years of operation: the approved regulatory fee was varied between 0.08% and 0.11%). This level of regulatory fee was sufficient founding for ANRE to hire and keep staff members with high level expertise, strong educational background and language skill together with full of enthusiasm.

The Article 4³, (4) of the Energy Law nr. 1525 – XIII of February 19, 1998 describes:

"The budget of the Agency is approved by the Parliament at the level up to 0,15 percent from the annual cost of electricity, natural gas supplied to customers and of the imported main petroleum products and liquefied petroleum gas."

In practice, there was case, when the Parliament approved ANRE's budget for 2012 in the middle of May 2012, creating a situation, in which ANRE and its' staff was in uncertain situation for 4-5 months. ANRE's budget for 2013 is still not approved as of April 11, 2013. In case of late Parliament' approval the license holders do not transfer the regulatory fee to ANRE, which could create serious liquidity problems and postponed activities.

There are not established concrete terms and time-schedules for approval of the ANRE's budget and there is no rule, which could ensure the adequate level of founding in a time (which could endanger the operation of ANRE on a high standard). The possibility of a serious budget cut could result of endangered security of supply, reduced social welfare and less competitive economy.

The Article 36 (5) of the EU Electricity Directives describes:

"In order to protect the independence of the regulatory authority, Member States shall in particular ensure that:

(a) the regulatory authority can take autonomous decisions, independently from any political body, and has separate annual budget allocations, with autonomy in the implementation of the allocated budget, and adequate human and financial resources to carry out its duties;"

There are good examples in Moldova on the financial independency of a central public regulatory authority:

The Law of the Electronic Communications nr. 241-XVI from 15.11.2007 sets rules on budgeting of the authority:

The budget of the National Agency for Regulation of the electronic communications and informational technologies (ANRCETI)

Article 12. (1) Annually, until the 15th of November, the Agency forms its budget for the next year from:

- a) regulatory and monitoring fees;
- b) fees for numbering resources attributed;
- c) other financial resources provided by law.
- (2) The <u>Agency's budget is approved by its Administration Council</u> in the limit of the necessities in order to <u>ensure</u> the Agency's activity and its <u>financial independence</u>. The execution of the budget is verified by an independent auditor, whose report will be presented to the Government.
- (3) The Agency establishes the amount / ceiling of the regulatory and monitoring fees for the next year at a <u>sufficient level</u> in order to <u>cover the expenditures necessary in order to ensure the activity according to this <u>law</u>. The amount of the monitoring and regulatory fees is established based on the estimated incomes resulted from the activities from the telecommunication sector, in the size of 0.3 from the estimated incomes.</u>
- (4) Annually, <u>until the 1st of November, the Agency publishes the</u> <u>decision regarding the amount of the monitoring and regulatory fees</u> established for the next year in the Official Gazette of the Republic of Moldova.

Suggestion: The Moldovan Energy Law should be amended accordingly:

Giving by law the same "financial independence" for ANRE as was given to ANRCETI (own budget approval

- with all the necessary auditing and controlling possibilities).
- If this way of ensuring the "financial independence" of ANRE would be not acceptable, then:
 - o the terms and time-schedules for approval of the ANRE's budget should be established by law,
 - there should be a (backup) regulatory fee calculation method for the case of delayed approval.
- **ad. 4.,** Independency from the market interest. ANRE is functioning at the same building as one of the license-holder has offices (using or hiring premises from one market player). However the oil company, which is the owner of the office building, is not subject of any tariff approval of ANRE, the other energy industry players could have a feeling regarding potential discrimination. Due to the staff increasing tendency in the last several years and to the fact that ANRE might be attributed with a new regulatory function (the water sector), the present available offices may be insufficient for the additional staff.

"Member States shall guarantee ...the regulatory authority...act independently from any market interest" [EU Gas (and Electricity as well) Directive: Article 39 (4) b) (i)]."

<u>Suggestion:</u> ANRE should investigate the possibility sharing or hiring other office place, where the appearance of independence from the market interest is more transparent, and where there are adequate spaces for meetings and for more staff (required for new responsibilities).

ad. 5., The highly concentrated Moldovan markets (natural gas and electricity;) could require some regulatory interaction supporting competition and reducing entry barriers.

"In carrying out the regulatory tasks... the <u>regulatory authority</u> shall <u>take</u> all reasonable <u>measures</u>....<u>promoting competitive</u> ... internal <u>market</u>." [EU Gas (and Electricity as well) Directive: Article 40 a)]

Article 37 of the EU Electricity Directive describes the *Duties and powers of the regulatory authority:*

- "(4) <u>Member States shall ensure</u> that <u>regulatory authorities</u> are <u>granted the</u> <u>powers enabling them</u> to carry out the duties referred to in paragraphs 1, 3 and 6 in an efficient and expeditious manner. For this purpose, the regulatory authority shall have at least the following powers:
- (a) to issue binding decisions on electricity undertakings;

(b) to carry out investigations into the functioning of the electricity markets, and to decide upon and <u>impose</u> any necessary and proportionate measures <u>to promote effective competition</u> and ensure the proper functioning of the market. Where appropriate, the regulatory authority shall also have the power to cooperate with the national competition authority and the financial market regulators or the Commission in conducting an investigation relating to competition law;"

The relevant Hungarian legal framework was introduced and delivered to ANRE. The main aim of this regulation is reducing the chance to abuse of market power/dominant position. The law describes the responsibility of the regulatory authority to identify – through thorough market analysis – those market players, who have Significant Market Power (SMP).

The Hungarian Electricity Act gives detailed guidance for such market analysis:

"Section 107 (3) In the process of identification of operators with significant market power the Office [Regulator] shall take into consideration:

- a) the presence of an authorized operator in the geographical area of a particular market and in the closely related markets, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the authorized operator in question;
- *b) the size of the authorized operator and its market share;*
- c) the scope of activities of the authorized operator and of the companies it controls according to Act LVII of 1996 on the Prohibition of Unfair Trading Practices and Unfair Competition, and that of the company exercising control over the authorized operator, vertical integration and the unique characteristics of identified markets in terms of links, product diversification, and the scope of goods and services offered in packages;
- d) the existence of barriers to market entry, growth and expansion;
- e) lack or low level of countervailing buying power;
- f) lack of potential competition;
- g) economies of scale and activity;
- h) supply and demand."

The Hungarian Electricity Act describes the responsibilities of the regulator [Office] setting obligations on those, who identified as player with SMP:

- "Section 110 (3) The <u>Office [Regulator]</u>, in order to promote effective and sustainable competition, to the extent required for the protection of consumer interests, <u>may impose upon</u> authorized operators with <u>significant market power</u> in the markets specified in Subsection (1) of Section 107:
 - a) <u>obligations</u> to <u>ensure transparency</u> in relation to the publication of specific information, such as accounting information, technical

<u>specifications</u>, specific data of <u>sales</u> <u>contracts</u>, terms and conditions for the supply of and access to services, and <u>prices</u>;

- b) if the authorized operator discriminates among its contracting parties with respect to the same transactions, the Office may impose an obligation to provide equal treatment, such as, in particular, to abolish any major contract clause that is considered discriminatory, covering prices, payment deadlines, discriminatory sales and purchase conditions and techniques, which have the capacity to prejudice against certain customers, and to exclude any contract clause for rendering the conclusion of a contract conditional upon undertaking any commitment which, due to its nature or with regard to the usual contractual practice, do not form part of the subject of the contract;
- c) if the lack of effective competition means that the authorized operator concerned might sustain prices at an excessively low or high level, the Office may impose obligations relating to price controls, including obligations for cost orientation of prices and obligations concerning cost accounting systems and pricing systems, furthermore, obligations relating to price controls. Where imposing the obligation to employ cost-reflective pricing mechanisms, it shall be defined based upon and in consideration of the authorized operator's expenses incurred in connection with operations and any investments, including appropriate return on such investments. With the exception of the obligation to make an offer under Subsection (5) of Section 111, the Office may not impose obligations relating to price controls or for cost orientation of prices upon authorized producers.
- Section 111 (1) The <u>Office may order</u> an authorized operator with significant market power in the market referred to in Point 1 of Subsection (1) of Section 107 <u>to conduct public auctions at specific intervals</u>. The <u>Office shall determine</u> the <u>frequency of such auctions</u>, and <u>the volume capacity and electricity to be offered for sale</u>. Furthermore, the Office may prescribe to conduct sales through the regulated electricity market.
- (2) With a view to ensure transparency, the <u>Office shall require</u> an authorized operator with significant market power in the market referred to in Point 2 of Subsection (1) of Section 107 to draw up a <u>reference offer</u>, broken down as prescribed, showing separately, among others, the service charges, payment terms, and the procedure to follow when switching from one service provider to another where applicable. The authorized operator required to publish a reference offer shall be bound to this reference offer in the form it was published containing the conditions specified by law, or by the Office on the strength of a market analysis, and may not deviate from it even with the consent of the other party."

All the above mentioned regulatory possibilities (requiring more transparency, capacity auction/gas release, cost based pricing instead of market based one, reference offer,...) could support competition on a highly concentrated market. These regulatory interactions should be introduced in consultation with the Competition (Anti-monopoly) Authority. The relevant Hungarian legal framework was delivered to ANRE.

<u>Suggestion:</u> ANRE should investigate the possibility introducing similar regulatory responsibilities; ex-ante promoting competition, and reducing the chance to abuse of market power/dominant position, and lowering entry barriers to the relevant market. If this potential regulatory intervention could be relevant for the Moldovan energy markets (gas and electricity,) the Electricity and Natural Gas Act should be amended accordingly.

ad. 6., The present Moldovan practice shows that the rules for access to the grid and on congestion management are prepared and issued by ANRE. Based on the most common international practice this allocation of responsibilities should be re-evaluated. The EU 3rd Energy Package created the following responsibilities; the ACER prepares the Framework Guidelines (FG - regulatory requirements of the detailed network codes/market rules) and the ENTSOs are preparing the Network Codes on the basis of the FGs. Due to the more and more sophisticated, and technical nature of the cross border capacity calculation/allocation-, congestion management-, day ahead-, balancing-and intraday rules the specific knowledge and expertise of the TSOs' staff are required for the adequate deepness, and applicability of these rules. The relevant Hungarian legal framework was introduced and delivered to ANRE.

The better allocation of responsibilities could be based on the following principles:

- the regulator (ANRE) should set "basic requirements" on the content of the grid codes,
- the natural gas and electricity TSOs should be responsible for the preparation of the grid codes,
- the natural gas and electricity TSOs should establish grid codes committees comprising the representatives of network/system users (the establishment and operation of such committees cannot reduce the responsibility of the TSOs regarding preparation of adequate rules in time, while could assist TSOs discovering the aspects and opinion of networks users),
- these committees should discuss, and comment of the draft codes prepared by the relevant TSOs,
- the TSOs should submit the draft codes together with the comments/opinion of the code committees to the regulator for approval
- the regulator compares the submitted draft code with the "basic requirements" and approve/ approve with conditions/ not approve (send back for further development to TSOs)
- the regulator should give detailed explanation and reasoning for setting conditions of the partial approval or non-approval
- the regulator should have enforcement power (penalty scheme) forcing the preparation of adequate codes in timely and high quality manner.

Suggestion:

- The Government should re-evaluate the division of responsibilities among ANRE and TSOs regarding network codes' and market rules' preparation.
- The Government should require from the TSOs more active involvement in the analysis, understanding and implementation of EU TPA and Market Rules
- Necessary amendments should be done in the Moldovan primary legislation.
- ad. 7., The Article 40 (c) of the EU Gas Directive requires: "In carrying out the regulatory tasks... the <u>regulatory authority</u> shall <u>take</u> all reasonable <u>measures....eliminating restrictions on cross-border trade.."</u> (the same requirements exists in electricity). Based on the information collected at the Fact Finding Mission there are existing legislation, and/or government decisions, which limit the actions of ANRE regarding this task.

Suggestion:

- The Government should re-evaluate the regulation, which limits the responsibilities of ANRE regarding setting and approving cross-border capacity allocation rules (required by the EU Directives). The necessary amendments of existing rules should be submitted and implemented.
- **ad. 8.,** The Article 41 (1) of the gas Directive lists all the duties, in which ANRE has to have authority (the same requirements exist in electricity).

Suggestion:

While transposing Electricity and Gas Directives from the 3rd package into national legislation, the above mentioned provisions should be examined and missing duties should be identified.

ad. 9., The Article 41 (3) a) and (4) c), d) of the Gas Directive require, that the regulator shall have power to impose penalties in case of non-compliance (the same requirement exists in electricity). ANRE could identify the non-compliance, but "only" a Court decision could authorize ANRE imposing sanctions.

Article 37 of the EU Electricity Directive describes the *Duties and powers of the regulatory authority:*

- "(4) <u>Member States shall ensure</u> that <u>regulatory authorities</u> are <u>granted the</u> <u>powers enabling them</u> to carry out the duties referred to in paragraphs 1, 3 and 6 in an efficient and expeditious manner. For this purpose, the regulatory authority shall have at least the following powers:
- (a) to issue binding decisions on electricity undertakings;

(d) to impose effective, proportionate and dissuasive penalties on electricity undertakings not complying with their obligations under this Directive or any relevant legally binding decisions of the regulatory authority or of the Agency, or to propose that a competent court impose such penalties. This shall include the power to impose or propose the imposition of penalties of up to 10 % of the annual turnover of the transmission system operator or of up to 10 % of the annual turnover of the vertically integrated undertaking on the vertically integrated undertaking, as the case may be, for non-compliance with their respective obligations pursuant to this Directive; and....

In spite of fact, that the Directives allow the present Moldovan allocation of responsibilities (ANRE proposes and the competent court impose sanctions), the wide-spread European regulatory practice back up the suggestion; ANRE should be authorised by law imposing penalties. The most important arguments, which support this responsibility, are the following;

- the sanctioning possibility strengthen the direct power of the regulatory authority in the actions, when saving the interest of the customers,
- the understanding, monitoring and identifying of any misbehaviour of the energy companies of the very complex electricity and gas supply chain require detailed knowledge and expertise, which the energy regulatory authority has, but the judges at the courts does not have,
- the proportionate and timely sanctions/ penalties could deter the energy companies from further misbehaviour and/or unlawful actions; while the very often long lasting court procedures do not have such immediate effect,
- the statutory power of regulatory authorities imposing fines/sanctions/penalties does not mean, that the energy companies have no right to appeal against the imposed fines/sanctions/penalties at court.

The relevant Hungarian legal framework – which provides the above mentioned direct sanctioning power to the Hungarian energy regulatory authority (HEO) – was introduced and delivered to ANRE. The relevant Polish legal background was also mentioned.

Suggestion: Based on the above mentioned arguments the Government should investigate the possibility introducing direct responsibility to ANRE in order to impose effective, proportionate and dissuasive penalties on energy undertakings not complying with their obligations under the Moldovan energy laws or any relevant legally binding decisions of the regulatory authority. If this potential regulatory intervention could be relevant for the Moldovan energy markets (gas and electricity) the Government should propose this regulation for implementation in the Electricity and Natural Gas Act.

ad. 10., The Article 41 (4) a) of the Gas Directive requires, that **the regulator shall have power to issue binding decisions**. **In case** the decision or resolution of ANRE is **appeal**ed by any of the interested parties (license holders, investors, end-users, other stakeholders) the competent **Court could suspend the decision of ANRE**.

Article 37 of the EU Electricity Directive describes the *Duties and powers of the regulatory authority:*

- "(4) <u>Member States shall ensure</u> that <u>regulatory authorities</u> are <u>granted the</u> <u>powers enabling them</u> to carry out the duties referred to in paragraphs 1, 3 and 6 in an efficient and expeditious manner. For this purpose, the regulatory authority shall have at least the following powers:
- (a) to <u>issue binding decisions</u> on electricity undertakings;

The relevant Hungarian legal framework – which provides the necessary power to the Hungarian energy regulatory authority (HEO) to issue and keep in power binding decisions in the described cases until the end of court decision making process – was introduced and delivered to ANRE.

Some relevant examples of the Hungarian legal background [Law on Electricity LXXXVI dd. 2007 (168. §)]:

- (10) The court in charge of public administrative cases in the process of judicial review has the right to change the decision by Authority except for the decision taken based on Governmental Resolution on necessary measures in case of substantial interruption in the electricity system and extreme conditions in the electricity supply, and for the decision as a result of certification procedure, and for decision setting the system usage and connection charges.
- (15a) In case of appeal for judicial review there is no room for suspension of the implementation, if the decision;
 - sets the system usage and connection charges
 - adopts the method of **determination of the balancing** energy **and** terms of **settlement**
 - adopts the procedures for handling the **access to the** lines connecting the systems (**interconnectors**) **including capacity allocation** and handling bottlenecks (*congestion management*)
 - appoints temporarily a distributor for maintenance of direct lines.

<u>Suggestion:</u> Based on the above mentioned EU requirements and on the introduced Hungarian legal framework Government should investigate the possibility introducing similar "safeguard" (limiting the possibility to suspend the implementation of ANRE' resolutions and decisions) for the ANRE' binding resolutions and decisions in the determined cases. If this potential regulatory empowerment could be relevant for the Moldovan legal framework (gas and electricity act) the Government should propose this regulation to the Parliament for implementation in the Electricity and Gas Act.

ad.11., During the workshop some practical Hungarian and Polish example, advice were introduced regarding "close cooperation" with the neighbouring regulators. The NRAs in the CEE region and in the framework of ACER/CEER activity very often (monthly) meet each other with the purpose of harmonising relevant rules and preparing conditions of regional market building and functioning. Unfortunately, because of the budgetary constraints (lack of timely approval) ANRE has limited capacity following this practice with the neighbouring regulators.

ad.12., During the workshop some practical Hungarian and Polish example, advice were introduced regarding the coordination of the development of network codes and congestion management rules with the stakeholders and with the neighbouring regulators. This topic was also discussed during Topic # 2.

ad.13., During the workshop some practical Hungarian and Polish example, advice were introduced regarding conditional approval to allow the TSO's outsourcing some part of the congestion management tasks to a regional "Central Allocation Office (CAO)". We also paid attention of ANRE to the ERRA Legal Working Group meeting, scheduled to March in Tallinn, where the working group members (the Moldovan member as well) and the Head of CEE CAO (Mr. Apko) will introduce and deeply discuss the approval conditions of common congestion management rules.

Additional issues were mentioned by ANRE representatives during the workshop:

- ANRE is interested in the **exemption procedure** in case of exempting cross border network elements from the regulated Third Party Access rules (access, connection and network/system tariff). The Hungarian exemption decision *will be introduced* in case of the Nabucco project *later on*.
- ANRE is interested in the relevant authority regarding restructuring of the energy companies, especially **approval of** merger & acquisition and **unbundling related actions**. This issue will be discussed during the 2nd Workshop.
- ANRE is interested in the international practice of market structure/ operational model issues of **large and medium end-users' possibility** purchasing energy on the **free** market **and/or** on the **regulated market**. This issue will be discussed during the 3rd Workshop.

<u>Findings and Suggestions on Topic #2:</u> Regional Market Building Possibilities (for Gas and Electricity), including Cross-Border Capacity Calculation and Congestion Management

Regional Market Building Possibilities (Gas and Electricity)

The representative of Ministry of National Development of Hungary responsible for Strategy and Energy Policy introduced the following main issues:

- General market building tendencies in the CEE region (concept of gas and electricity target models)
- Presentation of regional initiatives in market building (EU internal market concept, CEE, SEEE, V-4, North-South Corridor)
- Infrastructure development concepts (new potential gas transit routes, PCI concept)
- Some regional market building elements of the Hungarian Energy Policy and its planned implementation

During the presentation and discussion the Moldovan partners were interested in:

- Advantages and disadvantages of being part of a regional market instead of remaining isolated from point of view of market price and security of supply

<u>Suggestion:</u> Establishing physical interconnections with neighbouring countries (especially the gas interconnector to Romania) and introduce market based third party access methods to cross-border capacities (or similar mechanism) for network users.

The representative of FGSZ Natural Gas Transmission Closed Company Limited by Shares (ITO) of Hungary responsible for Business development introduced the following main issues:

- Regional gas market building process (SEEE working groups, ENTSOG, Ro-Hu initiatives, other initiatives)
- Harmonization of gas market rules and market operations (development of gas target model, framework guidelines, network codes)
- Concept and practice of ENTSOG' Ten Years Network Development Plan (TYNDP) related to gas transmission networks
- The practice of Hungarian Ten Years Network Development Plan related to gas transmission networks
- Case Study: Introducing the draft rules of Capacity Allocation Management Network Code (CAM NC) in Hungary

During the presentation and discussion the Moldovan partners were interested in:

- How the different institutions work for gas market integration;
- The connection between national and European Ten Year Network Development Plans;
- Decision making in network development plans on both national and international level;
- Control functions in project realisation;
- Harmonisation of system usage dimensions;
- Primary capacity allocation and congestion management procedures;
- Short term capacity products;

- Interruptible capacity products;

<u>Suggestion:</u> It should be investigated whether or not the number of interconnectors could be increased. Such a study should focus on both supply security and market criteria. More transparency might be needed in TPA rules on the existing interconnectors. These rules should ensure non-discriminatory treatment of network users. (ANRE developed draft regulations on transposing EU Regulations No. 1228/2003 and No. 1775/2005, that will be approved after amendments to the Natural Gas and Electricity Acts are adopted.)

The representative of MAVIR Hungarian Independent Transmission Operator Company (ITO) responsible for Market Operation introduced the following main issues:

- Regional electricity market building process (CEE working groups, ENTSO-E, trilateral market coupling, other initiatives) driving forces and impediments
- Harmonization of electricity market rules and market operation (concept of different target models, framework guidelines, network codes)
- Concept and practice of ENTSO-E' Ten Years Network Development Plan (TYNDP) – related to electricity transmission networks
- The practice of Hungarian Ten Years Network Development Plan related to electricity transmission networks
- Hungarian experience related to electricity market opening
- Main challenges of regional and EU-wide market integration (unexpected flows [loop flows], impact of renewable support schemes, time-pressure)

During the presentation and discussion the Moldovan partners were interested in:

- Balancing need of RES (Answer: 50-90 % of installed capacity in case of intermittent renewable generators);
- High Voltage Back to Back Station (connecting two electricity grids with different frequencies) direct link to ROM;
- Power plant building with and without PPAs;
- Investment decisions based on market prices signals;
- ITC mechanism.

<u>Cross-Border Capacity Calculation and Congestion Management (Gas and Electricity)</u>

The representative of FGSZ Natural <u>Gas</u> Transmission Closed Company Limited by Shares (ITO) of Hungary responsible for Business development introduced the following main issues:

- The main responsibilities of Transmission System Operator (including cross-border capacity calculation and allocation);
- The Entry-Exit system with Virtual Trading Point;
- Case Study: Hungary-Romania Capacity Bundling Project;
- Introducing short term bundled products allocated via the Regional Booking Platform.

During the presentation and discussion the Moldovan partners were interested

<u>in:</u>

- Entry-exit models;
- The definition and functions of a virtual trading point in title transfer and balancing;
- Bi-directional deliveries via physical reverse flow or through netting off gas volumes (backhaul);
- Operational and legal issues related to backhaul counter-flow deliveries;
- the responsibility of system operators and network users in market based balancing.

<u>Suggestion:</u> The introduction of proper entry-exit system with virtual trading point may be considered as first step followed by launching short term capacity products. Market based balancing could be worth to investigate only once wholesale market gives signals of certain level of liquidity.

The representative of MAVIR Hungarian Independent Transmission Operator Company (ITO) responsible for Market Operation introduced the following main issues:

- Congestion management;
- Capacity calculation: NTC and Flow-based (methods and practices);
- Capacity allocation (Explicit and Implicit) (development of methods; pros and cons);
- UIOLI and UIOSI principles;
- Market Coupling (Social Welfare increment);
- Case study: CZ-SK-HU Trilateral Market Coupling (driving force and results) (possibility of further development);
- Way to Internal Energy Market by 2014.

During the presentation and discussion the Moldovan partners were interested in:

- What to do with internal congestion? (The answer introduced the Svenska Kraftnet case; the bidding areas as potential, but politically less acceptable solution; the network investment eliminating internal congestion [which solution require incentive network tariff regulation]);

- What type of software's used by MAVIR, the costs of software's (SCADA, schedule, cap allocation, PSSE);
- The method and basis for network planning and daily, and weekly capacity allocation, and the data collections from neighbours;
- The Balancing energy scheduling inputs/outputs and pricing.

<u>Suggestion:</u> Increasing the transparency should be considered where there is possibility of competition/tender – there won't be quick and visible success but should go further/ahead.

<u>Findings and Suggestions on Topic #3:</u> Supporting Competition (methods and possible regulatory interactions in a concentrated markets) - The idea and practical implementation of ex-ante regulation of market players with significant market power in Hungary

The General Secretary of ERRA (former Director of the Hungarian Energy Office) introduced the following main issues:

- Competitive markets;
- Development of Market Structures;
- Wholesale market (Single buyer model, Mandatory pool, Voluntary pool, Bilateral contract market, Hybrid model) (Wholesale and Retail Market, Bilateral Contracts' Market (OTC), Power Exchange, Balancing Market, Ancillary Services Market, Market of congested Network Capacity);
- Ancillary service markets;
- Retail market;
- Market power (Sources of market power, potential abuse of market power);
- Stakeholders' view on efficient competition;
- Regulatory tools mitigating the chance to abuse market power (Competition test; Significant Market Power (SMP) concept);
- Hungarian Case study: Ex Ante regulatory tools; obligations on market players with SMP (Obligation for capacity release, Cost based prices (instead of market based ones), Limited supply obligation to Universal Service Provider(s), Pro-form offer as obligation at Retail Market).

<u>Suggestion:</u> The possibility to authorize ANRE to identify those players who have significant market power and to impose ex-ante obligations on them (avoiding the chance of abuse market power) should be examined! The relevant Hungarian legal framework was delivered to ANRE.

Annex 8 : Final program of the 3^{RD} workshop in Moldova

Danube Region Strategy (DRS) Energy Priority Area

3rd WORKSHOP
FINAL PROGRAMME
May 27-29, 2013
Chisinau, Moldova

AGENDA-AT-A GLANCE

May 27 (15:00 – 17:30)	Topic I: General customer protection related issues (gas and electricity) – the necessary legal/regulatory framework and the different regulatory procedures; the potential support for vulnerable customers, power/energy poverty, Last Resort Supplier' concept
May 28 (09.00 – 12:00)	Topic I: (cont.) General customer protection related issues (gas and electricity) – Introduction of the concept of Consumer Checklist, Introducing the benchmark of European practice on Dispute Settlement Procedure Topic II: Service Quality Regulation – different elements of service quality regulation, international benchmark of requirements and measured facts
May 28 (13:45 – 17:30)	Topic II: (cont.) Service Quality Regulation – impact of Service Quality Regulation on pricing (network tariff); Topic III: End-user switching process (from one supplier to another) – elements of the switching process, responsibilities of DSOs, suppliers and customers, conditions of changing supplier
May 29 (09:00 – 11:00)	Topic IV: Exemption (from Third Party Access obligations) process – conditions of any TPA' exemption (requirements of the EU Directives); "Nabucco" exemption procedure as case study
May 29 (11:00 – 12:00)	Preparation of the 4 th Workshop

Monday, May 27, 2013: <u>Topic I</u>: General customer protection related issues (gas and electricity)

Venue: MOLDELETRICA, str. V. Alecsandri, 78. Transfer provided by the Hugarian Embassy

Afternoon Session 15:00 – 17:30	General customer protection related issues (gas and electricity) – the necessary legal/regulatory framework, the different regulatory procedures and support systems	Targeted audience: Representatives of the; - Ministry of Economy of Republic of Moldova, - ANRE (Regulatory Authority) - Local DSOs (gas and electricity) - Local Suppliers (gas and electricity) - Small Customers' associations
15:00 – 15:45	Introduction of the key elements of the EU Directives (3rd EU Package) ensuring effective safeguard and support for end-users.	Presenter: Ms. Anikó CSŐREG – Hungarian Energy and Public Utility Regulatory Authority
15:45 – 16:15	Q&A	
16:15 – 17:00	General contractual framework of small customers [business conduct rules] and the approval of it. Identification and support of vulnerable customers. Issues of power/energy poverty. Introduction of the Last Resort Supplier' concept.	Presenter: Ms. Anikó CSŐREG – Hungarian Energy and Public Utility Regulatory Authority
17:00– 17:30	Q&A	
17:30	Meeting concludes	

Tuesday, May 28, 2013

Topic I: General customer protection related issues (gas and electricity)

Topic II: Service Quality Regulation

Topic III: End-user switching process (from one supplier to another)

Venue: MOLDELETRICA, str. V. Alecsandri, 78. Transfer provided by the Hugarian Embassy

Morning Session 9:00 – 12:00	General customer protection related issues (gas and electricity) – the necessary legal/regulatory framework, the different regulatory procedures and support systems (continue) Service Quality Regulation	Targeted audience: Representatives of the; - Ministry of Economy of Republic of Moldova, - ANRE (Regulatory Authority) - Local DSOs (gas and electricity)
		 Local Suppliers (gas and electricity) Small Customers' associations
09:00 – 09:45	Introduction of the CEER Paper on "Guideline of Good Practice on Customer Complaint Handling, Reporting and Classification" (CEER recommendation) Complaints handling procedure at Suppliers/Distributors and Regulators. Typical complaints and potential regulatory actions.	Presenter: Ms. Anikó CSŐREG – Hungarian Energy and Public Utility Regulatory Authority
09:45 – 10:00	Q&A	
10:00 – 10:15	Coffee break	
10:15 – 11:15	Different elements of Service Quality Regulation: reliability of supply, commercial quality and Voltage quality. Data collection (data reporting and validation system) and measurement systems, requirements and standards. Annual publications on service quality results and tendencies. Short introduction of CEER' international benchmark of quality requirements and measured facts. Impact of Service Quality Regulation on network charges (network tariff effects) (financial incentives for service quality enhancement.)	Public Utility Regulatory
11:15 –	Q&A	

12:00			
12:00	_	Lunch break	
13:45			

Afternoon	End-user switching process (from one	Targeted audience:
Session	supplier to another)	Representatives of the;
13:45 –		- Ministry of Economy of
17:00		Republic of Moldova,
		- ANRE (Regulatory
		Authority)
		- Local DSOs (gas and
		electricity)
		- Local Suppliers (gas and
		electricity)
		- Small Customers'
		associations
13:45 –	Detailed elements of the switching	Presenter:
15:00	process. Responsibilities of DSOs,	
	Suppliers and Customers. Conditions of	Mr. Ferenc KLÉZLI – EoN
	changing supplier:	Distribution 2614
	- short introduction of the Hungarian	
	market (players, competitors, new	
	entrants),	
	- introduction of the regulatory	
	framework of the switching process	
	and the different forums/platforms of	
	cooperation of market players,	
	- the way and subject of competition on	
	the retail market,	
	- contractual framework (contracts for	
	connecting and using the networks	
	system, supply contract, contract between DSO and supplier),	
	- introducing the different steps of the	
	switching process,	
	- introducing the tasks and	
	responsibilities of the different	
	players during the switching process,	
	- communication channels, tools,	
	messages,	
	- settlement system (system use,	
	commodity, balancing, deviation	
15.00	from schedule)	
15:00 -	Q&A	
15:30	Coffee breek	
15:30 – 15:45	Coffee break	
15:45 –	Potential regulatory measures supporting	Presenter:
16:30		1 rescriter.
10.30	customers in the supplier' selection and	1 C'1 GZÖDÉNIGI
1		LAY GADOY NIORENYI = 1
	switching process. Regulatory	dr. Gábor SZÖRÉNYI – General Secretary ERRA
	switching process. Regulatory monitoring of the process.	General Secretary, ERRA

16:30-	Q&A	
17:00	Meeting concludes	

Wednesday, May 29, 2013

Topic IV: **Exemption process** (from Third Party Access obligations)

Preparation of the 4th Workshop

Venue: MOLDELETRICA, str. V. Alecsandri, 78. Transfer provided by the Hugarian Embassy

Morning Session 9:00 – 12:00	Exemption process (from Third Party Access obligations) Preparation of the 4th Workshop	Targeted audience for Topic IV: Representatives of the; - Ministry of Economy of Republic of Moldova, - ANRE (Regulatory Authority) - Local TSOs (gas and electricity)
		Targeted audience for preparation of the 4 th Workshop: - Ministry of Economy of Republic of Moldova
09:00 – 10:00	Conditions of any TPA' exemption (requirements of the EU Directives). Regulatory cooperation of the involved NRAs preparing harmonised exemption conditions	Presenter: Ms. Nina GRALL – Energy Community Treaty Secretariat (former E-Control expert involved in the "Nabucco" exemption process)
10:00– 10:45	Exemption procedure in case of cross- border network development. The "Nabucco" gas pipeline - exemption procedure as case study.	Presenter: Mr. Mihai Ramniceanu – ANRE, Romania
10: 45 – 11:15	Q&A	
11:15 – 11:30	Coffee break	
11:30 –	Preparation of the 4 th Workshop	- Ministry of Economy of Republic of Moldova, -ERRA, DRS
12:30	Meeting concludes	

ANNEX 9: EXECUTIVE SUMMARY ON THE "NATURAL GAS STORAGE ANALYSIS IN T	гне
DANURE RECION"	

EXECUTIVE SUMMARY

The present study addresses the need in the Danube Region for new underground natural gas storage (UGS) facilities. There are several UGS storage investment proposals on the table and there is some uncertainty on how to evaluate their regional impact and how to rank them in the European Project of Common Interest (PCI) selection process. This study aims to focus on the added value of these new storage facilities for the region and for the national markets. From our previous study on the ranking of gas infrastructure projects of the Danube Region we learned that individual storage investment does not have significant regional gas wholesale price impacts. This study examines whether storage investments are essential for the security of supply of their host countries and/or whether they have the potential to increase the economic welfare of the region.

The most important role of storage under normal market conditions is to cover seasonal swings in demand. The Danube Region has predominantly depleted field storage facilities that are technically suitable to provide this seasonal flexibility. The seasonal volatility in consumption depends on the weather conditions of the country (moderate climate countries use more gas for heating), the sectorial distribution of gas consumption (gas used for power generation is driven by the price spread between gas and electricity). The need for storage capacity is also influenced by the interconnectivity of the country, as flexibility can be provided by gas purchase contracts through interconnectors as well. These are the main determinants of storage demand and their composite outcome can be simulated by the forthcoming market modelling exercise.

In the first part of the study, we give a short overview of the natural gas storage markets of the Danube region. We found that the Danube Region as a whole has sufficient storage capacities but with uneven distribution across countries. While some have spare capacities (e.g. Hungary) others do not have storage facilities at all (Bosnia and Herzegovina, Moldova and Slovenia). In case of Slovenia the necessary flexibility is provided by Austrian storages. For Moldova and Bosnia, historically the long term gas supply contract provides the necessary flexibility. A few new infrastructure has been already commissioned which will change this situation fundamentally (Serbian storage was commissioned in 2012, the Romanian-Moldovan interconnector is to be commissioned in 2013). The Bosnian need for flexibility can be provided by the neighbouring countries' storage, Moldova has its own storage investment plans, plus can use the Romanian storage facilities in the future. According to our model simulations even without further expanding the gas storage capacity, these new infrastructure investments end isolation and will enhance security of supply in the region.

The most important characteristics of the storage market are market and ownership structure, price determination and the rules for third party access. The storage market in the Danube region is dominated by vertically integrated companies. In five countries it is a monopoly (Bulgaria, Croatia, Poland, Serbia and Ukraine), in the rest of the countries the market share of the largest player is around 80%, with the exception of Austria (36%). Unfortunately, despite this low concentration, the storage market in Austria is not competitive but characterized by long term capacity contracts, and new entrants have difficulties to access these facilities.

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¹ The Danube Region Gas Market Model and its application to identifying natural gas infrastructure priorities for the Region, available at: http://www.rekk.eu/index.php?lang=en

Our storage tariff benchmarking analysis highlighted the lack of competition on the storage market: tariffs vary within the region on a large scale. Whereas Austrian, Slovakian and Hungarian tariffs are among the higher ones, Ukrainian, Bulgarian, Croatian tariffs are much cheaper. The difference between the highest and lowest tariff (excluding Ukraine) is almost six-fold (7 €/MWh). As a response to the concentrated market structure, tariffs are dominantly regulated in the region, with the exemption of the Czech Republic where new capacities are auctioned providing a good estimate of the value of storage capacities in a competitive environment (around 3.5 €/MWh). Third party access to storage is the default regulation, however there are a few exemptions: e.g. Serbian storage does not have third party access.

We understand that storage demand is driven by many factors, and as the markets become more interconnected and competitive, storage can be substituted partly by other means of flexibility, that can be best simulated with market models. However as a first assessment without market modelling we developed a rule of thumb based on historical data of mature gas markets to see, where additional investment into storage might be needed. For seasonal flexibility need we use the proxy of total working gas capacity of a country/ annual gas consumption ratio. A ratio above 25% is considered to be sufficient, between 20-25% questionable, while below 20% insufficient storage capacity.

According to our rule of thumb **Bosnia and Herzegovina**, **Bulgaria**, **Croatia**, **Moldova**, **Poland and Slovenia** lack the required working gas capacity. **Romania and Serbia are in an undecisive position**, **hence require further analysis**. Austria, the Czech Republic, Hungary and Slovakia seem to have sufficient infrastructure.

As we received comments to refine the above rule of thumb with the daily flexibility need, we defined a second proxy of withdrawal capacity/ peak day consumption ratio, calibrated on the same mature markets' historical data. The second proxy confirmed our previous findings.

In the second part of our study we run our Danube Region Gas Market Model to evaluate the necessity of further storage investment. We consider 2015 as our reference case, when new interconnectors already under construction in the region will be in place. In the reference case South Stream is delivering 10 bcm to Italy with 1.5 bcm trading possibility along its route. Compared to 2011 we found that despite the growing regional annual gas consumption (from 2011 to 2015 regional consumption grows by 21 bcm), regional storage demand drops from 16 to 14 bcm. The reasons behind are twofold:

- (i) New interconnectors strengthen interconnectivity in the region providing additional flexibility that competes with storage facilities.
- (ii) In a more integrated market cheaper storage attracts demand of other markets. This leads to a new distribution of storage gas injection where Hungary, Serbia and to a lesser extent also Croatia gains storage stock, and Slovakia and Austria loses (assuming unchanged storage pricing policies).

If no further investment takes place, 9 bcm existing spare working gas storage capacity cannot be utilised due to the lack of interconnection or high transmission costs. At the same time several markets utilize their storage at the technical maximum, indicating that investment is needed.

In the next step we analysed the effect of a 5 bcm package of proposed new UGS infrastructure package for the countries facing storage capacity shortages (BG, HR, MV, PL, RO, SB) on the Danube Region storage market and on social welfare.

Results show that this 5 bcm new working gas capacity investment is too much for the region. Unused spare capacities grow from 9 to 13 bcm and less than 20% of the new storage infrastructure is utilized. The reasons for this result are:

- (i) new capacities are expensive (tariffs should cover investment costs) and not competitive to other flexibility sources
- (ii) Neighbouring countries' old storages are cheaper even with the added cost of transmission charges.
- (iii) Social welfare analysis justifies the Polish and the Moldovan storage investments.

To measure the security of supply benefits of a storage investment, we simulated a supply crisis. We assumed a supply disruption to occur in January caused by a 30% supply cut of Russian gas transits through Ukraine. In our 2015 base case we assume a certain level of "strategic" gas stock to be kept for security of supply purposes (30 days winter consumption of the household sector of the given country). We found that keeping this stock in storages prevents from dramatic consequences in case of a supply shock: only a modest price increase in the Eastern Balkan is foreseen. By adding the 5 bcm new storage infrastructure to the region, even this modest reaction eliminates. We simulated what would happen without the "strategic stock" and the model suggests that a similar crisis as of the one in 2009 would occur. From the modelling exercise our policy recommendations to the Danube Region policy makers are the followings:

- The 994/2009 Security of Supply Regulation aims to ensure continuous supply through the most cost-efficient measures. Hence a better use of existing infrastructure should be encouraged instead of building new capacities. New interconnectors open up new possibilities to provide flexibility to the market. The region's spare gas storage capacities should be used in the first place instead of building new facilities. Regional policy cooperation to facilitate the use of neighbouring countries' storage facilities shall be encouraged.
- A certain level of obligatory "strategic stock" to be kept in storage increases the security of the whole region significantly. We understand that other flexibility tools are competing storage under normal conditions (supply contracts, demand side measures, spot markets), but in a supply crisis situation the storage facilities play a crucial role in maintaining the integrity of the market and the continuity of supply. However, they can serve as backups, but only if there is gas stored in them. The strategic stock should not necessarily been stored in a physically separate or otherwise dedicated storage facility.

- In a security of supply situation the physical reverse flow possibilities are of
 utmost importance. The exemption from the obligation to allow physical bidirectional gas flows on pipelines besides decreasing the effectiveness of
 market integration is undermining the efforts to ensure continuous supply
 in crisis situations.
- Investment in new storage facilities does not necessarily increase the total social welfare for the region. Investment proposals on the table are too much for the region, they would result in an increase of unused spare capacities. The benefits of new facilities under supply crisis situations can barely out weight the losses on these investments for the region as a whole. A cost benefit analysis of the individual storage investment projects shall be carried out, taking into account the competing flexibility possibilities and the externalities on other market participants.
- In the Danube Region the Polish and the Moldovan storage investment proposals seem to be justified on the basis of our welfare analysis. The Bulgarian storage investment results in positive social welfare change only under the supply interruption scenario, but not in normal conditions.

It is understood that a certain level of mistrust exist when security of supply is ensured by facilities outside of the territory of the given Member State. To overcome this problem, it is important to encourage the conclusion of arrangements between natural gas undertakings. Governments or regulatory agencies should find incentives or shall provide the necessary political and economic insurance for the parties that the regional cooperation will not be harmed in any type of crisis situation, and shall provide contractual assurance for reliable delivery.

ANNEX 10: CONCLUSIONS OF THE ENERGY PRIORITY AREA 2 ON THE "NATURAL GAS
STORAGE ANALYSIS IN THE DANUBE REGION"

CONCLUSIONS of the Energy Priority Area 2 of the Danube Region Strategy on the

"Natural Gas Storage Market Analysis in the Danube Region" accepted in Budapest on 13 June, 2013

As a follow-up of the Danube Region Gas Market Model, a study for the optimal use of the gas storage capacities of the Danube Region was commissioned by the Steering Group of the Energy Priority Area.

The Natural Gas Storage Market Analysis in the Danube Region² addressed the need for new underground natural gas storage facilities. The aim of the study was to evaluate the added value of new storages for the region as a whole and for the national markets. The analysis examined whether storage investments are essential for the security of supply of their host countries and/or they have the potential to increase the economic welfare of the region.

COUNTRIES OF THE DANUBE REGION HAVE AGREED on the following outcomes of the analysis:

- The Danube Region as a whole has sufficient storage capacities but with uneven distribution across countries.
- As the markets become more interconnected and competitive, storage can be substituted partly by other means of flexibility that is new interconnectors.
- At the moment there is 4 bcm existing spare storage capacity not utilized in the region.
- Further investment into storage and the progressing interconnectivity would increase the unused storage capacities in the region substantially.
- Social welfare analysis justifies the need for Moldovan storage investments. The Bulgarian storage
 investments results in positive social welfare change only under supply interruption scenario, but not
 in normal conditions.

Based on the above, the Energy Priority Area has the following RECOMMENDATIONS:

- a better use of existing storage capacities needs to be encouraged first, before new storage investment projects,
- regional policy cooperation to facilitate the use of neighboring countries' storage facilities shall be encouraged,
- in a security of supply situation the physical reverse flow possibilities are of utmost importance; the exemption from the obligation to allow physical bi-directional gas flows on pipelines is undermining the efforts to ensure continuous supply in crisis situation,
- a cost-benefit analysis of the individual investment projects shall be carried out, taking into account the competing flexibility possibilities and the externalities on other market participants,
- in order to overcome the existing mistrust amongst countries when security of supply is ensured by
 facilities outside the territory of the given state, governments or regulatory agencies should find
 incentives or shall provide the necessary political and economic insurance for the parties that the
 regional cooperation will not be harmed in any type of crisis situation, and shall provide contractual
 assurance for reliable delivery.

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² The analysis includes Austria, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Germany (as an external market), Hungary, the Republic of Moldova, Romania, Serbia, Slovenia, Slovakia and Ukraine from the Danube Region and additionally Poland.

ANNEX 11: JOINT DECLARATION ON BIOMASS SUSTAINABILITY

JOINT DECLARATION

ON

BIOMASS SUSTAINABILITY BY

THE COUNTRIES OF THE DANUBE REGION STRATEGY Budapest, 13 June, 2013

Energy generation from solid and gaseous biomass is essential to meet the EU 2020 renewable energy target. It helps addressing climate change, security of supply concerns and contributes to job creation, particularly in rural areas.

Sustainable use of such resources is a fundamental issue for all countries of the Danube Region, however it is not a new concept and in most countries strict regulation is already in place.

Biomass is generally produced in a sustainable manner in the EU; therefore there is no need for further binding sustainability criteria on European level for biomass originating from the Member-States. The national systems may not be always perfect, but these are developing constantly as the result of long negotiation processes among stakeholders.

Import of biomass used for energy is at a very low level and can be sufficiently controlled in the frame of the EU Timber Regulation and relating regulations even if the level of import rises in the future.

New EU-wide obligatory sustainability criteria would unavoidably create additional administration and costs especially for the EU producers, without any additional benefit for the environment, thus creating market distortion and disadvantage in competition for the producers of the Member States. Moreover, a new and less detailed EU biomass sustainability criteria system would possibly devalue and erode the existing well developed and widely accepted national criteria, indicator and monitoring systems.

Based on all the above, the countries of the Danube Region Strategy (DRS) do not see an urgent need to develop additional sustainability criteria for solid biomass on EU level.

The DRS states commit themselves to cooperate in the further development of biomass technologies and are convinced that this declaration will facilitate the achievement of the 2020 energy targets and the sustainable use of biomass in the entire Danube Region."

The Joint Declaration is adopted on the occasion of the 6th Steering Group Meeting of the Priority Area 2 of the Danube Region Strategy in Budapest, 13 June 2013.

6. PROJECTS APPROVED BY THE STEERING GROUP AFTER THE FIRST ANNUAL REPORT

CZECH REPUBLIC

Ostrava Smart City Initiative

Project title	Ostrava Smart City Initiative
Thematic priority	CO ₂ reduction, Energetics, eMobility, Energy savings, Environment, Modernization
Project description	City Of Ostrava leads its effort to involve in the energy industrial initiative Smart Cities along with the supportive partners Moravian-Silesian Region and VŠB-Technical University of Ostrava with a view to improving the limit situation of the environment in the Moravian-Silesian Region.
	Smart Cities Initiative is a tool aimed at raising the awareness of EU mission of reducing the CO_2 emissions by 20 % until the year 2020. Initiative is closely linked to the EC's SET Plan (Strategic Energy Technology Plan) from the year 2011.
Project manager	Ing. Lucie Hellerová
(including contact	Ostrava City Municipality
address, e-mail, phone, fax)	Prokešovo nám. 8
, ,	
	729 30 Ostrava
	Czech Republic
	E-Mail: LHellerova@ostrava.cz
	Cell Phone: 00420731638272
	Phone: 00420599443178
Timetable	2011 – member of the Covenant of Mayors
	2012 – preparation of the Energy Audit and Action Plan according the Covenant of Mayors recommendations
	2013-2020 – suitable projects running
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Project status	Project in Progress
Objective(s)	 aim supported by the Government Resolution from 9th April, 2010 (to tackle the environment pollution in the region – one of the steps is to support Ostrava in taking part in the Initiative) member of the Covenant of Mayors since 2nd November 2011 (European movement involving local and regional authorities, voluntarily committing to increasing energy efficiency and use of renewable energy sources on their territories. By their commitment, Covenant members aim to meet and exceed the European Union 20% CO₂ reduction objective by 2020) searching for suitable projects negotiating with potential partners (public institutions, private sector companies, etc.) for funding, technological support and think tank Ostrava is aimed not only to the reducing of emissions, but also to reduce dust pollution and improve the environment situation in general, by the steps in the energy and industry sectors which are traditionally crucial for the Region.
	Areas for the suitable selected projects: - increase energy efficiency of buildings - lighting - support efficient lighting system in the city - public transport – eMobility - streamlining the transport system and its continuity - Light systems and systems for transport management - building parking facilities - support for the controlled car entrance to the city - incineration of waste in the households – educate, aid and motivate citizens for using the environmental types of heating - support for education - training for liability to the environment - etc.
Instruments used	 City of Ostrava own instruments EU funding (Structural Funds) Private sector partners
Funding (Total budget	This initiative is supposed to be mainly financed by the:
and shares)	 City of Ostrava own instruments 375 million CZK Structural Funds 2014+ 2125 million CZK Private sector partners 50 million CZK
Partners (including contact address, e-mail, phone, fax)	- VŠB – Technical University of Ostrava - Moravian-Silesian Region Council

GERMANY

Green Chemistry Belt

Green Chemistry Belt
PA 02/ Energy
Green Chemistry Belt PA 02/ Energy The "Green Chemistry Belt" project aims to develop a supply-chain for Biofuels and biogenic materials for energy use. The finite nature, the price volatility and climate change issues of fossil fuels will require new concepts in the resource supply. The intention of the Green Chemistry Belt project is to build up eco- and cost-efficient logistic concepts for agricultural raw materials and transformed biogenic materials. Biogenic feedstock's: — decentralized harvest — regional conversion — central refinement Gradual transformation technologies of biogenic feedstock's at hubs for decentralized biomass conversion in rural locations and at Danube harbours up to industrial areas along the Danube region. Renewable raw materials are able to replace fossil based materials and fossil based energy (solid, liquid and gaseous fuels). When used efficiently in cascades or multiple usage in closed cycles including all by-products from agricultural and forestry production and / or from the food industry, renewable raw materials will open up enormous potential for the industrial supply. Biogenic raw materials can be harvested in rural areas. In a first decentralized biomass conversion plant the biogenic feedstock's are converted into transportable solid, liquid or gaseous forms. This biogenic raw material can be transported to logistic hubs for further refinement and/or usage. One example is the conversion of rape seed into plant oil in decentralized oil mills and the transportation of the rape oil to locations where the transesterification for the production of rape oil methlyester (RME) is possible. RME is one of the most important biofuels. The Green Chemistry Belt is a trans-European concept for the supply with biogenic raw materials for energetic or material use. On other example is the usage of biogenic by-products for the power supply of the decentralized biomass conversion plants. For example the production of bioethanol out of straw leads to the by-product lignin. Lignin is used

	this integrated concept "Green Chemistry Belt". Of course the
	produced energy can also be provided in various ways, e.g. as
	biofuels, SNG (synthetic natural gas), heat, pellets, etc.
	This will not only lead to a new energy supply for the biomass-
	conversion facilities but also for the whole energetic market, e.g.
	mobility and logistic, households and industry.
Project manager	Dr. Raimund Brotsack
(including contact	BioCampus Straubing GmbH
address, e-mail,	Europaring 4
phone, fax)	D – 94315 Straubing
	E-Mail: raimund.brotsack@biocampus-straubing.de
	Phone: +49 (0)9421 / 785-161
	Fax: +49 (0)9421 / 785-165
Timetable	In a first step (2012) we intend to identify three different regions
	along the river Danube on the base of SWOT analysis which can be
	used as model regions for the production and decentralized
	conversion of biomass feedstocks. Starting from different raw
	materials pre-feasibility studies should help in the second step (2012
	to 2013) to demonstrate material flow along a complete value chain
	with
	minimised transport and transhipment and maximised cascade and
	multiple usage of biomass feedstocks. In the third step (2014) a value
	chain process management handbook is developed which could be
	used for the transfer of the collected know-how to other regions along
	the Danube. The project aims to establish information flow to the
	governing bodies of the EU's Danube Strategy. The project is
	designed to support the strategy. Vice-versa, it will also give input
Duois et status	to possible improvement of the Strategy.
Project status	Project application in central Europe INTERREG IV B / 3.4
	"Supporting
	environmentally friendly technologies and activities" Deadline for
	current call: 14.10.2011
	Submitted: 14.10.2011
Ob :4: (-)	
Objective(s)	The primary objectives are the promotion of sustainable supply with
	biogenic raw
	materials for energetic and / or material use and the support of the
	competiveness of enterprises in the whole Danube region in the fields of future
Instruments used	orientated bio economy.
Instruments used	Pre-feasibility, conferences, web based communication
Funding (Total budget	This initiative serves to elaborate different value chains for biogenic
and shares)	raw materials in model regions along the Danube. Following a
	clearly transnational approach, it applies for European funds mainly
	(INTERREG IV B, Central Europe) with 25% and 15% respectively
Danier and Carl P	for "new" Member States coming from own resources
Partners (including	Philipp von Bothmer (Leader of the project)
contact address, e-	Agency for Renewable Resources
mail, phone, fax)	OT Gülzow
	Hofplatz 1
	18276 Gülzow-Prüzen

	E-Mail. p.vonbothmer@fnr.de Phone: 03843/6930-146 Fax: 03843/6930-102 We have additional partners from AU, CZ, DE, HU, SK
Do you agree to be considered as a Danube project?	yes

Project Proposal to the Priority Area 2

(to encourage more sustainable energy)

${\bf Please\ return\ to:\ Danube-energy@mfa.gov.hu}$

	BASIC PROJECT DATA		
Full project title	Good Neighbours for Sustainable Investments in Banat Region		
Short project title	SUSBANAT		
Project website	Not Applicable		
Project description	By the assistance of the current project proposal BTC EGTC intends to make a step toward the implementation of overall EU2020 goals by launching energetic investments in close cooperation with member municipalities by setting up a joint Energy Agency. Targeted development sectors: • Enhancing energy efficiency (EE) and renewable energy sources (RES) in existing buildings, • Energy efficient street-lightening. In the framework of SUSBANAT project 34 investments are developed and launched as a final result with prepared joint Energy Monitoring System that contributes to the conscious energy management in a cross-border context.		
Objective(s) of the project	 The strategic objectives of the project are: Renovated and more efficient public buildings with wider use of renewable energy sources and street lightening systems in the target region Increased knowledge concerning solutions to decrease energy consumption and CO2 emission To set up transnational institutional capacity for the development and management of energetic investments and enhancing energy independency of the target region 		
Planned project activities including deadlines or duration	 Management and coordination (36 months) Involvement of stakeholders (36 months) Standard energy audits on the sights (10 months) Technical designs and permits (12 months) Elaboration of joint feasibility with EMS system tool (19 months) Innovative financial tools, financial engineering (30 months) 		

7. Communication (36 months) 8. IEE common dissemination activities (2 months) SUSBANAT project contributes to the promotion of energy efficiency and Need and added value use of renewable energy in buildings and heating systems including Danube Region for combined heat and power facilities as required by Energy Performance of **Strategy** the Buildings Directive and Renewable Energy Directive. The project proposal has **high replication potential** in the Danube Region, because it provides a best practice how to prepare and implement energetic investments in a transnational cooperation from a bottom-up approach in the target region. Transboundary impact The EGTC enables the municipalities to set up a transnational joint structure that provides adequate expertise and technical assistance with low added cost per town, that stimulates and accelerates their investments that would be too complicated and complex for individual members. MLEI Project Development Assistance contributes to the EGTC to set up a joint expert and project team in the framework of the Energy Agency that assists to exceed these capacity burdens both in financing and expertise. The transboundary impact is that SUSBANAT project harmonizes energetic investments with joint and standardized methodology and technical approach, and elaborates a joint Energy Management System as an IT tool that manages and monitors energy consumption in both sides of the border. Connection with other The project relies on the achieved results of project Coop-Banat project(s)? (HURO/1001/083/212) where Integrated Regional Strategy of Banat-Triplex Confinium EGTC has been elaborated. The Strategy identified Energy as one of the three main pillars of the cooperation, the current proposal makes a step forward for physical implementation of existing energetic development needs.

Relevant PA2 Action(s) from the Danube Region Strategy's Action Plan (please click to the link):

- To extend the use of biomass (e.g. wood, waste), solar energy, geothermal, hydropower and wind power
- To implement the National Renewable Energy Action Plans and to prepare a Danube Region Renewable Energy Action Plan
- To explore the possibility to have an increased energy production originating from local renewable energy sources to increase the energy autonomy
- To promote energy efficiency and use of renewable energy in buildings and heating systems including by renovating district heating and combined heat and power facilities as required

by Energy Performance of the Buildings Directive and Renewable Energy Directive				
STATUS AND TIME FRAME				
Current project phase:	Definition (e.g. project idea, abstract)			
(please tick a box)	x Preparation (e.g. proj	ject proposal,	feasibility st	udy)
	☐ Implementation			
	☐ Completion			
Start date	01/05/2014	End date		30/04/2017
Notes	Project start date depend award decision. The plant		•	d with EACI in case of ect is 36 month.
	PROJECT MAI	NAGEMEN	T	
Project leader	BANAT-TRIPLEX COP			AN GROUPING OF
Contact person	Name		Helga Szécs	i
	Organisation		BTC EGTC	
	Address 6782 Mórahalom, Mille 2. (HUNGARY)		nalom, Milleniumi sétány RY)	
	Phone +36 20 406-91-21			91-21
	E-mail		info@btc-eg	gtc.eu
	Website:		www.btcegt	<u>c.eu</u>
Project partners (including country code, address, email, phone)	Not Applicable: BTC EGTC as a territorial grouping itself consists of 37 Hungarian, 37 Romanian and 8 Serbian associate municipalities from Banat region			
	FINAN	CING		
Available: (please tick a box)	☐ Yes 🗓	Partly	_ I	No
Total budget:	400.000 EUR			
Source(s) and amount (potential sources for	☐ National/regional fur	nds:		
project ideas):	EU funds:		300.000 EU	R
(please tick a box and provide further info	☐ IFI loans:			
	Private funds: Venture capital	equity and		

	X Other: own-co	ontribution	100.000 EUR			
EUSDR EMBEDDING						
Relation to other Priority Areas of the Danube Region Strategy: (please tick a box)	PA1b: To imp PA03: To pro PA04: To rest PA05: To man PA06: To pro soils PA07: To de and information PA08: To sup development PA09: To invo X PA10: To step	prove mobility and in prove mobility and not mote culture and tout tore and maintain the mage environmental eserve biodiversity, evelop the knowledgen technologies poort the competitive est in people and skip up institutional capork together to promote prove mobility and in the provention of the competition of the c	nultimodality – Roa arism, people and people quality of waters risks landscapes and the ge society through reveness of enterprises	d, rail and air links cople contacts quality of air and research, education s, including cluster		
Do you agree to be considered as a Danube project?	X YES ☐ NO					
REMARKS (will be filled by the Priority Area Coordinators)						
Decision of the PA2 Steering Group			DATE:			
Date of last update						

Project Proposal to the Priority Area 2

(to encourage more sustainable energy)

Please return to: Danube-energy@mfa.gov.hu

BASIC PROJECT DATA				
Full project title	South Hungarian Enhanced Geothermal System (EGS) Demonstration Project			
Short project title	SHEGS Demonstration Project			
Project website	n/a			
Project description	The project will develop an Enhanced Engineered Geothermal System (EGS) reservoir in the south part of Hungary and build a geothermal power plant to produce 11.8 MW of electric power from the reservoir averaged over a period of 20 years, with 74.066 MWh/year of energy generated annually. The plant will be of the ORC (Organic Rankine Cycle) type. The geothermal reservoir will be created within crystalline basement rocks in a compressional state of stress in the south part of Hungary. The host formation is a high-temperature, low-permeability granite formation, typical for the whole Pannonian Basin in the southeastern part of Central Europe. The new reservoir will be created through a combination of hydraulic, thermal and chemical processes, mainly hydrofracturing, within a volume of rock that is hot, tectonically stressed, and fractured. This will cause fractures to open, extend, and interconnect and create a conductive fracture network that forms reservoir similar to a natural geothermal reservoir. The estimated size of the reservoir is 3 km3.			
Objective(s) of the project	The key objective of the project is to provide an green and sustainable alternative to the use of fossil fuels for energy production (power and heat) in the targeted area. Secondary planned objectives include strengthening the local community and social development by providing opportunities in the field of employment, knowledge transfer and potential for industry.			

Planned project activities including deadlines or duration

Planned key project activities include the following milestones:

- Feasibility Study (ongoing)
- Feed Process
- Detailed Design
- Licensing
- Procurement / Contracting
- Execution
- Testing of Wells
- Testing of Power Plant
- Commissioning
- Occupancy Process
- Entry into operation (December 2012)

The Project Execution plan is currently under development and is scheduled for issue in December 2012.

The notification to proceed and transfer the project into the Feed and detailed design processes is pending award decision from the European Investment Bank's NER300 initiative.

Need and added value for Danube Region Strategy

Enhanced Geothermal Systems have enormous potential to be an important contributor to the energy portfolio of the Danube Region as a source of clean and renewable energy, and thereby facilitating the EU goal of 2020 that 20% of the energy use to be from sustainable renewable energy sources. Geothermal systems have the ability to produce energy consistently and around the clock. Some key benefits of this technology can be listed as follows:

- Expanded Resources: EGS will increase energy production, electricity and heat, by producing geothermal energy in new environments and at various depths.
- Increased Productivity of geothermal resources
- Extended Lifetime of geothermal resources
- Siting Flexibility
- Sizing Flexibility

The environmental advantages are numerous, e.g.:

- EGS, like traditional geothermal energy systems, constitutes a source of electricity that is almost entirely free of greenhouse gas (GHG) emissions.
- Unlike intermittent renewable energy technologies, such as wind and solar power, EGS can more easily replace carbon-intensive coal-

fired power plants. Replacing the generation from a typical 500 MW coal-fired power plant with electricity from geothermal plants would avoid about 3 million metric tons of CO2 emissions per One of the greatest environmental benefits of EGS comes from its ability to satisfy base load electricity demand. Enhanced geothermal systems, when recharged, can provide near continuous output, making the technology a renewable, zero-carbon option for supplying base load electricity generation. Secondary benefits EGS on community and social development include, e.g.: Potential to create high-paying, long-term jobs in the sector. Attract industrial entities to the area that benefit from clean geothermal energy in the form of using medium hot water for horticultural industry, thus creating gender equality job opportunities for the local and nearby communities. Drilling of deep geothermal wells enables extensive research within the field of geology and geophysics with in deeper lying geological formation where usually limited information is available. Hi-tech power plant where water is circulated down to 4-6 km depth to extract the heat from the rock formation and bring it to the surface for power and heat production is a unique opportunity within the field of education in natural sciences. **Transboundary** The Project is an innovative demonstration project with a strong R&D impact element that promotes opportunities for geothermal utilization and knowledge transfer in the field of sustainable green energy utilization in the whole area marked by the Pannonian Basin, i.e. not only in the actual project location of Hungary, but stretching to the greater part of the south Danube Region within the boundaries of Slovakia, Hungary, Slovenia, Croatia, the Republic of Serbia and western Romania. The results of the project may have spurring impact on the development of green energy, namely geothermal utilization in all the listed areas in the Danube Region, with secondary benefits and impacts as listed above affecting even other adjacent areas. Connection with other

The ongoing project preparations include investigation on the

project(s) ?	feasibility of connecting the project with near-site industrial and horticultural development projects.			
	norticultural development projects.			
Relevant PA2 Action(s) link):	from the Danube Region	on <u>Strategy</u>	's Action Pl	an (please click to the
				
_				
2) To Energy efficiency and rer	Encourage newable energy:	more	sustain	able energy;
 Action - "To extend hydropower and waste or a contract of the con	end the use of biomass (e	.g. wood, w	aste), solar e	energy, geothermal,
	ore the possibility to have able energy sources to inc			
heating systems in	note energy efficiency ar ncluding by renovating d red by Energy Performan	istrict heatin	g and comb	ined heat and power
	courage the Energy Com Renewable Energy Dire	•	ibers/ observ	vers in adopting and
	STATUS AND T	IME FRAN	ME	
Current project phase:	☐ Definition (e.g. pro	oject idea, ab	ostract)	
-	X Preparation (e.g. pr	roject propos	sal, feasibili	ty study)
(please tick a box)	☐ Implementation			
	☐ Completion			
Start date	May 2011	End date		December 2016
Notes				
	PROJECT MA	NAGEMEN	T	
Project leader	EGS Hungary Consor	tium		
Contact person	Name Sig. Lárus Hólm			
	Organisation		Mannvit on behalf of Consortium	Kft. of the "EGS Hungary"
	Address		Budafoki Hungary	út 56., 1117 Budapest,
	Phone		+36-1-464-	-7430

	E-mail	larush@mannvit.is			
	Website:	www.mannvit.hu/mannvit.com			
Project partners (including country code, address, email, phone)	Hungarian Ministry for Development of Green Sustainable Development Class Attn. Zsanett Ducsai-Oláh 44-50 Fő street H-1011 Budapest Tel: +36-1-795-35-08 E-mail: peter.vedres@nfm.gov.hu	-			
	EU-FIRE attn. Mr Kovács, Péter	Kft.			
	18. III./4. Sze 1137 Budapest	ent István krt.			
	Telefon:+36 1 238 0816				
	Fax: +36 1 238 0817				
	E-mail address: <u>peter.kovacs@eu-f</u>	<u>ïre.hu</u>			
	FINANCING				
Available: (please tick a box)	☐ Yes X Partly	□ No			
Total budget:	EUR 116.323.000				
Source(s) and amount (potential sources for	X National/regional funds:	EUR 39.295.008-			
project ideas):	X EU funds:	EUR 42.120.000			
(please tick a box and provide further info	☐ IFI loans:EBRD	Has shown interest in a letter to participate up to 35% which will decrease need for venture capital			
	Private funds: equity and Venture capital	EUR 23.055.829			
	Other:	EUR 11.852.163			
EUSDR EMBEDDING					

Relation to other Priority Areas of the Danube Region		PA1a: To waterways	o improve mo	bility and intermo	dality of inland
Strategy:		PA1b: To in air links	mprove mobility	y and multimodality	- Road, rail and
(please tick a box)		PA03: To promote culture and tourism, people and people contacts			
		PA04: To res	store and mainta	ain the quality of wat	ters
		PA05: To ma	anage environm	ental risks	
	X	PA06: To prand soils	reserve biodiver	rsity, landscapes and	the quality of air
	X		develop the kell information te	cnowledge society t chnologies	hrough research,
	X	PA08: To support the competitiveness of enterprises, including cluster development			
	X	$\overline{\mathbf{X}}$ PA09: To invest in people and skills			
		PA10: To step up institutional capacity and cooperation			
		PA11: To work together to promote security and tackle organised			
		and serious c	rime		
Do you agree to be considered as a Danube project?	l	YES NO			
REMARKS (will be filled by the Priority Area Coordinators)					
Decision of the PA2 Steering Group				DATE:	
Date of last update					

Project Proposal to the Priority Area 2

(to encourage more sustainable energy)

BASIC PROJECT DATA			
Full project title	Energy Performance Contracting in the Danube Region		
Short project title	EPCDR		
Project website	n/a		
Project description	During an international workshop on Energy Contracting in the Danube Region organised in December 2012 in Baden-Württemberg, barriers that are hindering the development of energy efficiency services where identified and first recommendations how to overcome these barriers were made.		
Objective(s) of the project	Main objective of this project is to overcome existing barriers for the implementation of ESCO models in the partner countries in order to support the establishment and sustainable growth of a market for sustainable energy services in the whole Danube region.		
Planned project activities including deadlines or duration	the establishment and sustainable growth of a market for sustainable energy		
	 T4.5 Review and Updates T4.6 EPC Market Impact Monitoring WP5: Training of Facilitators T5.1 Training Needs Assessment 		

	 T5.2 Design of Training Courses and Development of
	Curricula
	 T5.3 Training of Trainers
	 T5.4 Pilot Training Courses
	 T5.5 Replication and Institutionalisation of Training
	Courses
	 T5.6 Training Impact Monitoring and Update of Training
	Needs Assessment
	 T5.7 Transfer of the EPCDR Training Management
	WP6: EPC Project Development and Demonstration
	 T6.1 Assessment of the Best Practices
	 T6.2 Adaptation of Models and Concepts
	 T6.3 Establishment of Project Partnerships
	o T6.4 Project Design
	 T6.5 Project Implementation,
	 T6.6 Documentation of new Best Practices
	 T6.7 Replication and Dissemination
	WP7: Communication
	o T7.1 Exchange of information and expertise with other EU
	initiatives promoting EPC
	o T7.2 EPCDR Newsletters
	 T7.3 Annual EPCDR Conferences
	WP8: IEE Common Dissemination Activities
Need and added value	The Danube Region has a high potential for improvement in energy
for Danube Region	efficiency, e.g. in public and residential buildings and district heating, as
Strategy	well as in combined heat and power facilities.
<i>-</i>	1
Transboundary impact	Some countries have already built up distinctive know-how regarding
Transboundary impact	Some countries have already built up distinctive know-how regarding energy efficient technologies and related services and obligations, which
Transboundary impact	
Transboundary impact	energy efficient technologies and related services and obligations, which
Transboundary impact	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order
Connection with other	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order
·	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region.
Connection with other	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region.
Connection with other project(s) ?	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a
Connection with other project(s) ?	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region.
Connection with other project(s) ? Relevant PA2 Action(s) fr	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a com the Danube Region Strategy's Action Plan (please click to the link):
Connection with other project(s) ?	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a com the Danube Region Strategy's Action Plan (please click to the link):
Connection with other project(s)? Relevant PA2 Action(s) fr 2) To Encourage more sust	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a rom the Danube Region Strategy's Action Plan (please click to the link): ainable energy;
Connection with other project(s)? Relevant PA2 Action(s) fr 2) To Encourage more sust Action 14 "To pr	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a rom the Danube Region Strategy's Action Plan (please click to the link): ainable energy; romote energy efficiency and use of renewable energy in buildings and heating
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Connection with other project(s)? Relevant PA2 Action(s) fr 2) To Encourage more sust • Action 14 "To prosystems including by required by Energy • Action 17 "To proper sustems in the sustems	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a rom the Danube Region Strategy's Action Plan (please click to the link): ainable energy; romote energy efficiency and use of renewable energy in buildings and heating by renovating district heating and combined heat and power facilities as a Performance of the Buildings Directive and Renewable Energy Directive". rovide local authorities, businesses and citizens in the Danube Region
Connection with other project(s)? Relevant PA2 Action(s) fr 2) To Encourage more sust • Action 14 "To prosystems including by required by Energy • Action 17 "To proper sustems in the sustems	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a rom the Danube Region Strategy's Action Plan (please click to the link): ainable energy; romote energy efficiency and use of renewable energy in buildings and heating by renovating district heating and combined heat and power facilities as a Performance of the Buildings Directive and Renewable Energy Directive".
Connection with other project(s)? Relevant PA2 Action(s) fr 2) To Encourage more sust • Action 14 "To prosystems including by required by Energy • Action 17 "To proper sustems in the sustems	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a rom the Danube Region Strategy's Action Plan (please click to the link): ainable energy; romote energy efficiency and use of renewable energy in buildings and heating by renovating district heating and combined heat and power facilities as a Performance of the Buildings Directive and Renewable Energy Directive". rovide local authorities, businesses and citizens in the Danube Region
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Connection with other project(s)? Relevant PA2 Action(s) fr 2) To Encourage more sust • Action 14 "To pr systems including l required by Energy • Action 17 "To pr consultative support	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a rom the Danube Region Strategy's Action Plan (please click to the link): ainable energy; romote energy efficiency and use of renewable energy in buildings and heating by renovating district heating and combined heat and power facilities as Performance of the Buildings Directive and Renewable Energy Directive". rovide local authorities, businesses and citizens in the Danube Region rt with issues relating to mitigation of climate change and energy efficiency".
Connection with other project(s)? Relevant PA2 Action(s) from 2) To Encourage more sust Action 14 "To prosystems including by required by Energy Action 17 "To proconsultative support	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a rom the Danube Region Strategy's Action Plan (please click to the link): ainable energy; romote energy efficiency and use of renewable energy in buildings and heating by renovating district heating and combined heat and power facilities as a Performance of the Buildings Directive and Renewable Energy Directive". rovide local authorities, businesses and citizens in the Danube Region rt with issues relating to mitigation of climate change and energy efficiency". STATUS AND TIME FRAME
Connection with other project(s)? Relevant PA2 Action(s) fr 2) To Encourage more sust • Action 14 "To pr systems including l required by Energy • Action 17 "To pr consultative support	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a rom the Danube Region Strategy's Action Plan (please click to the link): ainable energy; romote energy efficiency and use of renewable energy in buildings and heating by renovating district heating and combined heat and power facilities as a Performance of the Buildings Directive and Renewable Energy Directive". rovide local authorities, businesses and citizens in the Danube Region rut with issues relating to mitigation of climate change and energy efficiency". STATUS AND TIME FRAME Definition (e.g. project idea, abstract) Preparation (e.g. project proposal, feasibility study)
Connection with other project(s)? Relevant PA2 Action(s) fr 2) To Encourage more sust • Action 14 "To pr systems including l required by Energy • Action 17 "To pr consultative support	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a rom the Danube Region Strategy's Action Plan (please click to the link): ainable energy; romote energy efficiency and use of renewable energy in buildings and heating by renovating district heating and combined heat and power facilities as a Performance of the Buildings Directive and Renewable Energy Directive". rovide local authorities, businesses and citizens in the Danube Region ret with issues relating to mitigation of climate change and energy efficiency". STATUS AND TIME FRAME Definition (e.g. project idea, abstract)
Connection with other project(s)? Relevant PA2 Action(s) fr 2) To Encourage more sust • Action 14 "To pr systems including l required by Energy • Action 17 "To pr consultative support	energy efficient technologies and related services and obligations, which could now be usefully promoted, adapted and spread in the Region in order to strengthen the uptake of EPC in the Danube Region. n/a rom the Danube Region Strategy's Action Plan (please click to the link): ainable energy; romote energy efficiency and use of renewable energy in buildings and heating by renovating district heating and combined heat and power facilities as a Performance of the Buildings Directive and Renewable Energy Directive". rovide local authorities, businesses and citizens in the Danube Region rut with issues relating to mitigation of climate change and energy efficiency". STATUS AND TIME FRAME Definition (e.g. project idea, abstract) Preparation (e.g. project proposal, feasibility study)

Start date	Beginning of 2014	End date		Beginning of 2017	
Notes					
PROJECT MANAGEMENT					
Project leader	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH				
Contact person	Name		Tobias Seib	erlich	
	Organisation		Deutsche Internation (GIZ) Gmb		
	Address		Büro Stuttga	art:	
			Königstraße	: 1B	
			70173 Stutts	gart	
			Deutschland	I	
	Phone +49 (0)711 22754-0				
	E-mail		tobias.seiberlich@giz.de		
	Website:		www.giz.de		
Project partners (including country code, address, email, phone)	 State Office Baden-Württemberg KEA - Klimaschutz- und Energieagentur Baden-Württemberg GmbH / Climate protection and energy agency Baden-Württemberg Steinbeis-Europa-Zentrum 				
FINANCING					
Available: (please tick a box)	☐ Yes 🗓	Partly	I	No	
Total budget:	1.4 Million Euro				
Source(s) and amount (potential sources for	🗴 EU funds:		1.05 Million	n Euro	
project ideas): (please tick a box and provide further info	X Project partners:		0.35 Million	ı Euro	
EUSDR EMBEDDING					
Relation to other Priority Areas of the Danube Region Strategy:	 □ PA1a: To improve mobility and intermodality of inland waterways □ PA1b: To improve mobility and multimodality – Road, rail and air links □ PA03: To promote culture and tourism, people and people contacts 				
(please tick a box)	PA04: To restore and maintain the quality of waters				

	PA05: To m	PA05: To manage environmental risks			
	PA06: To p	= 11100. To proper to enough enough of une quantity of unit unite			
		PA07: To develop the knowledge society through research, education and information technologies			
		PA08: To support the competitiveness of enterprises, including cluster development			
	X PA09: To in	PA09: To invest in people and skills			
	X PA10: To st	PA10: To step up institutional capacity and cooperation			
		PA11: To work together to promote security and tackle organised and serious crime			
Do you agree to be considered as a Danube project?	▼ YES □ NO				
REMARKS (will be filled by the Priority Area Coordinators)					
Decision of the PA2 Steering Group			DATE:		
Date of last update					