

Project Fiche – IPA Annual Action Programme 2007 for Bosnia and Herzegovina

Support to Bosnia and Herzegovina (BiH) to meet the requirements of the Energy Community Treaty for South East Europe and public education and awareness campaign in Energy Community Treaty obligations, energy efficiency and sector reform regarding power and gas.

1. Basic information

1.1 CRIS Number:

1.2 Title:

Support to Bosnia and Herzegovina (BiH) to meet the requirements of the Energy Community Treaty for South East Europe and public education and awareness campaign in Energy Community Treaty obligations, energy efficiency and sector reform regarding power and gas.

1.3 ELARG Statistical code: 03.15

1.4 Location: Bosnia and Herzegovina

Implementing arrangements:

1.5 Contracting Authority (EC)

1.6 Implementing Agency: EC Delegation

1.7 Beneficiary (including details of project manager):

The beneficiaries of the project will be at two levels, State and Entity:

At the State level, the following organisations will be included:

Ministry of Foreign Trade and Economic Relations (MoFTER) as the lead beneficiary, bearing in mind its responsibility for development and coordination of energy policy.

The project manager will be: *INFORMATION TO BE PROVIDED BY MOFTER*

- Transmission System Operator (TRANSCO)
- Independent System Operator (ISO)
- State Energy Regulatory Commission (SERC)

At the Entity level, the following organisations will be included:

- Ministry of Energy, Mining and Industry of FBiH (MEMI) – as the entity level governments have key responsibilities in terms of ownership of energy facilities and implementation of energy policy they are key beneficiaries
- Ministry of Economy, Energy and Development of RS (MEED) - as the entity level governments have key responsibilities in terms of ownership of energy facilities and implementation of energy policy they are key beneficiaries
- Federal Energy Regulatory Commission (FERC)
- Regulatory Commission for Electricity of RS (REERS)
- The three power utility companies currently responsible for generation and distribution: Elektroprivreda BiH, Elektroprivreda RS and Elektroprivreda HZ HB.

- The gas utility companies responsible for transmission and distribution, currently the companies operating in Sarajevo, Lukovica, Visoko and Zvornik.

A significant aspect of the project will be the overall coordination, cooperation and involvement of the above entities along with consumer representative bodies as they emerge.

1.8 Overall cost: €2.5m

1.9 EU contribution: €2.5m

1.10 Final date for contracting: N+2

1.11 Final date for execution of contracts: N+4

1.12 Final date for disbursements: N+5

2. Overall Objective and Project Purpose

2.1 Overall Objective:

Assist in the continuing reform and development of the energy sector in BiH, which creates a single country wide energy market, efficient, regulated and integrated with regional markets of South Eastern Europe and the European Union, meeting obligations undertaken in relation to the Energy Community Treaty, as well as other international obligations.

2.2 Project purpose:

2.2.1 Project purpose 1:

In relation to the power sector, the project will assist BiH in meeting the requirements of the Energy Community Treaty for South East Europe (EnC) and other international obligations; and assist significantly in the reform of the power sector, specifically in relation to unbundling of generation and distribution as per the existing Restructuring Action Plans, which involves the formation of new generation and distribution companies

2.2.2 Project purpose 2:

In relation to the gas sector, the project will assist BiH in meeting the requirements of the Energy Community Treaty for South East Europe (EnC) and other international obligations; and assist in the reform of the gas sector, specifically in relation to the formation of a transmission system operator (TSO) and a number distribution system operators (DSO), based on the existing sector organisation.

2.2.3 Project purpose 3:

Across the entire Energy sector the project will design and plan and assist implementation of the implement awareness and educational programmes: directed at key energy sector stakeholders, including ministries, government agencies, utilities, energy consumers and the public at large; to provide information regarding the Energy Community Treaty for South East Europe (EnC) and relevant EU Directives (i.e. 30, 54, 55 and 70¹) and increase

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¹ Directive 54 relates to electricity. Directive 55 relates to gas. Directive 77 relates to renewables. Directive 30 relates to biofuels.

understanding of upcoming changes and reduce resistance to change, particularly for those working within the sector; and to address issues of energy efficiency, renewables and environmental sustainability, particularly in the public domain, including schools.

2.3 *Link with AP/NPAA / EP/ SAA*

The *EC Country Strategy Paper* for BiH points to need to help BiH authorities to build the capacity of BiH's public administration, to build a reliable counterpart for the EC in relation to all aspects of the SAP, including Community assistance, to develop BiH's capacity to ensure coherence between government policy and legislation and SAP obligations, notably regarding legal approximation, and to help BiH improve coordination amongst and between the State institutions and Entities.

The *European Partnership of BiH* gives short and medium term priorities for, *inter alia*, the energy sector,

Short term priorities in the energy field are (i) to start implementing the commitments undertaken within the framework of the EnC Treaty; (ii) develop and adopt a comprehensive Energy Strategy; (iii) pursue reforms and liberalisation of the energy sector; and (iv) ensure that the ISO and TRANSCO become rapidly fully operational, each as a single State-level company

The medium term priorities in the energy field are to (i) implement the entities' action plans for the restructuring of the energy sector; (ii) consolidate the State and Entity Energy Regulators; (iii) take steps to achieve concrete progress in relation to the gas sector, *inter alia*, by developing a gas strategy, establishing a system operator (TSO) and regulator and developing the internal gas market.

This project will focus on the above requirements, though it is noted that the degree of progress in each area needs to be closely monitored to ensure timely and appropriate action by this project.

BiH also has obligations related to this project under the *Energy Community for South East Europe (EnC) Treaty*. BiH also has commitments under the *Energy Charter Treaty* and the *Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA)*. These are all international agreements, which thus supersede national law. Improving energy efficiency would also contribute to meeting obligations undertaken in relation to environmental agreements, such as Kyoto.

The project thus addresses key priorities identified in the European Partnership and Country Strategy, as well as assisting the country to meet obligations undertaken under various international agreements, key among which is the Energy Community Treaty.

2.4 *Link with MIPD*

The energy sector is stated as a key priority for the MIPD. For ease of reading direct quotes from MIPD are in *italic*.

The start of the implementation of the first IPA 2007 programme is expected in the beginning of the year 2008. For the purpose of the prioritisation of the assistance it is assumed that BiH has been able to fulfil most of the requirements of the short-term priorities before the implementation of the first IPA programme starts. The short term priorities have been addressed in the CARDS action programme 2006. Thus, the present IPA MIPD concentrates on the medium term requirements of the European Partnership. Exceptions to this rule are the key

priorities identified under short term priorities in the European Partnership. Despite their particular importance for the assessment of Bosnia and Herzegovina's progress in the reform agenda, progress in the areas of police reform, public broadcasting legislation, strengthening of state-level institutions, public administration reform and in the creation of a real internal market is slow or even stalled.

The MiPD notes (section 1.2) that *'taking into consideration the importance of energy to industrial growth and overall economic development, assistance to support the energy sector will be a further priority'.*

The main areas of intervention, priorities and objectives of the MiPD that relate to energy are (under section 2.2.3.1): *Supporting the development of strategies and policies in order to establish sectoral policies and a regulatory framework compatible with European standards e.g. quality infrastructure, competition, agriculture, environment, energy, trade, SME development, regional economic development, health, information society, justice, employment, labour market and human resource development (HRD), etc.*

Expected results and time-frame (under section 2.2.3.2) are: *The reform of the energy sector will be continued and a comprehensive energy strategy will be adopted and under implementation. Bosnia and Herzegovina will meet commitments undertaken in the framework of the EnC Treaty and EC directive requirements.*

Programmes to be implemented in pursuit of these objectives (section 2.2.3.3) are: *In the energy sector, the restructuring and the integration of the Transmission Company for Electricity (TRANSCO) will be supported, as well as the unbundling and separation of the power generation and distribution and the thereto related capacity building of generation and distribution companies. Capacity building assistance will be provided to the Energy Department of MoFTER, the State Energy Regulator and the Gas Transmission Operator. Further assistance will be granted for the gas sector reform. Bosnia and Herzegovina will be supported in its efforts to meet the obligations undertaken as part of the EnC Treaty.*

The design of this project addresses these issues. While many EnC Treaty requirements are to be met by July 2007, twelve months after the Treaty came into force, many will still be outstanding, especially in the areas of customer protection, social policy, environmental obligations directly linked to the energy sector, energy efficiency and introduction of biofuels. Coordination of policies at the State and Entity levels are required to meet these requirements.

The project therefore strongly corresponds to the MiPD.

2.5 Link with National Development Plan –PRSP(Poverty Reduction Strategy Plan)

A key document is the *Poverty Reduction Strategy Plan (PRSP)*.

Meeting the preconditions for viable and equitable economic development of all parts of Bosnia and Herzegovina, poverty reduction by 20%, and acceleration of integration in the EU, as well as signing and implementation of the Stabilisation and Association Agreement are the objectives of the development of Bosnia and Herzegovina.

Energy holds the priority position in the accomplishment of these objectives.

Energy sector reform with the purpose of integrating of BiH in the single energy market of the South-East European countries, as well as approximation to the EU, lead BiH to viable economic development.

Energy sector reform is followed by realisation of the activities from the list of priorities of the European Partnership. Therewith, the state clearly defined energy as the key segment of the development of this country.

The PRSP plan, which is the overall blueprint for BiH, sets out the following goals of the energy sector reform as it pertains to poverty alleviation. The PRSP clearly links the performance of the energy sector to future improvements of living standards in BiH. The major goals of the energy sector reform as stated in the PRSP are:

- *stimulate national and international investment;*
- *ensure a more reliable supply of energy, in accordance with defined quality standards and at lowest prices;*
- *join the international market through a single market of electric power and gas in BiH;*
- *enhance cost-effectiveness and rational use of energy sources and improve energy efficiency;*
- *implement liberalisation and introduce competition and transparency;*
- *ensure protection of environment in accordance with national and international standards;*
- *protect interests of the system users;*
- *increase the use of renewable energy sources;*
- *meets the conditions of the European Energy Charter Agreement, as well as other international contracts and agreements.*

The project is thus in line with both the Mid-Term Development Plan and the PRSP.

2.6 Reference to National / Sectoral investment Plans

Pursuant to the Law Establishing ISO and the Grid Code, ISO BiH has developed and submitted to SERC the *Indicative Generation Development Plan for the period 2007-2016*, drawn on the basis of available data in the power sector.

It should be noted that BiH, at the moment, does not have a long-term energy development

Strategy, though this is now being addressed by the EU funded TASED project. Progress to date indicates that closer cooperation is required with all key stakeholders in the power sector and the bodies responsible for planning in Bosnia and Herzegovina, in the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS), in order to make the next Indicative Plan for the period 2008 – 2017 as realistic as possible and acceptable to the various parties involved. The indicative generation plan also serves as the basis for development of the *Long-Term Transmission Network Development Plan*, based on which specific annual and multi-annual investment plans are made.

It is noted that the *Study on Energy (funded through a World Bank loan under Power III)* on the development of the Energy sector of BiH started in November 2006. This Study will provide a good basis for the Energy Balance Projection until 2020 and the investment plans to cover future needs. The Study will cover all the energy sub-sectors; electricity, gas, coal, oil and renewables. The Study is expected to provide recommendations for efficient integration of BiH into the energy sector of the EU. The Study will also serve as the basis for development of the Energy Strategy of BiH, which shall be realised through the EC CARDS

2005 (TASED) Project that started in February, 2006 and due to be completed by February 2008.

3. Description of Project

3.1 Background and justification:

Energy is a key sector for the BiH economy, particularly in terms of attracting foreign direct investment (FDI) and for export. Furthermore, as a cost to business it has significant employment implications as well as affecting the overall development and competitiveness of BiH enterprises. Currently electricity is the key element of the energy sector, apart from fuel for transportation. Gas is less significant but expected to expand.

BiH ratified the Energy Community Treaty in July 2006, and assumed a series of obligations by so doing. This is a core element of the legal and policy environment. BiH authorities are stretched in this area and require support. Reform of the energy sector along the lines described above and creation of unified energy market is critical to supporting both the BiH link-up with energy markets in SEE and EU, and sustainable economic development in BiH.

An unbundled energy sector with competitive markets and transmission linkages to the SEE and EU could, over time, provide cheaper energy inputs for domestic industry, thereby enabling BiH companies to become more competitive. In addition, the creation of a SEE market with connections to BiH provides an important export opportunity for BiH.

Institutionally, at State level there is an Energy Department within MoFTER, and each Entity also has a Ministry responsible for energy. An overall energy strategy for BiH is under preparation, funded by the EU. For more detailed information regarding BiH energy institutions please refer to Annex 5.

Key elements of the domestic legal and policy environment regarding power are in place and include the State and Entity electricity laws and the Entity Restructuring Plans already adopted by the respective parliaments. Power transmission is already unbundled and the Independent System Operator and Transco are operational. Independent regulatory commissions for power are established and operational. Power generation and distribution, which is currently within the three power utilities, needs to be unbundled; allocating the assets, liabilities and staff to the new companies and corporatised. Up to fifteen companies in generation and distribution are foreseen in the Action Plans approved at the Entity level. This requires considerable effort. It is proposed that this project provide a template for the process, addressing such issues as structure, corporate governance and internal regulations and rule books. This will have to be carried out in cooperation with the Entities who are the owners of the assets and the regulators.

Understanding of the need for and process of energy reform, the significance of the Energy Community Treaty and the Energy Charter Treaty is weak in both the sector staff and the consuming public at large. The project will address this issue at two levels; (i) within the utilities as part of a management transition strategy and (ii) for domestic consumers through a publicity campaign that may also address issues of energy efficiency and conservation, and renewables. Experience elsewhere indicates that publicity through school programmes can be most effective. This needs to be addressed.

This project would be a continuation of ongoing technical assistance. Current EC funded projects support the power transmission company (Transco) and BiH in preparing an Energy Strategy and in responding to the first wave of Energy Community Treaty requirements. Continuity will be important to ensure BiH is able to satisfy Energy Community Treaty

requirements and optimally manage transition in this key sector. Other donors have been and remain involved in the sector and are looking for leadership from the EC. Close coordination with other donors has been established with other donors in the sector, is imperative and is envisioned to continue. Please refer to Annex 5 for information regarding donor involvement in the sector.

Terms of reference for the future IPA 2007 programme will be ready prior to the signing of the Financing Agreement.

3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)

This project, as the continuation of EC projects for energy sector of BiH and in cooperation with other donors and the IFI, will result in functionally separate energy structure in electricity and gas. It will be compatible with the EnC treaty requirements, which calls for competitive markets nationally, which are linked with the SEE and the EU markets. In time this will ensure competitive energy available for local industry, and provide reliable and safe supply of energy products. Such a reformed and restructured sector creates the required climate for investment in both the electricity and gas sectors and improves environmental performance and sustainable development of the sector through implementation of energy efficiency and use of renewable energy.

The project also addresses social and educational issues, as required by the EnC Treaty and various EU Directives. This is achieved by improved public consultation and educational programmes aimed at the public. The emphasis is on awareness of the changes taking place in the energy sector and the need for efficiency improvements. The same campaigns may also be used for improving the way the public at large deals with the sector, especially in relation to public hearings at the regulatory commissions. Other jurisdictions have shown the value of schools programmes in this context. Additionally, awareness and educational programmes should address internal energy sector stakeholders, such as ministries, government agencies, and utilities to provide information regarding the Energy Community Treaty for South East Europe (EnC) and relevant EU Directives (i.e. 30, 54, 55 and 70²) and increase understanding of upcoming changes and thus aim to reduce resistance to change, particularly for those working within the sector.

3.3 Results and measurable indicators:

Results 1 – 6 are the results that can be expected from the overall energy reform process and are dependent to some extent on the actions of others, including donors, IFI, and donor funded consultants. The success of the project will be assessed on the overall results. These results should be revisited periodically and changes made to reflect the actual situation on the ground. It is assumed at this stage that the key requirements of the EnC Treaty scheduled for July 2007 will already have been achieved or that considerable progress will have been made by the start of this project. Development of an energy efficiency action plan may be considered if appropriate.

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² Directive 54 relates to electricity. Directive 55 relates to gas. Directive 77 relates to renewables. Directive 30 relates to biofuels.

3.3.1 Result 1 (contributes to project purpose 1):

Separation of generation and distribution functions in the power sector. This requires that the two functions are separated functionally in an accounting and financial sense (i.e. regulatory reporting and accounts will be separated).

OVI: Power generation and distribution functionally separated by project end.

3.3.2 Result 2 (contributes to project purpose 1):

New generation and distribution companies formed and established as legal corporations, and operational. Each company is to be legally and financially separated and reporting separately to the appropriate regulator, compliant with EU Electricity Directive 54.

OVI: Generation and distribution companies formed and established as legal corporations, reporting separately to the regulator and compliant with Directive 54 by project end.

3.3.3 Result 3 (contributes to project purpose 1):

In the power sector, significant progress is made in meeting all EnC Treaty and EU directives: 54-Electricity; 30-Renewables; and 77-Biofuels.

OVI: Road maps from EnC Treaty indicate significant progress towards meeting EnC Treaty and, concomitantly, EU directives: 54-Electricity; 30-Renewables; and 77-Biofuels by project end.

3.3.4 Result 4 (contributes to project purpose 2)

Progress is made towards the establishment of a transmission system operator (TSO) for gas. This requires a state-wide TSO to be established for gas and involves determination of the ownership structure and putting in place management boards to operate the companies.

OVI: Gas TSO institutional and legal framework established, including ownership structure and management boards in place by project end.

OVI: Gas TSO formed and operational by project end.

3.3.5 Result 5 (contributes to project purpose 2):

Progress is made towards the establishment distribution gas companies (DSO), in accordance with the adopted law and compliant with the requirements of the EU Gas Directive 55.

OVI: Gas DSO institutional and legal framework established, including ownership structure and management boards in place, in line adopted law and Directive 55 by project end.

OVI: Gas DSO formed and operational by project end.

3.3.6 Result 6 (contributes to project purpose 2):

Gas is regulated in BiH in compliance with EnC Treaty requirements and Directive 55.

OVI: Gas sector is regulated in line with EnC Treaty and Directive 55 requirements by project end.

3.3.7 Result 7 (contributes to project purpose 3):

Key energy sector stakeholders, including Ministries, government agencies, regulators, and operating utilities, are informed regarding EnC Treaty and EU Directive requirements and are implementing those requirements. Consumers, especially smaller consumers and small and medium enterprises (SME), and the general public are made aware and informed. This addresses the issue what is happening in the sector and how changes affect them.

At the key stakeholder level (government and utilities) this involves awareness and implementation of the EnC Treaty and four key directives; 54 and 55 related to electricity and gas respectively, 30 related to biofuels and 77 related to renewables. Included are the issues that management and staff of the existing companies face as the various Treaty and Directive requirements are implemented and the new companies are formed. The purpose is to prepare management and staff for change, reducing anxieties and resistance at the working level. For the general public, including smaller consumers (i.e. domestic users, SMEs) this should include the implications for them of implementation of the Treaty and associated EU directives. Key areas are information about the changes in structure (who your supplier may be).

OVI: Baseline surveys at beginning and later stages indicate improved understanding of identified issues.

3.3.8 Result 8 (contributes to project purpose 3):

Improved awareness and practical understanding of energy efficiency and conservation issues (i.e. energy programmes, lighting, labelling etc.), renewables, consumer protection among smaller consumers (i.e. domestic users and SMEs) and the public at large, as well as among those responsible for developing and implementing energy efficiency and sustainable energy policies. To be possibly supplemented by grant funded, cost shared pilot projects to be used as concrete case studies for policy development and media promotion.

OVI: Baseline surveys at beginning and later stages indicate improved understanding of identified issues.

OVI: Analysis of before and after picture of policy related to identified issues indicates that policy thinking has developed and is better informed as a result of the project intervention.

3.4 *Activities:*

3.4.1 Project purpose 1

Activity 1.1:

Expert accounting and financial support to the process of separating the accounting and financial reporting of the generation and distribution functions of the existing utilities in the power sector through training and expert input. This includes support for regulatory filing.

Activity 1.2:

Expert management, financial and legal support to the process of creating the new generation and distribution companies, including support for board selection, management structure,

internal rules and regulations, regulatory compliance. This is expected to be in the form of templates and provided through training and expert input.

3.4.2 Project purpose 2

Activity 2.1:

Expert legal support to formulate and adopt legislation required in the gas sector. This activity is carried out in close cooperation with the existing EU support to the Regulator and the USAID funded project.

Activity 2.2:

Expert management, financial and legal support in the process of creating the Gas TSO, including support for board selection, management structure, internal rules and regulations, regulatory compliance. This is expected to be provided through training and expert input.

Activity 2.3:

Expert management, financial and legal support in the process of creating the Gas DSO (4); includes support for board selection, management structure, internal rules and regulations, regulatory compliance. This is expected to be provided through training and expert input.

3.4.3 Project purpose 3

Activity 3.1:

Design and assist in the implementation of an education and awareness programme regarding end-user energy efficiency issues and renewables, and the implications for BiH among the following audiences: those responsible for reform and management of the energy sector, and specifically for introducing, promoting and implementing energy efficiency policies and renewables at national, entity and regional level; end-users; and the general public.

Activity 3.2:

Design and assist in the implementation of an education and awareness campaign to raise awareness regarding the changes taking place in the energy sector. This includes the EnC Treaty and Directives and includes energy efficiency, conservation, biofuels and renewables. The campaign would comprise two components. One would target sector players (i.e. government ministries, agencies and utilities) and the other would target consumers, especially the smaller consumers (i.e. domestic users, SMEs), and the general public. Key areas are information about the EnC Treaty, EU directives, including renewables, energy efficiency and biofuels. For consumers, changes in structure (who your supplier may be); energy efficiency and conservation issues (energy programmes, lighting, labelling etc.) and consumer protection are important.

3.6 *Conditionality and sequencing*

- Complete review of actual situation to be undertaken during the Inception period with all donors, donor funded consultants and key sector stakeholders including Ministries, regulators and operating companies– 3 months.
- Definable work packages to be included in the Inception report along with manpower estimates and completion schedules in the form of time defined Gantt charts – 3 months.

3.7 *Linked activities*

This project builds on a series of previous projects, some complete, some ongoing and some to start in 2007. Details are provided in section 3.1.3 above. Ongoing CARDS projects are TASED and TATSI. TASED supports MOFTER in developing an overall energy strategy. TATSI is providing assistance to Transco in improving its accounting and financial systems post formation. The new regulation support project will begin in spring 2007.

EBRD is about to embark on a short term project to develop a methodology of how to unbundle the existing EP(s). Results of this study should be available by autumn 2007. The issues to be addressed include the consideration of a share transaction versus asset transfer.

The WB Energy Study is under way and expected to be completed by the end of 2007. As well as providing input data for the CARDS 2005 Energy Strategy project it will have collected data related to energy system demand/supply balances and possible future investments. The project includes all energy sources, electricity, oil, gas, coal and renewables.

The USAID funded study will concentrate on completing legal work in the gas sector, work associated with regulation and monitoring the evolution of the Action Plans related to creating the unbundled companies in the electricity sector.

It is emphasised that the leadership of the entire energy programme, from the international perspective, rests with the EU and is a key element of this project.

3.8 *Lessons learned*

There is considerable experience in BiH gained in the development of the electricity laws and the formation of ISO and Transco. A number of lessons emerge.

1. It is difficult to define a time schedule that is observed by all parties; however, it essential that clear targets and time frames are put in place and followed.
2. Flexibility of approach is essential along with an ability to change course to adapt to new situations.
3. Working in isolation leads to project failure. Close cooperation is required at all levels, especially with other consultants.
4. Donor coordination is vital in resolving issues. In this environment which is heavily politicised ensuring that the international community presents a unified view is paramount and can, and has, overcome even the strongest opposition with time, perseverance and carefully targeted and coordinated assistance. An example of this is the successful unbundling of transmission in the power sector and the formation of Transco and ISO which was funded by an EC technical assistance project and implemented in close collaboration with the rest of the donor community's assistance programmes and support at a political level. Contact and cooperation between State and Entity governments and agencies needs to be improved to get buy-in from all parties. The institutional set up in the energy sector remains problematic and the needs in the sector are considerable and

growing rapidly as the sector seeks to meet the challenges of meeting EnC Treaty obligations and EU Directives as well as growth. The EC is recognised as the lead donor in the sector. Should there be a lack of progress in the short term in relation to areas where development is necessary and where political agreement is necessary but where this political agreement may not be forthcoming, the proposed interventions should focus on areas where clear progress can be made and the needs are, in any case, far in excess of the support that even this full programme could provide (i.e. energy efficiency, renewables, public education and awareness).

Indicative Budget (amounts in €)

Activities	TOTAL COST	SOURCES OF FUNDING										
		EU CONTRIBUTION				NATIONAL PUBLIC CONTRIBUTION					PRIVATE	
		Total	% *	IB	INV	Total	% *	Central	Regional	IFIs	Total	% *
Activity 1												
contract 1.1	2.5 m	2.5M	100	2.5M	0	0	0					
TOTAL	2.5 m	2.5m	100	2.5m	0	0	0					

expressed in % of the Total Cost

This is envisaged to be a Service contract

5. Indicative Implementation Schedule (periods broken down per quarter)

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1.1 (Support to Bosnia and Herzegovina (BiH) to meet the requirements of the Energy Community Treaty for South East Europe and public education and awareness campaign in Energy Community Treaty obligations, energy efficiency and sector reform regarding power and gas.)	Q1 2008	Q2 2008	Q1 2011

All projects should in principle be ready for tendering in the 1st Quarter following the signature of the FA

6. Cross cutting issues (where applicable)

6.1 Equal Opportunity

The project will follow the laws and practices in place in BiH related to all opportunities. An example from earlier work is the ethnic representation on the boards of the State owned companies.

6.2 Environment

Environmental Impact Assessment (EIA) is already built into the EC CARDS 2005 and World Bank Energy Study so that all future investments are appropriately covered.

The EnC Treaty has a number of environmental requirements, which are summarized below.

Article 13: The Parties recognise the importance of the Kyoto Protocol. Each Contracting Party shall endeavour to accede to it.

Article 14: The Parties recognise the importance of the rules set out in Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control. Each Contracting Party shall endeavour to implement that Directive.

*Article 15: After the entry into force of this Treaty, the construction and operation of new generating plants shall comply with the *acquis communautaire* on environment.*

*Article 16: The “*acquis communautaire* on environment”, for the purpose of this Treaty, shall mean (i) Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directive 97/11/EC of 3 March 1997 and Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003, (ii) Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC, (iii) Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants, and (iv) Article 4(2) of Directive 79/409/EEC of the Council of 2 April 1979 on the conservation of wild birds.*

The project shall ensure that all environmental requirements related to the energy sector are taken into account.

6.3 Minorities

As indicated in section 6.1 above, the project will follow the laws and practices in place in BiH related to all opportunities and treatment of minorities.

ANNEXES

ANNEX 1: Logical framework matrix in standard format

It is noted that the log frame matrix is prepared for the entire process of reform and implementation on the EnC Treaty and EU directives. It includes activities and results that are dependent on work carried out by other consultants. The success of the project is measured by the degree of success in the implementation of the entire energy reform process from the international perspective, as well as the effectiveness of the public awareness activities.

LOGFRAME PLANNING MATRIX FOR <i>Energy Fiche</i>	Programme name = Energy Programme number = <i>TO BE PROVIDED</i>	
Support to Bosnia and Herzegovina (BiH) to meet the requirements of the Energy Community Treaty for South East Europe and public education and awareness campaign in Energy Community Treaty obligations, energy efficiency and sector reform regarding power and gas.	Contracting period) expires - Final date for contracting: 31 st December 2009 Final date for execution of contracts: 31 st December 2011	Disbursement period expires: 31 st December 2013
	Total budget: €2.5m	IPA budget: €2.5m

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
Overall Objective			
Assist in the continuing reform and development of the energy sector in BiH, which creates a single country wide energy market, efficient, regulated and integrated with regional markets of South Eastern Europe and the European Union, meeting obligations undertaken in relation to the Energy Community Treaty, as well as other international obligations.	Significant progress in BiH compliance with EnC Treaty obligations and EU directives. Electricity and gas markets established and integrated into SEE market.	Independent observation by EnC Secretariat and by the international community.	
Project purpose			
<p>1. In the power sector assist BiH in meeting the requirements EnC Treaty and other international obligations and EU Directives; specifically the unbundling of generation and distribution and the formation of new generation and distribution companies</p> <p>2. In the gas sector, assist BiH in meeting the requirements of EnC Treaty EU Directives and other international obligations; assist significantly in the reform of the gas sector, specifically in relation to the formation of a transmission and distribution operators TSO and DSO(s).</p> <p>3. Across the entire Energy sector the project will design and plan awareness and educational programmes: directed at key energy sector stakeholders, including ministries, government agencies, utilities, energy consumers and the public at large; to provide information regarding the Energy Community Treaty for South East Europe (EnC) and relevant EU Directives (i.e. 30, 54, 55 and 70³) and increase understanding of upcoming changes and reduce resistance to change, particularly for those working within the sector; and to address issues of energy efficiency, renewables and environmental sustainability, particularly in the public domain, including schools.</p>	<p>1.1 Power sector unbundled and new companies formed</p> <p>2.1 BiH gas sector reorganized along the lines required by the EnC Treaty</p> <p>3.1 Improved awareness among sector stakeholders of EnC Treaty, EU Directives and international obligations and the implications for BiH, including those related to energy efficiency, renewables, biofuels and environmental</p>	<p>Review of reform process and progress by donor community</p> <p>Independent submissions to Regulator and annual reports of new co.</p> <p>TSO and DSO observed to be formed and operating</p> <p>EnC Secretariat reports</p> <p>Independent verification by surveys</p> <p>Independent verification by</p>	<p>All donors and consultants accept EU consultant leadership of process</p> <p>Political commitment to proceed with sector unbundling.</p> <p>Continued implementation of obligations to restructure the gas sector along EnC Treaty lines.</p> <p>Buy-in by sector stakeholders, education facilities and mass media</p>

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³ Directive 54 relates to electricity. Directive 55 relates to gas. Directive 77 relates to renewables. Directive 30 relates to biofuels.

	<p>sustainability.</p> <p>3.2 Improved understanding and implementation of energy efficiency measures among end-users.</p> <p>3.3 Improved policy making regarding energy efficiency.</p> <p>3.4 Reduced resistance to change.</p>	surveys	
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Results			
<p>Results 1 – 6 are the results that can be expected from the overall energy reform process and are dependent to some extent on the actions of others, including donors, IFI, and donor funded consultants. The success of the project will be assessed on the overall results. These results should be revisited periodically and changes made to reflect the actual situation on the ground. It is assumed at this stage that the key requirements of the EnC Treaty scheduled for July 2007 will already have been achieved or that considerable progress will have been made by the start of this project. Development of an energy efficiency action plan may be considered if appropriate.</p> <p>1.1 Result 1 (contributes to project purpose 1):</p> <p>Separation of generation and distribution functions in the power sector. This requires that the two functions are separated functionally in an accounting and financial sense (i.e. regulatory reporting and accounts will be separated).</p> <p>1.2 Result 2 (contributes to project purpose 1):</p> <p>New generation and distribution companies formed and established as legal corporations, and operational. Each company is to be legally and financially separated and reporting separately to the appropriate regulator, compliant with EU Electricity Directive 54.</p> <p>1.3 Result 3 (contributes to project purpose 1):</p> <p>In the power sector, significant progress is made in meeting all EnC Treaty and</p>	<p>1.1 Power generation and distribution functionally separated by project end.</p> <p>2.1 Generation and distribution companies formed and established as legal corporations, reporting separately to the regulator and compliant with Directive 54 by project end.</p> <p>3.1 Road maps from EnC Treaty indicate significant</p>	<p>1.1 Confirmation by Regulators.</p> <p>1.2 Legal registration of new companies</p> <p>1.3 EnC Secretariat</p>	<p>1.1 Good cooperation by Entity governments and agencies.</p> <p>1.2 as for 1 above.</p> <p>1.3 Good cooperation at all levels of</p>

<p>EU directives: 54-Electricity; 30-Renewables; and 77-Biofuels.</p> <p>2.1 Result 4 (contributes to project purpose 2)</p> <p>Progress is made towards the establishment of a transmission system operator (TSO) for gas. This requires a state-wide TSO to be established for gas and involves determination of the ownership structure and putting in place management boards to operate the companies.</p> <p>2.2 Result 5 (contributes to project purpose 2):</p> <p>Progress is made towards the establishment distribution gas companies (DSO), in accordance with the adopted law and compliant with the requirements of the EU Gas Directive 55.</p> <p>2.3 Result 6 (contributes to project purpose 2):</p> <p>Gas is regulated in BiH in compliance with EnC Treaty requirements and Directive 55.</p> <p>3.1 Result 7 (contributes to project purpose 3):</p> <p>Key energy sector stakeholders, including Ministries, government agencies, regulators, and operating utilities, are informed regarding EnC Treaty and EU Directive requirements and are implementing those requirements. Consumers, especially smaller consumers and small and medium enterprises (SME), and the general public are made aware and informed. This addresses the issue what is happening in the sector and how changes affect them.</p> <p>At the key stakeholder level (government and utilities) this involves awareness and implementation of the EnC Treaty and four key directives; 54 and 55 related to electricity and gas respectively, 30 related to biofuels and 77 related to renewables. Included are the issues that management and staff of the existing companies face as the various Treaty and Directive requirements are implemented and the new companies are formed. The purpose is to prepare management and staff for change, reducing anxieties and resistance at the working level. For the general public, including smaller consumers (i.e. domestic users, SMEs) this should include the implications for them of implementation of the Treaty and associated EU directives. Key areas are information about the changes in structure (who your supplier may be).</p> <p>3.2 Result 8 (contributes to project purpose 3):</p> <p>Improved awareness and practical understanding of energy efficiency and</p>	<p>progress towards meeting EnC Treaty and, concomitantly, EU directives: 54-Electricity; 30-Renewables; and 77-Biofuels by project end.</p> <p>4.1 Gas TSO institutional and legal framework established, including ownership structure and management boards in place by project end.</p> <p>4.2 Gas TSO formed and operational by project end.</p> <p>5.1 Gas DSO institutional and legal framework established, including ownership structure and management boards in place, in line adopted law and Directive 55 by project end.</p> <p>5.2 Gas DSO formed and operational by project end.</p> <p>6.1 Gas sector is regulated in line with EnC Treaty and Directive 55 requirements by project end.</p> <p>7.1 Baseline surveys at beginning and later stages indicate improved understanding of identified issues.</p> <p>8.1 Baseline surveys at beginning and later stages</p>	<p>reports</p> <p>2.1 Legal registration of TSO and TSO in operation.</p> <p>2.2 Legal registration of DSO and DSO in operation.</p> <p>2.3 Laws enacted and staff in place.</p> <p>2.3 EnC Secretariat reports</p> <p>3.1 Surveys of management and staff.</p> <p>3.2 Combination of</p>	<p>government and agencies</p> <p>2.1 Political commitment to form a state wide TSO for Gas.</p> <p>2.2 Political commitment to form a state wide DSO for Gas.</p> <p>2.3 Political commitment to enact required legislation and to pass on government commitment to sector players.</p> <p>3.1 & 3.2 Cooperation at many levels including utilities, mass media and educational establishments.</p>
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<p>conservation issues (i.e. energy programmes, lighting, labelling etc.), renewables, consumer protection among smaller consumers (i.e. domestic users and SMEs) and the public at large, as well as among those responsible for developing and implementing energy efficiency and sustainable energy policies. To be possibly supplemented by grant funded, cost shared pilot projects to be used as concrete case studies for policy development and media promotion.</p> <p>The project will take prime responsibility for Results 7 and 8 in light of the current absence of significant engagement from other stakeholders.</p>	<p>indicate improved understanding of identified issues.</p> <p>8.2 Analysis of before and after picture of policy related to identified issues indicates that policy thinking has developed and is better informed as a result of the project intervention.</p>	<p>surveys and focal groups and school visits.</p>	
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Activities	Means	Cost	Pre-condition
<p>Project purpose 1</p> <p>Activity 1.1:</p> <p>Expert accounting and financial support to the process of separating the accounting and financial reporting of the generation and distribution functions of the existing utilities in the power sector through training and expert input. This includes support for regulatory filing.</p> <p>Activity 1.2:</p> <p>Expert management, financial and legal support to the process of creating the new generation and distribution companies, including support for board</p>	<p>1.1 Expert advice in the financial and accounting area.</p> <p>1.2 Expert advice in the</p>		<p>International consultant in place with requisite skills to address:</p> <ul style="list-style-type: none"> • accounting • finance • management • legal • corporate governance

<p>selection, management structure, internal rules and regulations, regulatory compliance. This is expected to be in the form of templates and provided through training and expert input.</p> <p>Project purpose 2</p> <p>Activity 2.1:</p> <p>Expert legal support to formulate and adopt legislation required in the gas sector. This activity is carried out in close cooperation with the existing EU support to the Regulator and the USAID funded project.</p> <p>Activity 2.2:</p> <p>Expert management, financial and legal support in the process of creating the Gas TSO, including support for board selection, management structure, internal rules and regulations, regulatory compliance. This is expected to be provided through training and expert input.</p> <p>Activity 2.3:</p> <p>Expert management, financial and legal support in the process of creating the Gas DSO (4); includes support for board selection, management structure, internal rules and regulations, regulatory compliance. This is expected to be provided through training and expert input.</p> <p>Project purpose 3</p> <p>Activity 3.1:</p> <p>Design and assist in the implementation of an education and awareness programme regarding end-user energy efficiency issues and renewables, and the implications for BiH among the following audiences: those responsible for reform and management of the energy sector, and specifically for introducing, promoting and implementing energy efficiency policies and renewables at national, entity and regional level; end-users; and the general public.</p> <p>Activity 3.2:</p> <p>Design and assist in the implementation of an education and awareness campaign to raise awareness regarding the changes taking place in the energy sector. This includes the EnC Treaty and Directives and includes energy efficiency,</p>	<p>management, financial, accounting and legal areas.</p> <p>2.1 Expert legal advice.</p> <p>2.2 Expert management, financial, legal and corporate governance advice.</p> <p>2.3 Expert management, financial, legal and corporate governance advice.</p> <p>3.1 Expert advice in energy efficiency issues and ability to lead an awareness programme. Workshops and training programmes.</p> <p>3.2 Combination of needs assessment; workshops,</p>		<ul style="list-style-type: none"> • management transition • public awareness campaigns <p>Political will to implement programmes and support sector stakeholders and international consultants</p> <p>Excellent cooperation between donors and donor supported consultants</p> <p>Acceptance that this project is responsible for overall leadership on the international side.</p>
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<p>conservation, biofuels and renewables. The campaign would comprise two components. One would target sector players (i.e. government ministries, agencies and utilities) and the other would target consumers, especially the smaller consumers (i.e. domestic users, SMEs), and the general public. Key areas are information about the EnC Treaty, EU directives, including renewables, energy efficiency and biofuels. For consumers, changes in structure (who your supplier may be); energy efficiency and conservation issues (energy programmes, lighting, labelling etc.) and consumer protection are important.</p> <p>Key areas are information about the EnC Treaty, EU directives,, including renewables, energy efficiency and biofuels. For consumers changes in structure (who your supplier may be); energy efficiency and conservation issues (energy programmes, lighting, labelling etc.) and consumer protection are important.</p>	<p>seminars, conferences, schools presentations; workshops; TV and radio programmes; newspapers and other publications.</p>		
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ANNEX II: amounts (in €) Contracted and disbursed by quarter for the project

Contracted	Q2 2008	Q3	Q4	Q1 2009	Q2	Q3	Q4	Q1 2010	Q2	Q3	Q4	Q1 2011	Q2
Contract 1.1	2.5m												
Total	2.5m												
Cumulated	2.5m												
Disbursed		40%		10%		10%		10%		10%		10%	10%
Contract 1.1		1m		0.25m		0.25m		0.25m		0.25m		0.25m	0.25m
Total		1m		0.25m		0.25m		0.25m		0.25m		0.25m	0.25m
Cumulated		1m		1.25m		1.5m		1.75m		2m		2.25m	2.5m

Annex III: Reference to laws, regulations and strategic documents

3.1 Reference list of relevant laws and regulations

3.1.1 Relevant laws and regulations at state level

There are several laws that are considered the cornerstones of the electric sector development in BiH. At state level the following have been adopted:

- Law on Transmission of Electric Power, Regulator and System Operator of BiH (Official Gazette BiH 7/02)
- Law Establishing an Independent System Operator for the Transmission System of BiH (Official Gazette BiH 35/04)
- Law Establishing the Company for the Transmission of Electric Power in BiH (Official Gazette BiH 35/04)
- Grid Code (Official Gazette BiH 48/06)
- Market Rules (Official Gazette BiH 48/06)

3.1.2 Reference list of relevant laws and regulations at entity level

At the entity level, the following laws have been adopted:

- Federation of BiH Law on Electricity (Official Gazette BiH 41/02)
- Republika Srpska Law on Electricity (Official Gazette RS 66/02)

Additionally, at Entity level Action Plans for Restructuring the Power Sector were adopted by the respective parliaments in 2002 (RS) and 2004 (FBiH). The Action plan for Restructuring the Power Sector of RS have been in force since 2003 (Official Gazette 69/03) and Action plan for Restructuring the Power Sector of FBiH, was updated and revised and is in force since 19.06.2005.

3.1.3 Reference list of relevant Treaties and Agreements at International level

The key documents applicable at the international level are the Energy Treaty (EnC), the Energy Charter Treaty and the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA).

Energy Community Treaty for South East Europe (EnC)

BiH has entered into international agreements in the energy field. The most important is the Agreement on Establishment of the Energy Community which has been ratified and entered into force on 1st July, 2006.

The basic goals of the EnC are the creation of a stable and single regulatory framework and market space, which enables a reliable supply of energy products and also attract investments into the energy sector, especially electricity and natural gas. Competition is seen as a critical item in terms of supply, such as alternative routes of gas supply for example. The overall objective is to improve the availability and security of supply to SEE citizens and archive a corresponding improvement in the quality of life. Environmental protection, energy efficiency and conservation are seen as an integral part of the process, including the development of renewable resources.

By concluding this Agreement, contracting parties from the region commit to establish a common electricity and gas market among themselves, which will function in accordance with the standards of EU energy market, with which it will eventually be integrated. This is to be achieved by gradual takeover of parts of so-called *acquis communautaire* (legal heritage) of the EU, pertaining to energy, environment protection and competition. It is a matter of implementation of relevant EU directives and regulations for energy and environment protection.

By participating in this process, Bosnia and Herzegovina confirms its commitment to energy sector reform, energy market liberalisation and harmonisation of its policy with the EU Member Countries.

Energy Charter Treaty and the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA).

BiH is also a signatory member of the Energy Charter Treaty and the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA).

PEEREA's objectives are:

- the promotion of energy efficiency policies consistent with sustainable development;
- the creation of conditions which induce producers and consumers to use energy as economically, efficiently and environmentally soundly as possible;
- the fostering of cooperation in the field of energy efficiency.

The Contracting Parties undertake to establish energy efficiency policies and legal and regulatory frameworks which promote, inter alia, the efficient functioning of market mechanisms, including market-oriented price formation.

Kyoto Protocol

BiH is in the process of ratifying the Kyoto Protocol.

3.2 Reference to AP/NPAA/EP/SAA

The *EC Country Strategy Paper* for BiH points to need to help BiH authorities to build the capacity of BiH's public administration, to build a reliable counterpart for the EC in relation to all aspects of the SAP, including Community assistance, to develop BiH's capacity to ensure coherence between government policy and legislation and SAP obligations, notably regarding legal approximation, and to help BiH improve coordination amongst and between the State institutions and Entities.

The *European Partnership of BiH* gives short and medium term priorities for, *inter alia*, the energy sector,

Short term priorities in the energy field are (i) to start implementing the commitments undertaken within the framework of the EnC Treaty; (ii) develop and adopt a comprehensive Energy Strategy; (iii) pursue reforms and liberalisation of the energy sector; and (iv) ensure that the ISO and TRANSCO become rapidly fully operational, each as a single State-level company

The medium term priorities in the energy field are to (i) implement the entities' action plans for the restructuring of the energy sector; (ii) consolidate the State and Entity Energy

Regulators; (iii) take steps to achieve concrete progress in relation to the gas sector, *inter alia*, by developing a gas strategy, establishing a system operator (TSO) and regulator and developing the internal gas market.

This project will focus on the above requirements, though it is noted that the degree of progress in each area needs to be closely monitored to ensure timely and appropriate action by this project.

BiH also has obligations related to this project under the *Energy Community for South East Europe (EnC) Treaty*. BiH also has commitments under the *Energy Charter Treaty* and the *Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA)*. These are all international agreements, which thus supersede national law. Improving energy efficiency would also contribute to meeting obligations undertaken in relation to environmental agreements, such as Kyoto.

The project thus addresses key priorities identified in the European Partnership and Country Strategy, as well as assisting the country to meet obligations undertaken under various international agreements, key among which is the Energy Community Treaty.

3.3 *Link with MIPD*

The energy sector is stated as a key priority for the MIPD. For ease of reading direct quotes from MIPD are in *italic*.

The start of the implementation of the first IPA 2007 programme is expected in the beginning of the year 2008. For the purpose of the prioritisation of the assistance it is assumed that BiH has been able to fulfil most of the requirements of the short-term priorities before the implementation of the first IPA programme starts. The short term priorities have been addressed in the CARDS action programme 2006. Thus, the present IPA MIPD concentrates on the medium term requirements of the European Partnership. Exceptions to this rule are the key priorities identified under short term priorities in the European Partnership. Despite their particular importance for the assessment of Bosnia and Herzegovina's progress in the reform agenda, progress in the areas of police reform, public broadcasting legislation, strengthening of state-level institutions, public administration reform and in the creation of a real internal market is slow or even stalled.

The MiPD notes (section 1.2) that *'taking into consideration the importance of energy to industrial growth and overall economic development, assistance to support the energy sector will be a further priority'*.

The main areas of intervention, priorities and objectives of the MIPD that relate to energy are (under section 2.2.3.1): *Supporting the development of strategies and policies in order to establish sectoral policies and a regulatory framework compatible with European standards e.g. quality infrastructure, competition, agriculture, environment, energy, trade, SME development, regional economic development, health, information society, justice, employment, labour market and human resource development (HRD), etc.*

Expected results and time-frame (section 2.2.3.2) are: *The reform of the energy sector will be continued and a comprehensive energy strategy will be adopted and under implementation. Bosnia and Herzegovina will meet commitments undertaken in the framework of the EnC Treaty and EC directive requirements.*

Programmes to be implemented in pursuit of these objectives (section 2.2.3.3) are: *In the energy sector, the restructuring and the integration of the Transmission Company for Electricity*

(TRANSCO) will be supported, as well as the unbundling and separation of the power generation and distribution and the thereto related capacity building of generation and distribution companies. Capacity building assistance will be provided to the Energy Department of MoFTER, the State Energy Regulator and the Gas Transmission Operator. Further assistance will be granted for the gas sector reform. Bosnia and Herzegovina will be supported in its efforts to meet the obligations undertaken as part of the EnC Treaty.

The design of this project addresses these issues. While many EnC Treaty requirements are to be met by July 2007, twelve months after the Treaty came into force, many will still be outstanding, especially in the areas of customer protection, social policy, environmental obligations directly linked to the energy sector, energy efficiency and introduction of biofuels. Coordination of policies at the State and Entity levels are required to meet these requirements.

The project therefore strongly corresponds to the MIPD.

3.4 Link with National Development Plan –PRSP(*Poverty Reduction Strategy Plan*)

A key document is the *Poverty Reduction Strategy Plan (PRSP)*.

Meeting the preconditions for viable and equable economic development of all parts of Bosnia and Herzegovina, poverty reduction by 20%, and acceleration of integration in the EU, as well as signing and implementation of the Stabilisation and Association Agreement are the objectives of the development of Bosnia and Herzegovina.

Energy holds the priority position in the accomplishment of these objectives.

Energy sector reform with the purpose of integrating of BiH in the single energy market of the South-East European countries, as well as approximation to the EU, lead BiH to viable economic development.

Energy sector reform is followed by realisation of the activities from the list of priorities of the European Partnership. Therewith, the state clearly defined energy as the key segment of the development of this country.

The PRSP plan, which is the overall blueprint for BiH, sets out the following goals of the energy sector reform as it pertains to poverty alleviation. The PRSP clearly links the performance of the energy sector to future improvements of living standards in BiH. The major goals of the energy sector reform as stated in the PRSP are:

- *stimulate national and international investment;*
- *ensure a more reliable supply of energy, in accordance with defined quality standards and at lowest prices;*
- *join the international market through a single market of electric power and gas in BiH;*
- *enhance cost-effectiveness and rational use of energy sources and improve energy efficiency;*
- *implement liberalisation and introduce competition and transparency;*
- *ensure protection of environment in accordance with national and international standards;*
- *protect interests of the system users;*
- *increase the use of renewable energy sources;*

- *meets the conditions of the European Energy Charter Agreement, as well as other international contracts and agreements.*

The project is thus in line with both the Mid-Term Development Plan and the PRSP.

3.5 Reference to National/Sectoral plans

Pursuant to the Law Establishing ISO and the Grid Code, ISO BiH has developed and submitted to SERC the *Indicative Generation Development Plan for the period 2007-2016*, drawn on the basis of available data in the power sector.

It should be noted that BiH, at the moment, does not have a long-term energy development

Strategy, though this is now being addressed by the EU funded TASED project. Progress to date indicates that closer cooperation is required with all key stakeholders in the power sector and the bodies responsible for planning in Bosnia and Herzegovina, in the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS), in order to make the next Indicative Plan for the period 2008 – 2017 as realistic as possible and acceptable to the various parties involved. The indicative generation plan also serves as the basis for development of the *Long-Term Transmission Network Development Plan*, based on which specific annual and multi-annual investment plans are made.

It is noted that the *Study on Energy (funded through a World Bank loan under Power III)* on the development of the Energy sector of BiH started in November 2006. This Study will provide a good basis for the Energy Balance Projection until 2020 and the investment plans to cover future needs. The Study will cover all the energy sub-sectors; electricity, gas, coal, oil and renewables. The Study is expected to provide recommendations for efficient integration of BiH into the energy sector of the EU. The Study will also serve as the basis for development of the Energy Strategy of BiH, which shall be realised through the EC CARDS 2005 (TASED) Project that started in February, 2006 and due to be completed by February 2008.

ANNEX IV

PERSONNEL/INPUT REQUIREMENTS. DETAILS PER EU FUNDED CONTRACT

This is envisaged to be a Service contract.

For *TA contracts*: account of tasks expected from the contractor

It is expected that this project will be executed by a team provided by an international consultancy company / consortium , and that the team will have previous experience of similar work in emerging markets, preferably in the South East Europe. In terms of expertise the consultant will need to demonstrate the ability to work in a complex international environment and cover a number of disciplines, including policy, regulation, law, engineering, economics and finance. The consultant is expected to be familiar with EU Energy Regulations and Directives.

The work will be carried out in Bosnia and Herzegovina, not in the consultant's home office. It is expected that a small team will operate in BiH on a full time basis assisted by international and local experts as the work requires. Local language capability would be an advantage

Key Experts

The Experts experience requirements.

The strength and suitability of the Contractors experts shall form the primary basis upon which evaluation of the technical proposals shall be made. Good command of English, written and spoken, excellent leadership, communication and conflict resolution skills are a pre-requisite for all candidates. The Tender Evaluation Committee may interview candidates.

Experts shall be classified as either International or National. For the purposes of this ToR International Experts shall be considered those individuals whose permanent residence is outside the beneficiary country while National Experts are consider to be those individuals whose permanent residence is in the beneficiary country.

A long term expert is an expert whose assignment is made of, at least, a period of 6 full (22 working days) consecutive months.

Inputs – Minimum input required

Key Experts

Long Term Expert 1: Energy Sector Expert

Long Term Expert 2: Reform / Restructuring Expert

Long Term Expert 3: Public education / Communication / Media Expert for Education and Awareness Campaign

Non-Key Experts

Long Term Experts with extensive local knowledge and experience in the energy sector in BiH, and local language fluency

Short Term experts (STE)

Pool of Short Term Experts

The Contractor shall assign to one of the LTE's on the project the additional responsibility of Team Leader. The selection shall be made based upon due consideration of the project

requirements and the leadership qualities of the expert concerned. The Team Leader shall be the Contractors representative in BiH and shall be responsible for operational aspects of the Project Implementation and performance on behalf of the Contractor. Note that BiH recent experience substantially links inadequate leadership and management with project failure and subsequent contractual corrections and difficulties.

In the bid the Contractor must indicate which of the Key Experts is assigned as Team Leader and clearly justify this decision.

In addition to the 'experience requirements' above:

Key Expert 1: Energy Sector Expert

The contractor will provide an energy sector expert, dedicated to advising on all aspects of the energy sector, including electricity, gas, renewables and energy efficiency.

The energy sector expert will have primary responsibility for advising and assisting on the development of the sector, with assistance from the Reform/Restructuring Expert. In terms of experience and qualifications, Energy Sector Expert will need to demonstrate the following:

Qualifications and skills:

- A University degree or equivalent professional experience in engineering or relevant applied science;
- Well developed management skills, strong leadership and excellent communication skills, and ability to lead a team in multi-cultural environment and ensure good client communication;
- Fluency in both written and spoken English is essential;
- Knowledge/understanding of the local languages would be an advantage.
- Demonstrated analytical skills;
- Well developed interpersonal skills as well as skills in mediation;
- Excellent strategic planning, project management and report writing skills;

General professional experience

- Demonstrate at least 10 years experience of working in the energy sector,
- Demonstrate technical and management experience;
- Relevant professional experience in all fields covered by the project scope would be highly desirable, including demonstrating sufficient experience to qualify the expert to assist Key Expert 2 in reform and restructuring issues;
- Demonstrable experience of managing complex technical assistance projects and working with various levels of government in transition economies and multi donor environments.

Specific Professional Experience

- Knowledge and familiarity with the European Union's Directives relating to the energy sector;

- Experience in transitional economies, particularly the former Yugoslavia, would be desirable.

Key Expert 2: Reform/Restructuring Expert

In conjunction with the technical assistance provided by the Energy Sector Expert, the project will also need to provide a Reform/Restructuring Expert to provide the necessary strategic support for the thorough understanding of the reform process.

Qualifications and Skills

- A University degree (preferably in a related field, inter alia, technical fields, engineering, finance and/or economics);
- Fluency in both written and spoken English is essential;
- Knowledge/understanding of the local languages would be an advantage;
- Strong advisory and communication skills in a multi-cultural setting critical.
- Well developed management skills, strong leadership and excellent communication skills, and ability to lead a team in multi-cultural environment and ensure good client communication;
- Demonstrated analytical skills;
- Well developed interpersonal skills as well as skills in mediation;
- Excellent strategic planning, project management and report writing skills;

General Experience:

- At least 10 years management experience in an energy enterprise or as a consultant to energy sector, with specific knowledge and understanding of EU energy sector Directives, regulatory affairs, energy sector management;
- Demonstrate experience in projects related to the reform and restructuring of the energy sector, preferably in a South East European country;
- Demonstrate sufficient appropriate experience regarding the energy sector, to qualify the expert in supporting Key Expert 1 in issues related to the energy sector;
- Relevant professional experience in all fields covered by the project scope would be highly desirable;
- Demonstrable experience of working in complex technical assistance projects and with various levels of government in transition economies and multi donor environments.

Specific Experience:

- Experience in a transitioning environment a plus;
- Specific knowledge and understanding of European Union Energy Directives and energy policy;
- Specific knowledge and understanding of electricity market rules as applied in the EC;

- Experience in transitional economies, particularly the former Yugoslavia, would be desirable.

Key Expert 3: Communication/Media Expert for Education and Awareness Campaign

In conjunction with the technical assistance provided by the Energy Sector and Reform/Restructuring Experts, the project will also need to provide a Communication/Media Expert for an Education and Awareness Campaign to provide the necessary support for the dissemination of information regarding the reform process, the EnC Treaty, energy efficiency issues etc. to key stakeholders and the public at large.

Qualifications and Skills

- A University degree (preferably in a related field, inter alia, media, communications);
- Fluency in both written and spoken English is essential;
- Knowledge/understanding of the local languages would be a considerable advantage;
- Strong advisory and communication skills in a multi-cultural setting critical.
- Well developed leadership and excellent communication skills, and ability to lead a team in multi-cultural environment and ensure good communication;
- Well developed interpersonal skills as well as skills in mediation;
- Excellent strategic planning and report writing skills;

General Experience:

- At least 10 years experience in an educational or mass media environment;
- Demonstrate experience in projects related to the communication of information, preferably in a South East European country;
- Experience of building capacity, especially in teams providing information to companies or the general public;
- Appropriate experience regarding the energy sector would be a plus,
- Experience of working in complex technical assistance projects and with various levels of government in transition economies and multi donor environments would be a plus.

Specific Experience:

- Experience of communicating with the public through the mass media is essential (radio, television, print);
- Experience in communicating with key stakeholders of agencies and companies in transition is a plus;
- Knowledge and understanding of European Union practices is a plus.
- Experience in transitional economies, particularly the former Yugoslavia, would be desirable.

- An interest in promoting energy efficiency and conservation would be an advantage.

Other Experts - (non-key experts): Long Term Experts and Short Term National and International Experts (STE)

General

CVs for experts other than the key experts are not examined prior to the signature of the contract. They should not be included in tenders. These profiles must indicate whether they are to be regarded as long-term/short term, and senior/junior so that it is clear which fee rate in the budget breakdown will apply to each profile.

The Consultant shall select and hire other experts as required according to the profiles identified in the Organisation & Methodology and/or these Terms of Reference. The Consultant should pay attention to the need to ensure the active participation of local professional skills where available, and a suitable mix of international and local staff in the project teams. All experts must be independent and free from conflicts of interest in the responsibilities accorded to them.

The selection procedures used by the Consultant to select these other experts shall be transparent, and shall be based on pre-defined criteria, including professional qualifications, language skills and work experience. The findings of the selection panel shall be recorded. The selection of experts shall be subject to approval by the Contracting Authority.

A short-term expert is defined as an assignment of less than 6 months in any 12 month period. All STE shall be formally approved by the Contracting Authority during the project implementation. All experts must be independent and free from conflicts of interest in the responsibilities accorded to them.

Note that civil servants and other staff of the public administration of the beneficiary country cannot be recruited as experts.

ToR Specific

The CVs of the Non-Key Long Term Experts need not be attached to the bid, as exact profiles of the expert will be agreed upon during the Inception phase. The experts will be proposed during the Inception period.

The Contractor is not expected to attach to the bid (Part: Organisation and Methodology) a list of short-term experts. Division of STE input and exact profile will be agreed upon during the Inception period;

The Contractor shall submit CVs of all non-key experts for approval by the Contracting Authority during project implementation in accordance with the following criteria:

Long Term Expert – Energy

Qualifications and Skills

- A University degree or equivalent professional experience in engineering or relevant applied science;
- Fluency in both written and spoken English is essential;
- Fluency in the local languages is essential;
- Strong advisory and communication skills.

General Experience:

- At least 5 years experience in the energy sector in BiH;
- Demonstrate technical and management experience;
- Relevant professional experience in all fields covered by the project scope would be highly desirable, including demonstrating sufficient experience to qualify the expert to assist Key Expert 1 and Key Expert 2;
- Demonstrable experience of managing complex technical assistance projects and working with various levels of government in transition economies and multi donor environments.

Specific Professional Experience

- Knowledge and familiarity with the European Union's Directives relating to the energy sector;
- Experience in transitional economies other than BiH would be desirable.
- Demonstrate experience in projects related to the reform and restructuring of the energy sector;

Long Term Expert – Education/ Communication

Qualifications and Skills

- A University degree (preferably in a related field, inter alia, mass media, communications, business);
- Fluency in both written and spoken English is essential;
- Fluency in the local languages is essential;
- Strong advisory and communication skills.

General Experience

- At least 5 years experience of working in the educational and/or communications field;
- Experience of conducting an educational and public awareness campaign through the mass media (radio, television, print);
- Experience of disseminating information to key stakeholders in large agencies or companies;
- Knowledge and familiarity with the European Union's practices would be desirable

- Experience in the energy sector desirable.

Pool of Short-Term Experts

These experts should have experience in providing technical assistance in matters related to the components of the intervention. In addition, the short-term experts should possess the following profile:

All Senior and Junior Non-Key Experts

- Shall have a university degree (preferably in a relevant field) and have good command of the English language;
- Knowledge/understanding of the local languages would be an advantage;
- All Senior Non-Key Experts shall have a minimum of 7 years professional working experience, 5 of which shall be in work explicitly related to the task for which they will be deployed;
- International Junior Non-Key Experts shall have a minimum of 4 years professional working experience; National Junior Non-Key Experts shall have a minimum of 2 years of professional working experience;
- The exact duration and timing of the various inputs will be agreed during the implementation of the project. This short-term pool should cover a wide range of experience with the understanding that possibly not all experts will be used in the course of the project.

Incidental budget

An incidental budget is envisaged for expenses related to training, awareness raising and elements of the running costs of any working groups/task forces that need to be established.

ANNEX V: BIH ENERGY INSTITUTIONS AND DONOR INVOLVEMENT IN THE ENERGY SECTOR

Institutions of the Energy Sector in Bosnia and Herzegovina

The energy sector in BiH is structured at two levels: State and Entity. The key organisation at the state level is the Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina (MoFTER). According to Article 3 of the Law on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina, MOFTER is responsible for the overall policy-making in the country and coordination with entities. It coordinates general policy activities and international relations with regard to energy and environmental protection, while the responsibility for implementation is with Entity-level Ministries.

The other State level bodies are: the Transmission System Operator (TRANSCO), the Independent System Operator (ISO) and the State Energy Regulatory Commission (SERC).

At the Entity level, the two key institutions operating in the Energy sector are the Entity Ministries; the Ministry of Energy, Mining and Industry of FBiH (MEMI) in the Federation of Bosnia and Herzegovina and the Ministry of Economy, Energy and Development (MEED) in the Republika Srpska.

The Federal Ministry of Energy, Mining and Industry (MEMI) is the ministry responsible for energy, mining, geological research and industry. This includes coordinating policy on energy, monitoring economic performance, coordination of project implementation, especially power generation facilities.

The Ministry of Economy, Energy and Development (MEED) has a similar role in RS, where its responsibilities include the coordination of generation, transmission and distribution of electricity and the production and processing of coal, petroleum products, natural gas. Its mandate also includes the development of medium-term and long-term plans including providing funds for their implementation and the development of annual energy balances. Additional data is provided in Annex III.

Both Ministries at the Entity level are responsible for coordinating the operation of three electric utility companies (EP).

In the area of regulation BiH regulates at both the State and Entity levels, for electricity only at present. This means that in addition to the State Energy Regulatory Commission (SERC), there are entity level regulators; the Federal Energy Regulatory Commission (FERC) and Regulatory Commission for Electricity of RS (REERS). Transmission and system operation is regulated by SERC, and generation and distribution by FERC and RSERC in their territories. Gas is not yet regulated and discussion is taking place to establish gas regulation. It is not clear at this time what final regulatory regime will emerge. In the electricity sector Transco and ISO operate at the state-wide level while the three Elektroprivredas operate in their service territories, monitored and owned by the Entity governments.

3.1.3 Donor involvement in the sector

This project would be a continuation of ongoing technical assistance. Current EC funded projects support the power transmission company (Transco) and BiH in preparing an Energy Strategy and in responding to the first wave of Energy Community Treaty requirements. Continuity will be important to ensure BiH is able to satisfy Energy Community Treaty requirements and optimally manage transition in this key sector. Other donors have been and

remain involved in the sector and are looking for leadership from the EC. Close coordination with other donors has been established with other donors in the sector, is imperative and is envisioned to continue.

One of the core objectives in the EC Country Strategy is to support economic reform and BiH's transition to a market economy, in order to facilitate sustainable growth and facilitate the integration of BiH economy into the EC structures and those of the wider international community. In this context, one of the specific objectives is to create a single market in BiH harmonised with the EU which facilitates closer integration with South East Europe (SEE) and EU.

Reform of the energy sector along the lines described above and the creation of unified energy market is critical to supporting both the BiH link-up with energy markets in SEE and EU, and sustainable economic development in BiH. An unbundled energy structure with competitive markets and transmission linkages to the SEE and EU could, over time, provide cheaper energy inputs for domestic industry, thereby enabling BiH companies to become more competitive. In addition, the creation of a SEE electricity market with connections to BiH provides an important export opportunity for BiH. Besides Bulgaria, BiH is the only net exporter of energy in the region.

Given the importance of the reform of the energy sector, the recent feasibility study, which was undertaken by the EC to assess BiH's readiness to sign a Stabilisation and Association Agreement, identifies the reform and restructuring of the energy sector as one of the key areas for there to be progress. The EC has been supporting the restructuring of the energy sector in the following ways:

Technical Assistance to Support the Set-up and Effective Operations of an Independent System Operator and Transmission Company (ISO/Transco): - €1 Million (September 2004 – June 2006).

In the framework of Power III, the EC project supported the formation of the Transco and ISO in line with respective laws, thereby ensuring reliable transmission capacity to meet the demands of the electricity market. By February 2006, both ISO and Transco were registered as companies and operating with effective and independent management boards which are responsible, respectively, for performance and development of the transmission system and co-ordination and control of despatch and scheduling arrangements.

Technical Assistance to Strengthen the Energy Department of MOFTER and develop an overall energy strategy for BiH (TASED): - €1.4 Million (February 2006 – January 2008).

The primary objective is to strengthen the Energy Department of MOFTER with a strong emphasis on capacity building through the development of an overall energy strategy. The project will establish an energy database and develop an energy balance model. A key output is the development of the overall energy strategy for BiH covering all primary and secondary energy sources and the main users by sector – industry, transport, commercial, domestic.

Technical Assistance to ISO/Transco (TATSI): - €1.0 Million (June 2006 – December 2008).

This project is commenced in August 2006. It provides continued support primarily to Transco, concentrating on the areas of accounting and finance, including preparation of tariff submissions, and regulatory affairs. The project will be in place for 18 months.

Technical Assistance to support Energy Regulation in Bosnia and Herzegovina - €1.5m (20 months due to start in spring 2007).

The project aims to support the energy, regulation in BiH in line with the respective laws and in a manner that is in line with business practices in the EU electricity and gas sectors, by completing the unification process and by building capacity at the state level regulator in regulating electricity and gas on a BiH-wide basis.

Complementarities and co-ordination with other donors

A major focus of post war reconstruction support from the International Community has been the rehabilitation of the energy sector. This has been undertaken through consecutive Power Programmes led by the World Bank and supported by other IFIs (EBRD, EIB) as well as donors (EC, USAID, DFID-UK, Canada, Spain, Norway, Italy, Switzerland and Japan).

- Power I and II – included a total of \$170 million of loan finance and technical assistance to support the investment requirements for rehabilitating the energy sector.
- Power III – is practically complete and supported the restructuring and reform of the energy sector through investments and associated conditionalities. The total funding package was \$225 million.
- Power IV – is now started. It will provide further support for investment in the power sector, mainly in generation and distribution. A budget of the order of \$265 million is foreseen.

Support for the reform and restructuring process has been provided by a number of donors over the past years. DFID funded the work for the Transitional Grid Code and the proposal of a Grid Code for a mature system and market; this was produced by KEMA.

CIDA has provided support to Transco in the development of its organisation and management structure, asset allocation and financial work through the SEETEC project and developing the market rules for the transitional stage. It is anticipated that the SEETEC assistance will be completed by June 2006. CIDA has also supported MOFTER with the provision of services of an advisor during the past two years.

The World Bank is currently carrying out a study of the financial management and information systems needs of the three EP on a BiH wide basis, as well as the Energy Study now in progress.

USAID has supported the sector, particularly electricity, for a number of years with the key areas being the drafting of laws, guidance for the overall restructuring process (action plans), the initial formation of SERC and the Entity Regulators and support for the formation and continuing operation of the independent system operator (ISO). It is anticipated that USAID support to the energy sector will continue with a new programme in place for 2007-2010. Key areas of support from USAID are expected to be: (i) Continued support to ISO including further development of the grid code and market rules as the BiH market is integrated into the regional market and evolves into an open market consistent with EC Treaty obligations and market opening; (ii) Monitoring and implementing the action plans to unbundle the generation and distribution assets of the three Electroprivreda (EP); (iii) Further support for regulation including completing all work associated with the new gas law and amending the state and entity laws for electricity to allow the creation of the single energy regulator.

Regulation has been supported over the past four years by a USAID funded project. This has involved drafting the various electricity laws and providing assistance to the state regulator SERC and the two Entity regulators. This has involved drafting secondary regulation, licensing and tariff work including holding public hearings. In 2006, the USAID project assisted in drafting the new state Gas Law and in making draft amendments to the existing

electricity laws required for unifying the regulatory work in one commission – SERC. There is, as yet, no agreement at the political level for this to proceed, or indication as to whether another path will be followed.

UNDP has been involved in energy efficiency programmes. The 'Efficient Housing Programme' aims to introduce low cost methods of saving energy when building or reconstructing buildings, thus mitigating the emissions of greenhouse gases while at the same time reducing the operational costs and increasing the comfort level of the buildings. The project will also explore through a feasibility study the potential for using individual small biomass-fired boilers for local wood waste in rural households. An energy conservation awareness project is also underway.

EBRD are about to start a short study of options available in the unbundling of the existing power sector distribution companies. Options will likely include asset allocation and share transfer schemes. The results of this study are expected to be available by the third quarter of 2007.

Close coordination with other donors and projects active in the sector is imperative, particularly with USAID in relation to its work with the energy regulators and the gas law. As the leader of the process the EC takes on this role as it assists the various ministries and agencies involved. This project is an integral part of this leadership.