



**EX ANTE EVALUATION OF THE BULGARIAN  
COMPETITIVENESS OPERATIONAL PROGRAMME  
DRAFT FINAL REPORT**

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### Abbreviations:

<b>COP:</b> Competitiveness Operational Programme	<b>MEE:</b> Ministry of Economy & Energy
<b>WG:</b> Working Group	<b>OP:</b> Operational Programme
<b>DG:</b> Directorate-General	<b>P*:</b> Priority *
<b>EAE:</b> (This) Ex-Ante Evaluation	<b>Re:</b> Regarding
<b>EIF:</b> European Investment Fund	<b>SF:</b> Structural Funds
<b>ECD:</b> European Commission Delegation	<b>ToR:</b> Terms of Reference
<b>GOB:</b> Government of Bulgaria	<b>WG:</b> Working Group
<b>BSMEPA:</b> Bulgarian SMEs Promotion Agency	

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## 1. INTRODUCTION & BACKGROUND CONTEXT

### 1.1 Introduction

This document represents the Draft Final Report in respect of the Ex-Ante Evaluation of the Competitiveness Operational Programme of the Government of Bulgaria.

- ◆ **Section 1** sets out the **Introduction, Background Context & Organisation of the Ex-Ante Evaluation**
- ◆ **Section 2** sets out the **Evaluation Objectives and Key Activities**, based on the Terms of Reference
- ◆ **Section 3** sets out the **Review of the Competitiveness OP Socio-Economic Analysis**
- ◆ **Section 4** sets out the **Review of the Competitiveness OP SWOT Analysis and List of Disparities**
- ◆ **Section 5** sets out the **Review of Previous Evaluation Results**
- ◆ **Section 6** reviews the **COP Objectives and Strategy and Coherence with EU and National Policy**
- ◆ **Section 7** sets out the **Environmental Assessment of the Competitiveness OP**
- ◆ **Section 8** reviews the **Competitiveness OP Energy-Related Aspects**
- ◆ **Section 9** sets out the **Review of the COP Monitoring Indicators and Quantification of Objectives**
- ◆ **Section 10** sets out the **Review of the COP Management and Implementation Provisions**
- ◆ **Section 11** sets out the **General Conclusions and Recommendations**.

### 1.2 Background Context

The OP “Development of the competitiveness of the Bulgarian Economy” corresponds to the strategic priority for enhancing the competitiveness of the Bulgarian economy, and represents one of the six Operational Programmes (Ops) developed by the Government of Bulgaria for the programming period 2007-2013.

#### **Stakeholders and Actors Involved**

The Competitiveness OP has been prepared by the OP Working Group, chaired by the designated future Managing Authorities (which for the Competitiveness OP is the Ministry of Economy & Energy). A separate ex-ante evaluation will be carried out for each of the OPs, and this inception report represents the elaboration of the approach for undertaking the ex-ante evaluation of the Competitiveness OP.

Technical support and assistance has been available to the Ministry of Economy and Energy staff throughout this process through a TA Twinning project financed under the PHARE programme. This twinning project has been working in tandem with the Ministry to prepare administrative and management processes for the Ministry’s future role as an MA with regard to the Competitiveness OP, as well as providing advice and feedback on a broad range of issues, including issues relating to compliance SF regulations (e.g. state aid compliance issues), as well as expert advice on the Competitiveness OP strategy, priorities and operational measures.

## Development of the Competitiveness OP

As mentioned, the Competitiveness OP has been prepared by the OP Working Group, which has been chaired by the Ministry of Economy & Energy. The task of drafting the Competitiveness OP began in early 2004. A first draft of the Competitiveness OP was made available to the Commission *on an informal basis* by the Ministry in February 2006, and preliminary and informal comments<sup>1</sup> were provided by the Commission services.

A revised version of the OP was produced in April 2006, following preliminary comments provided by the European Commission. Following some missions that took place between February and April, the Commission provided Ministry staff with some informal guidance and recommendations on the OP content and structure. The changes were supposed to be incorporated in the revised OP by the end of April 2006, so that the first official OP programming documents could be sent to the European Commission in Brussels. The amendments incorporated in the revised Competitiveness OP document were mainly technical, and comprised:

- A shortening of the socio-economic analysis and changing the data contained to be more EU-objective driven. The changes were performed as per the recommendations provided by the ex-ante team in the Working Paper 1.
- The number of Priorities was reduced through merging Priority 4 into Priorities 2 and 5, which actually did not change the strategy, objectives and the philosophy of the Programme. The undertaken changes did not influence the objective, scope and content of the OP, and the focus of the interventions remain the same.

## 1.3 Organisation of the Ex-Ante Evaluation

### 1.3.1 Organisation of the Ex-Ante Evaluation

The ex-ante work involved 2 field missions for each expert, as set out in the Terms of Reference.

The **first mission** focussed on:

- project set-up and planning, acquiring relevant documents
- Reviewing the Socio-Economic Analysis
- Reviewing the SWOT Analysis
- Reviewing Past Evaluation and Project Experience
- Planning and launching the Environmental Assessment Work Programme
- Planning and launching the Energy-Related Assessment Work Programme
- Reviewing Coherence of the Competitiveness OP with key national and EU policy

The **second mission** focussed on:

- Reviewing Coherence of the Competitiveness OP with key national and EU policy
- Reviewing the List of Disparities
- Reviewing the Competitiveness OP Strategy, Objectives and Priority Axes
- Continuing reviewing Past Evaluation and Project Experience
- Reviewing the Competitiveness OP Monitoring Indicators and Quantification of Objectives
- Reviewing the Competitiveness OP Implementation Provisions
- Completion of the Environmental Assessment Work Programme and the Energy Related review work

In addition to regular informal meetings with Ministry Staff, an inception report and interim report were provided to the Ministry to keep them abreast of progress.

### 1.3.1 Constraints facing the Ex-Ante Evaluation

A number of factors have impacted on the evaluation work:

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<sup>1</sup> It should be noted that this informal presentation of the Competitiveness OP to the Commission has no consequence on the timetable for completing negotiations etc regarding this OP.

- High proportion of environment and energy expertise in the team composition as required by the Terms or Reference. This meant that approximately 60 man-days were available for the ex-ante evaluation work beyond the environment and energy dimensions
- Short timetable and limited to complete the work, as per the Terms of Reference requirement to concentrate all of the evaluation fieldwork and consultant days in the first two months of the evaluation timeframe.
- Not all relevant documents could be available in English. For example, the consultants have worked with the draft ex-ante evaluation report on the NDP in the absence of an English translation of this document, and the English-language summary of the National Innovation Strategy.
- Shortly after the first mission, a revised edition of the Competitiveness OP was produced as mentioned above. Effort has been made to include reviews of the revised OP sections in the Ex-ante Evaluation Draft Final Report; however this has required additional time and effort. The reason for the revision of the Competitiveness OP in the midst of the ex-ante evaluation has been explained above and has been dictated by the desire to respond to preliminary feedback from the Commission and to respect deadlines agreed with the Commission regarding submitting the OP for formal feedback. Thus, while perfectly understandable, the revision has meant to some extent that the ex-ante evaluation has been reviewing a ‘moving’ target and has made the evaluation somewhat more complex.

## 2. EX-ANTE EVALUATION OBJECTIVES & SCOPE (TERMS OF REFERENCE)

The following objectives and expected outputs regarding the ex-ante evaluation are set out in the Terms of Reference (ToR). (Text in *italicised* format and between “inverted commas” represents text quoted directly from the ToR).

### 2.1 *Ex-Ante Evaluation – Objectives*

The **global objective** is described as the “*Ex-ante evaluation of the OP “Development of the competitiveness of the Bulgarian Economy” within the National Development Plan 2007 – 2013 of the Republic of Bulgaria in conformity with CR (EC) Regulation No 1260/1999, taking into account the reform of EU Cohesion Policy for the next programming period*”.

The **Specific objective(s)** are described as:

- Assessment of the impact of the proposed interventions within the OP
- Optimisation of the allocation of budgetary resources under the priorities
- Improvement of the overall quality of the OP
- The OPs overall consistency (between analysis, SWOT, strategy and priority development) and coordination with other Operational Programmes as well as coherence with the Community strategic guidelines and the chosen national and regional priorities.

Meeting these objectives is expected to “*improve the overall quality of the COP and contribute to establishing solid grounds for the implementation of the Structural Funds in Bulgaria in the programming period 2007 – 2013*”.

### 2.2 *Ex-Ante Evaluation – Key Activities*

Key Activities specified in the ToR to be undertaken within the ex-ante evaluation are:

- “*Analysis of previous evaluation results*”
- *Analysis of the analytical part of the OP, in particular the strengths, weaknesses, opportunities and threats (SWOT Analysis)*
- *Assessment of the rationale for the strategy and its overall consistency*
- *Quantification of the Objectives*
- *Evaluation of expected impacts, including environmental impact assessment (EIA).* (As discussed in the next section, it has been confirmed that a formal EIA is not required for the Competitiveness OP, and a more general environmental review will be undertaken in its place).
- *Quality of the implementation and monitoring mechanisms”*

### 3. REVIEW OF THE SOCIO-ECONOMIC ANALYSIS AND SWOT ANALYSIS

The review of the Socio-Economic Analysis was undertaken during the first mission of the evaluation team in March 2006, and thus was undertaken on the earlier version of the Competitiveness OP. However, the revised Socio-Economic Analysis section in the April 2006 COP version represents in many respects a summary section of the original Socio-Economic Analysis, in order to make the COP document more readable, and less a substantive alternation of the Analysis.

However, there are also significant substantive changes in some sections of the revised April 2006 Socio-Economic Analysis and these are commented on in Section 3.2

*Before commenting on the revised Socio-Economic Analysis, the main review of the original version is set out below. Selected key comments or recommendations that have been addressed in the revised Socio-Economic Analysis have been removed.*

#### 3.1 Review of the Socio-Economic Analysis (Earlier Version)

#### COP SECTION II.1: STATUS OF THE BULGARIAN ECONOMY

##### 3.1.1 Macro-Economic Development (Section 1.1)

###### *Analysis*

Overall this section is relatively well structured and presented. As can be seen from the Table of Contents in the above table, this section provided an overview of the macro-economic development framework since 1997, and describes in summary the evolution and current situation regarding GDP growth, the labour market evolution, inflation, imports and exports, the national debt, and monetary and foreign currency policy.

###### *Recommendations*

This section can nonetheless be further strengthened with a few small changes:

- Provide a summary table at the end, showing Bulgaria's macro-economic performance compared to the other Candidate Countries and EU-25. (Most of this information is included in the section but a short recapulative table at the end would be helpful).
- Provide a list of disparities at macro-economic level at the end of this section, so that the logical flow from the socio-economic analysis to the List of Disparities can be traced more easily by the reader
- It is worth questioning if some of the competitiveness assessment contained in Section 2 could be moved to this section

##### 3.1.2 Economic Sectors (Section 1.2)

###### Services Sector (Section 1.2.1)

Regarding the Services Sector, the importance of this sector as a motor of overall GDP is emphasised in the text. However, greater detail on growth by sector would be helpful.

###### *Recommendations*

*The following points could be developed in greater detail*

- Relative level of FDI into the science-intensive sectors (which areas, what kind of investment)?
- Shortage of skilled labour force in science-intensive sectors (NB implications for Human Resources OP??)

- Lag in penetration levels (relative to EU-25) in computer and internet use, and implications for ICT business opportunities (and strategic needs – e.g. need to drive this penetration up – which OP is responsible for this?)
- Are the opportunities to be exploited with regard to the strong growth in the supplementary pensions sector? (e.g. government incentives to attract this money into venture capital funds?)

### **Industry (Section 1.2.2)**

The fact that this sector has been hit hardest in the transition to a market economy is clearly communicated. The key role of the processing sector is emphasised, with its representing some 60% of total industrial output, and the relatively low level of GVA that it accounts for (18%). As a first comment it appears somewhat strange to describe a sector including machine-building and household appliances and equipment as a “processing” industry.

A key point is made when providing the breakdown of FDI into the component processing sectors, where it is concluded that the low unit labour cost in Bulgaria does not appear to be a significant factor in attracting mobile international investment, and low labour productivity, deficient transport and technical infrastructure and elements of the business environment appear important influencing factors? The total average figure for FDI during recent years (USD 300,000) needs to be verified as this seems uncommonly low.

There is a clear identification of the abnormally high energy consumption of Bulgarian industry. The fact that 20% of GDP is spent on purchasing primary energy supplies from abroad is identified as a key constraint on economic growth. While this section provides an estimate on the relative energy use per unit compared with other EU Member States, it would be interesting to have data on the exact proportion of companies’ costs structure compared with other EU countries.

In this sector, there are concluding remarks/needs analysis regarding FDI that is not found in other sections.

#### *Recommendations*

- The sectoral typology needs to be reviewed, and the missing 15-20% of this branch accounted for;
- Regarding energy consumption, include data on the exact proportion of companies’ costs structure compared with other EU countries

However, the following issues are not sufficiently addressed:

- The prospects for identifying new markets, and progress made to-date in this area
- Does the SWOT and strategy take account of the differing efficiency levels among component processing sectors?
- Can FDI levels be positively correlated to the differing efficiency levels among component processing sectors?

### **3.1.3 Small and Medium-Sized Enterprises (Section 1.3)**

The section on SMEs provides a significant amount of data. Based on data acquired from an ASMEP Survey of SME needs, SMEs perceive that the biggest challenges they face are:

- a) Insufficient resources for investments and upgrading [46% of survey respondents],
- b) Insufficient current financial resources [44% of survey respondents],
- c) High costs of raw materials [21% of survey respondents].

Other key points raised by the SME analysis are:

- The huge relative underinvestment of Bulgarian companies in plant and machinery (Table 21, page 43)
- Insufficient number of SMEs securing international quality certification, notwithstanding the rapid increase since 2001 (Table 19, page 42)
- Almost 50% of SMEs have never used banking financing
- However, more positively, between 35% and 50% of SMEs have used banking financing during the last three years
- Banking institutions unwillingness to extend credits based on collateral not denominated in real assets

- Almost half of SMEs have not started any preparation for accession to the EU market.

#### *Recommendations*

The following **weaknesses** in this section need to be addressed:

- Lack of information on the sectoral distribution of SMEs, and their employment and turnover contribution by sector
- Lack of information on SME characteristics by sector. This is a particular weakness regarding SMEs in the high-tech sector.
- An over-reliance on the ASMEP survey on SME needs, which it should be remembered is a self-reporting survey. However this is in part recognised by the analysis (e.g. the comments regarding analysis of SME HR policy on page 44, 3<sup>rd</sup> paragraph). Some experience of the evaluation team on previous SME development work in Bulgaria tends to suggest that entrepreneurs sometimes overestimate their marketing and sales capacities.
- Lack of inclusion of data on the relative experience, success and problems encountered by the cluster initiatives described on page 45.

#### **3.1.4 Investments (Section 1.4)<sup>2</sup>**

This section shows the positive and steady convergence of Bulgarian investments in fixed capital in the private sector as a percentage of GDP, rising from 9.8% (EU-25 = 17.5%) in 1998 to 17.8% (EU-25 = 17%) in 2004. Regarding FDI, key points to note in the socio-economic analysis are:

- The improved relative performance of Bulgaria in attracting FDI (measured as total FDI per capita) during 2001-2004 compared with the period 1992-2003 (during 2001-2004 Bulgaria ranked 7<sup>th</sup> among CEE countries, whereas it ranked 10<sup>th</sup> during the period 1992-2003)
- The forecast that during 2005-2007 Bulgaria and Romania will attract higher FDI flows in the run-up to accession (see page 51, COP)
- Assessment that if Bulgaria is to leverage its low-cost labour conditions that are comparable to India and China, it must offer the same level of productivity
- Recent trend of companies in developed countries establishing R&D centres outside of developed countries
- Germany, Netherlands, Austria and France are the biggest investors in the SEE region
- According to the UNCTAD Global Investment Prospects Assessment, the most attractive sectors for FDI flows during 2005-2008 are ICT, transport and tourism-related services, household services, manufacturing (electrical and electro-technical equipment, machinery and equipment, metals) and mining and quarrying<sup>3</sup>.
- The need to increase effort on attracting FDI (in particular from large MNCs) for both greenfield and expansion investments is emphasised, as well as the need to attract investments in sectors with high and average levels of value-added.
- The need to improve the investment environment.
- According to interview feedback from foreign investment, the main attractions of Bulgaria an investment location remain the quality of education of the workforce, a certain flexibility in the labour market and a good correlation between labour costs and qualifications.

#### *Recommendations*

Regarding recommendations to improve this section,

- Better explanation of some of the conclusions –e.g. “*encouraging investments in innovations and high-technological equipment especially for SMEs start-up and development*” – this is not clear.
- Overall, the conclusions under Section 1.4.4 (“Directions to Developing a Policy for Encouraging Investments”) do not necessarily emanate from the preceding analysis, and look in part like they have been extracted from a Bulgarian FDI strategy paper.

<sup>2</sup> There appears to be a typing error at the bottom of page 46 – Gross Fixed Capital Formation for 2004 should be €4 bln, not €4 mln?

<sup>3</sup> It is also reported that this list of most attractive sectors broadly coincides with the findings of a 2005 DeloitteTouche report on the most promising sectors of the Bulgarian economy for FDI, however none of the findings of this report are included in the analysis.

### 3.1.5 Research and Development, Innovation (Section 1.5)

This section emphasises the importance of Bulgaria developing a policy for technological development and innovation in order to become a highly competitive economy, and the need for many Bulgarian firms to develop a real company vision and strategy. The Innovation Strategy of Bulgaria and the National Scientific Research Strategy (2005-2010) have been developed with the objectives of the Lisbon Strategy in mind, and in accordance with the European Innovation Scoreboard 2005 the creation and dissemination of knowledge as an engine of innovation has been monitored.

Key competitive constraints are identified, including:

- The decreasing competitive advantage of Bulgaria in terms of its higher proportion of young graduates
- The low proportion of scientists working in business – but one of the highest proportion in state research institutions (one of the lowest among the EU-28)
- The very low ranking of Bulgaria in terms of life-long learning (the lowest among the EU-27)
- The low ranking of Bulgaria in terms of investment in education as a proportion of GDP
- The impossibility of meeting the Lisbon target of RTD expenditure reaching 3% of GDP by 2010 (of which expenditure two-thirds will come from business).
- Closure of industrial institutes with experimental R&D units during the transition years
- Focus of the 19 state institutes on serving the specific objectives of the respective state bodies
- Untapped scientific potential among lecturing staff in the higher technical schools due to lack of funding
- Innovative firms represent 11.4% of the total number of firms (NSI 2004 survey),
- Product innovation accounts for 44.2% of innovations, with process-based innovation only accounting for 8.9% of innovations (NSI 2004 survey),
- 30.1% of innovative firms (or 3.43% of all firms) undertake R&D in the computer science, architecture and engineering sciences areas
- More than 30% of innovative firms consider that lack of funding is a significant constraint for carrying out innovation activities, while 25% identified the cost of innovation as a significant obstacle (NSI 2004 survey)

#### *Recommendations*

Regarding recommendations to improve this section,

- Possibly an insufficient use of multiple information and data sources (e.g. over-reliance on Innovations.bg and the 2004 NSI survey?)
- Insufficient detail on the research areas of activity of existing state institutes
- Are some institutes securing revenue from private sector (e.g. certain divisions of the TU in Sofia are?)
- Lack of consideration of recent project experience,
- Again, there is no direct correlation between the socio-economic analysis and some of the conclusions/strategy directions elaborated on page 62.
- Similarly, the conclusions of page 65, such as the need to attract international venture capital funds to help fund the innovative process, are not discussed or explained in the main text.
- A possible over-emphasis on the legislative environment for patent protection and trade mark registration

### 3.1.6 Business Environment (Section 1.6)

This section outlines some of the issues regarding the business and regulatory environment for companies – Sub-section on *Simplification of the Normative and Administrative Environment* (Section 1.6.1) - and the steps taken or being taken to simplify the administrative and regulatory burden.

Regarding the Sub-section on the *National Quality Infrastructure* (Section 1.6.2) the overall situation appears positive on a number of fronts. Key observations include:

- a high level of adoption of EU standards (82.17%) – however translation of some standards into Bulgarian is a problem area

- the dynamic market for certification of quality management systems (presently over 50 consultancies and 20 certifying companies, and accreditation of 9 certifying bodies)
- 85 accredited testing laboratories and 142 accredited control bodies
- An established and functioning system for compliance assessment, however there is a lack of professionals for compliance assessment in some areas (e.g. personal protection devices)
- The need for funding for the Bulgarian State Agency for Metrology and Technical Surveillance, in order to acquire new standards.
- Need to develop a network of independent laboratories for testing and controlling measurement devices

Regarding the *Information Society* (Section 1.6.3), Bulgaria's slipping to 73<sup>rd</sup> in the 2004 World Economic Forum Report on the criteria of 'promotion and introduction of the internet and other information technologies' (compared with its ranking at 67<sup>th</sup> in the 2003 Report).

The final sub-section of Section 6 focuses on *Consultancy and Information Services* provided to Business (Section 1.6.6<sup>4</sup>). This section provides some interesting information but the structure and scope of the sector is not clear, and it is worth discussing whether it should be moved into the section on SMEs. Important points raised include:

- The challenges experienced by many regional authorities in implementing EU funded projects as they are supposed to create favourable conditions for local companies to apply for these projects
- The concentration of State aid on the consultancy and NGO 'sector' as an intermediary through which to assist SMEs
- The unsatisfactory co-ordination at the regional and local levels across Bulgaria between the business centres of different NGOs (e.g. BCCI, BIA, BARDA), and between these NGOs and the MSLP JOBS Project and the Telecentres Project of the Ministry of Transport and Communication

### *Recommendations*

Regarding recommendations for improvement

- Regarding *Section 1.6.1*, there is a lack of development of the issue regarding the prohibitive costs of starting a company – alone, the minimum capital required represents 116% of the average per capita income (World Bank Report, 2005). This will likely be an important impediment on future efforts to promote new venture creation (how will this be dealt with in the COP priorities/Priority 1?) What is the plan to address this and over what timescale is a solution envisaged?
- Regarding the national quality infrastructure (*Section 1.6.1*), some more comparative information between the situation in Bulgaria and the EU-15 and EU-10 would be helpful
- Regarding the sub-section on the Information Society (Section 1.6.3), there is no analysis of the implications of under-penetration of internet usage for the development of the high tech sector, for example with regarding to B2C companies
- Regarding the sub-section on the Information Society (Section 1.6.3), it is not clear why export growth has come at the expense of the development of the ICTs in Bulgaria (page 70, paragraph 4)
- In Section 1.6.6, the issue of sub-optimal co-ordination at the regional and local levels across Bulgaria between the business centres of different NGOs is not developed further.
- Regarding the conclusions of Section 1.6, they do not mention any of the issues identified in Sub-Section 1.6.6, such as the sub-optimal co-ordination between NGOs providing business support services, the insufficient awareness amongst SMEs of such business support services – which are likely to be important considerations for the implementation strategy for COP measures.

### **3.1.7 Tourism**

This section has not been reviewed since it is now understood that tourism will not be included within the scope of the Competitiveness OP.

## **COP SECTION II.2: ASSESSMENT OF THE COMPETITIVENESS OF THE NATIONAL**

<sup>4</sup> The numbering of this section should be changed to 1.6.4

## ECONOMY

### 2.1 Competitiveness Index

Key points made during this section include:

- That Bulgaria does not have a formal assessment system of national competitiveness
- Bulgaria's 2004 ranking in the World Competitiveness Index in places it in similar category as Croatia, Poland, and Romania.
- Regarding the WCI Technology Index, Bulgaria's low relative ranking – behind all of the EU-10 and far behind Romania and Croatia (and to a lesser extent Turkey<sup>5</sup>)
- Bulgaria's low ranking on Business Competitiveness, behind all of the New Member States and slipping to 20 places behind Romania in 2004 (compared with 2003)
- Bulgaria's low ranking on sub-indices such as company activities and strategies and quality of the business environment, behind all of the New Member States and Candidate Countries

#### *Recommendations*

- Much of the text in this section is descriptive, and chronicles the movement of EU-15 and EU-10 countries on various aspects of the World Competitiveness Index rankings. The text can be shortened and some could be presented in a comprehensive table showing Bulgaria's rankings relative to other EU-25 and Candidate Countries.

### 2.2 Openness of the Economy

This section reviews the openness of the Bulgarian economy, and describes key components of the liberalisation of foreign trade during the last decade, access conditions to the Bulgarian market (e.g. harmonisation of national customs law with EU legislation etc.), membership of WTO and other international free trade agreements (e.g. EFTA, CEFTA, various bilateral trade agreements)

#### *Recommendations*

- It is not clear what the purpose of this section is. It does not build on the socio-economic analysis of Section 1 and adds little value. It is recommended that it is integrated in the Macro-Economic Section of the Socio-Economic Analysis (Section 1.1)

### 2.3 Existing National Strategies, Programmes and Projects

This section considers the evaluation results from previous projects undertaken by the Ministry of Economy & Energy (Section 2.3.1) and the EU PHARE Programme (Section 2.3.2). The following are the key projects discussed:

#### *a. Ministry of Economy & Energy*

- “Project 100 – Creation of Competitive starting businesses”
- “Supporting the meat producing and meat processing SMEs to introduce the HACCP<sup>6</sup> system”

#### *b. PHARE Projects*

Twelve projects financed under the PHARE programme are referred to in this section:

- “Capacity building for accelerated growth of small and medium size enterprises sector in Bulgaria” (BG9908.02)
- Two twinning projects with the Ministry of Economy & Energy to build its institutional capacity and its capacity to manage the Competitiveness OP
- Two institutional-building projects focussing on developing the capacity of the Bulgarian Trade Promotion Agency and the Executive Agency for National Tourism Promotion and Information
- Pilot scheme for development of clusters

<sup>5</sup> Notwithstanding a modest public institutions

<sup>6</sup> Quality self-control system *Hazard Analysis and Control of Critical Points* (HACCP)

- 3 project focussed on Bulgarian cultural tourism (grant schemes for investment in tourism activities by municipalities and NGOs)
- Two PHARE-financed grant schemes for SMEs, one focussed on “SMEs services and technology grant scheme”, and the other on "Hi-technology business incubators".
- PHARE project (Support for increasing the competitiveness of Bulgarian enterprises) focussed on increasing the competitiveness of Bulgarian productive sector enterprises and prepare them to cope with the competitive pressure within the EU

This is one of the weakest sections of the Competitiveness OP document, and indicative of a wider weakness of the Competitiveness OP document in showing how the experience of previous projects and experience has been taken into account (See Section 3.3. of this evaluation report).

#### *Recommendations*

It is recommended that:

- Further research is undertaken to include other relevant project experience (e.g. cluster development projects financed by the German Development Agency (GTZ), in particular project experience focussed on the software sector)
- An analysis of this project experience, in terms of learning from successes and mistakes made in project design and project implementation and in identifying realistic project targets

### 3.2. Review of the Revised Socio-Economic Analysis

#### 3.2.1 Overview of the Revised Socio Economic Analysis

As mentioned at the beginning of this section, a significantly shortened version of the Socio-Economic Analysis was included in the revised April 2006 version of the Competitiveness OP, with a view to making this section shorter and more manageable for the reader.

The table below provides an overview of the Revised Socio Economic Analysis.

**Table 1 - Overview of the Revised Socio Economic Analysis**

OVERVIEW OF THE SUMMARISED SOCIO-ECONOMIC ANALYSIS REVISION
<p><b>II. SOCIO-ECONOMIC ANALYSIS</b></p> <p><b>1. Status of the Bulgarian economy</b></p> <p><b>1.1. Macroeconomic development</b></p> <p><b>1.2. Energy efficiency</b></p> <p><b>1.3. Small and medium-sized enterprises (SMEs)</b></p> <p>1.3.1. General characteristics of SMEs *</p> <p>1.3.1.2. SMEs by planning regions</p> <p>1.3.2. Indicators and factors for the SMEs competitiveness</p> <p>1.3.2. Access to finances for SMEs</p> <p><b>1.4. Research and Development. Innovations</b></p> <p>1.4.1. Creation of knowledge and its dissemination to enterprises</p> <p>1.4.2. Creation of pro-innovative infrastructure</p> <p>1.4.3. Innovative companies</p> <p>1.4.4. Patents and international trade mark registration</p> <p><b>1.5. Business environment</b></p> <p>1.5.1 Information and Communication Technologies supporting business</p> <p>1.5.2 Consultancy and information services provided to the business</p> <p>1.5.3 Business start</p> <p>1.5.4. National Quality Infrastructure</p> <p><b>1.6. Investments</b></p> <p><b>2. Assessment of the Competitiveness of the National Economy</b></p> <p><b>Business Competitiveness Index</b></p> <p><b>2.2. Links to national strategies, programs and projects</b></p> <p>Projects of the Ministry of the Economy and Energy</p>

\* SMEs are public and private non-finance enterprises in specialized sectors from C to K of the National Classifier of Economic Activities (NCEA 2003): micro enterprises (1-9 employees), small enterprises (10-49 employees) and medium-sized enterprises (50-249 employees).

\*\* the real share is based on the estimations of the National Statistical Institute – without these estimations the share are respectively 16.2% in GDP and 20.8% to GVA.

\*\*\* The approach used is the one also applied in Observatory of European SMEs, on defining by the highest share of employment the dominant size class in a given economic sector/ planning region, respectively the dominant economic sector/planning region among enterprises in a given size class

### 3.2.2 General Comments on the Revised Socio Economic Analysis

The revised section has been reviewed by the evaluation team

- The April version of socio-economic analysis was shortened and revised due to the comments provided by the ex-ante evaluators in Working Paper 1 and the Draft EC “Aide Memoire”. Referring to this paper, the analysis should be significantly reduced in terms of size, and the data should be more EU-objective driven, as the information should provide comparison between Bulgarian and EU average values in key points. The shortened Socio Economic Analysis in the revised OP document has made this section more manageable for the reader, with many sections being considerably shorted, in particular sections such as the opening section on the macro-economic context and the section on the national quality infrastructure.
- The revised Structure and Presentation of the Socio-Economic Analysis is consistent with the recommendations contained in the Ex-Ante Evaluation Report and feedback from the European Commission.
- Apart from all sections being reduced in length, there have been significant changes in some of the core sections of most relevant to the focus of the Competitiveness OP, and this has improved the relevance and focus of the overall section to the COP’s central purpose.
- The SMEs section has been made more focussed, and the text dealing with access to finance has in particular been significantly improved, with useful information on bank lending activity to SMEs.
- Additional information is included on the size of the SME sector at a regional level, which allows the reader to gain a better idea of regional variations in the SME sector.
- Thus, a number of areas of weakness identified in the Socio-Economic Review made available to the Ministry as part of the Interim Report have been addressed, in particular:
  - Lack of data on bank lending to SMEs broken down by sector and by SME size
  - Lack of information on regional divergences in SME development to support this in the SWOT Analysis
- The section on the Research and Innovation Sector has also been improved, with greater reference to the country’s research system, key research stakeholders and existing research priorities. However there is still scope for greater detail and critical analysis here. However, there are still significant gaps, such as a lack of information on high-tech companies.
- The section on earlier project experience has also been improved and strengthened with more summary information included on the progress of some projects, in particular some of the financial assistance projects. However, this section can still be developed with greater critical analysis of key learning from these projects with regard to the Competitiveness OP Priorities and measures.

### **3.3 The Socio-Economic Analysis – Conclusions and Recommendations**

Key conclusions and recommendations regarding the Socio-Economic Analysis are set out below:

- The original (longer version) of the Socio-Economic Analysis should be updated with new information presented in the revised Socio-Economic Analysis summary, in order to have one complete detailed Socio-Economic Analysis that can be further developed in a comprehensive and authoritative research base for the Competitiveness OP SWOT, Strategy and Priorities and Operational Measures.
- Each of the specific recommendations contained in Section 3.1 should be checked to ensure that they are addressed in future revisions of the Socio-Economic Analysis.
- Overall, the summarised version of the Socio-Economic Analysis contains significant improvements in the core SME and Research and Innovation sections, and this improvement has been accomplished in a short period of time by the Ministry staff.
- Significant information gaps however still need to be addressed, for example with regard to:
  - Providing a detailed account of the Bulgarian high-tech sector
  - Greater detail on the Research infrastructure (size, research activities, key players, performance, key challenges etc.) and the innovation governance system
  - More information on the sectoral breakdown of the SME sector and profiles of key sub-sectors

Overall, good progress has been made, however this section does need continued development in order to provide a sufficiently robust platform on which to build the final SWOT Analysis, List of Disparities and Strategy for Competitiveness and SME Development.

#### 4. REVIEW OF THE SWOT ANALYSIS & LIST OF DISPARITIES

This section considers the SWOT analysis contained within the Competitiveness OP document, following the review of the Socio Economic Analysis in the previous section.

##### 4.1 Overview of SWOT Analysis

For ease of reference for the reader, the existing SWOT analysis is set out in the Table below. The SWOT analysis contains a. 8 identified strengths, b. 16 identified weaknesses, c. 14 identified opportunities, and d. 7 identified threats:

**Table 1 - SWOT Analysis of the Competitiveness OP**

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>• Macroeconomic stability and sustainable growth; <a href="#">(1.1)</a></li> <li>• Stable and improving investment and credit rating of the Bulgarian economy; <a href="#">(1.1)</a></li> <li>• Increasing contribution of SMEs in GDP; <a href="#">(1.3.1)</a></li> <li>• Good production traditions in certain sectors of the economy; <a href="#">(1.2.2)</a></li> <li>• Increasing share of the private sector in economy; <a href="#">(1.1.1)</a></li> <li>• Sustainable bank sector; <a href="#">(1.2.1)</a></li> <li>• Favourable geographic and climate conditions; <a href="#">(1.7)</a></li> <li>• Favourable tax rates; <a href="#">(1.1.1)</a></li> </ul>	<ul style="list-style-type: none"> <li>• Low GDP per capita; <a href="#">(1.1.1)</a></li> <li>• High energy intensity of economy; <a href="#">(1.2.3)</a></li> <li>• Weak connection business-science-education; <a href="#">(1.5.2)</a></li> <li>• Increasing negative rates of export trade balance; <a href="#">(1.1.4)</a></li> <li>• Low technology level; <a href="#">(1.3.2)</a></li> <li>• Slow pace of development of information society; <a href="#">(1.6.3)</a></li> <li>• Low labour productivity; <a href="#">(1.1.3)</a></li> <li>• Dominating share in export of production with low value added; <a href="#">(1.1.4)</a></li> <li>• Conservative management in companies; <a href="#">(1.3.2)</a></li> <li>• Insufficient use of information technologies in business; <a href="#">(1.3.2)</a></li> <li>• Low share of enterprises with introduced management systems (QMS, OSH, ecological, etc.); <a href="#">(1.3.2)</a></li> <li>• Difficult access to finance for SMEs; <a href="#">(1.3.2)</a></li> <li>• Low quality and insufficiency of business services; <a href="#">(1.6.6)</a></li> <li>• Low admin. capacity for business support at local level; <a href="#">(1.6.6)</a></li> <li>• High dependency on materials; <a href="#">(1.3.2)</a></li> <li>• Non-favourable enough structure of FDI (low share of investments in industry) <a href="#">(1.4.1)</a></li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>• Accession to the Common EU Market;</li> <li>• Integration of Bulgarian companies into the European business networks;</li> <li>• Access of business to Structural funds;</li> <li>• Increase in the entrepreneurship;</li> <li>• Attraction of investments in high-productivity sectors;</li> <li>• Access to systems for technology, product and management transfer;</li> <li>• Development of ecological productions;</li> <li>• Development of alternative financial sources and non-banking financial sector;</li> <li>• Development of different forms of cooperation (clusters, public-private partnership, etc.);</li> <li>• Resource and business orientation of the scientific researches;</li> <li>• Increase in the energy efficiency of production and support for the development of renewable energy sources;</li> <li>• Improvement of the administrative and economic business environment;</li> <li>• Development of information and consultancy services;</li> <li>• Support for the development of innovations and technologies;</li> </ul>	<ul style="list-style-type: none"> <li>• Recession on international markets;</li> <li>• Political instability on the Balkans;</li> <li>• Threat of international terrorism;</li> <li>• Increase of the price of energy resources;</li> <li>• Lack of change in enterprises' behaviour after accession;</li> <li>• Insufficient capacity for absorption of EU Funds;</li> <li>• Enterprises not able to fulfil in time the EU requirements;</li> </ul>

Two changes have been identified in the SWOT Analysis in the revised version of the COP, as highlighted in bold font in the table above:

- **SWOT Strengths:** Favourable geographic and climate conditions; [\(1.7\)](#)
- **SWOT Weaknesses:** High dependency on materials; [\(1.3.2\)](#)

## 4.2 Review of SWOT Analysis against the Socio-Economic Analysis

This Section reviews the swot against the Socio-Economic Analysis. A number of factors in the SWOT where further clarification or precision is deemed necessary are identified below. The following section (Section 3.2.3) provides recommendations on additional findings to include in the SWOT.

### ***Factors requiring further clarification or precision***

The following SWOT points could benefit from further clarification or precision:

#### *Strengths*

- “Macroeconomic stability and sustainable growth”: A minor comment - here it is recommended to specifically mention low inflation, i.e. “Macroeconomic stability (including low inflation) and sustainable growth”
- “Favourable tax rates”: What is the basis for this assessment? Does it mean more favourable tax rates than the EU average or sufficiently favourable to outperform existing low-tax strategies used by existing EU members such as Ireland, Estonia...?

#### *Weaknesses*

- “Low technology level”: Suggest adding “and need for technological renewal and investment in enterprises”
- “Low labour productivity”: Suggest adding “and lowest for sectors with highest export rates and lowest average salary”

#### *Opportunities*

- “Accession to the Common EU Market”: There may be a case for also including this as a threat, but on the whole it is probably accurate to consider this as a ‘net opportunity’

Based on reviewing the SWOT contents against the findings of the Socio-Economic Analysis, a number of additional points have been identified which the evaluation team considers should be included in the SWOT analysis. (See points listed under “Recommended Additions” in Section 3.2.3 below for each of the 4 parameters of the SWOT). Possible points where it is particularly debatable whether or not to include them are listed under “Possible Additions”

These points cover all 4 parameters, but in particular Weaknesses, Opportunities and Threats. These suggestions are set out in the following Section 4.4.

### 4.3 SWOT Analysis - Specific Recommendations

Based on reviewing the SWOT analysis against the existing Socio-Economic Analysis, it is recommended that consideration be given to including the following points in the SWOT analysis

#### A. STRENGTHS

##### *Recommended Additions:*

- Concentration of FDI in knowledge-based activities (1.2.1)
- Higher (relative) efficiency in key sector such as finance and communications (but transport lags behind) (1.2.1)
- Relatively flexible labour market (1.4.2)
- Decreasing level of unemployment? (1.1) – or **Weakness??**

#### B. WEAKNESSES

##### *Recommended Additions*

- High unemployment levels (notwithstanding decrease) (1.1)
- Investment in the transport and communications infrastructure started too late (1.2.1)
- Low FDI levels relative to some EU-10 and Candidate Countries (1.2.1)
- Need for development of the non-bank financial sector (1.2.1)
- Insufficient targeting and resourcing of efforts to attract FDI (1.2.2)
- Promising prospects for successful integration of Bulgarian power supply industry into the EU system after 2007 (12.3.3)
- Most enterprises unprepared for the liberalised energy market and emissions trade (1.2.3.4)
- Local authorities underestimate the importance of providing incentives for developing SMEs providing energy-efficient services, and of promoting energy efficiency in general (12.3.4)
- For most SMEs, replacement of obsolete, energy-intensive equipment is not an affordable solution in the short-term (12.3.4)
- Shortage of experts for designing, funding and managing projects promoting energy efficiency (12.3.4)
- Shortage of experts for designing, funding and managing projects promoting energy efficiency (12.3.4)
- High cost of raw materials and supplies for production (SMEs' perception) (1.3.1)
- Low use by SMEs of technology transfer centres? (1.3.1)
- Low use by SMEs of outside suppliers for legal, financial, and accounting and tax consultancy (1.3.1)
- Existing sector targets for FDI broadly matches the focus of the Competitiveness OP (1.4.1)
- Low proportion of scientists working in business (one of the lowest among the EU-28) (1.5.2)
- The low ranking of Bulgaria in terms of life-long learning and in investment in education as a proportion of GDP
- Low proportion of process-based innovation among innovative firms (1.5.3)

#### C. OPPORTUNITIES

##### *Recommended Additions:*

- Likely strong investment in transport, warehousing and communications in the coming decade (1.2.1)
- Government initiatives to increase uptake of the Information Society may provide further boost for the telecoms sector (1.2.1)
- Opportunities for venture capital fund creation using incentives for supplementary pension scheme funds? (1.2.1)
- Faster growth in value-added of SMEs compared to the wider economy, with small enterprises showing highest growth among SMEs (1.3.1)

- Faster growth in labour productivity of SMEs compared to the wider economy (1.3.1)
- Successful impact through the Competitiveness OP on micro-enterprises offers the prospect of significant employment creation (*deduced* from 1.3.1)
- Industry sectors with higher than average value-added display above-average efficiency in performance (1.2.2)
- Opportunities to consolidate Bulgaria's role as a leading player in SEE and Euro-Med power supply market? (1.2.3.3)
- EU accession offers access to Bulgarian SMEs' primary export market (1.3.1)
- High proportion of researchers working in state research institutions could be a source of competitive advantage if successful re-orientation of such institutions can be achieved (*deduced* from 1.5.2)
- Untapped scientific potential among lecturing staff in the higher technical schools due to lack of funding (1.5.2)

*Possible Additions:*

- Strong domestic consumer demand for household appliances would suggest favourable prospects for electrical engineering manufacturing? (1.2.1)
- EU pollution control requirements likely to mean provided continued incentive for car substitution? (1.2.1)

## D. THREATS

*Recommended Additions:*

- Phare project experience suggests implementation and absorption challenges are a real issue to be dealt with for the Competitiveness OP (1.6.6)
- Sub-optimal co-ordination at the regional and local levels across Bulgaria between the business centres of different NGOs (1.6.6)
- Any further delays in the privatisation of key transport operators (Bulgaria Air, sea and river navigation companies, ports) (1.2.1)
- Lack of sufficient quality certification support constraining SMEs export potential (1.3.1)
- High concentration of total FDI (62%) in Sofia city and district (1.4.1)
- No possibility to meet the Lisbon target of RTD expenditure reaching 3% of GDP by 2010 (of which expenditure two-thirds will come from business).
- High relative time and procedure costs to starting a new company (compared with EU best practice countries) (1.6.1)
- High capital costs of starting a new business (1.6.1)
- Bulgaria's low ranking on World Competitiveness Index Technology Index (international perception threat) (2.1)

*Possible Additions:*

- Small risk that level of bank lending could lead to economy overheating? (however credit portfolio of banking system in good shape) (1.1)
- Further employment loss in Bulgarian industry sectors pre- and post-Accession? (*implied* from 1.2.2)
- Decreasing competitive advantage of age-structure of Bulgarian population (1.5.1)

#### 4.4 SWOT Analysis – General Recommendations

Overall, the SWOT analysis is incomplete, as already see in terms of suggested additional points from the Socio-Economic analysis for inclusion.

The previous section (Section 3.1) provided a series of recommendations for each section as to how the Socio-Economic Analysis might be further strengthened and developed. This naturally implies that the SWOT Analysis will also need further development, corresponding to the additional analysis to be added to the Socio-Economic Analysis.

##### 4.4.1 SWOT – Recommendations Regarding Required Additional Content and Thematic Findings

Some of the additional points to be included in the Strengths, Weaknesses, Opportunities and Threats are likely to include:

- More detailed findings regarding the **SMEs sector**, including:
  - More detailed sector breakdowns
  - Results under previous PHARE and other ILO projects and initiatives
- Findings on the state of the **high-tech sector**, based on new information included in the socio economic analysis – this is likely to include SWOT findings regarding:
  - size and growth
  - key challenges facing high-tech SMEs
  - type and scale of financial investment needs
  - areas offering possible competitive advantage (product and process technologies)
  - experience in accessing EU markets
  - FDI investment breakdown.
  - Areas where business-to-business co-operation may support growth and internationalisation
- More detailed findings on the **research and innovation sector**, based on new information included in the socio economic analysis – this is likely to include SWOT findings regarding:
  - Research focus of existing state research institutions
  - Existing linkages between PROs and business, and any evidence of good/promising practices
  - Challenges facing research and business actors in building mutual linkages
  - Possibilities for business – science collaboration

##### 4.4.2 SWOT – Recommendations Regarding Structure and Presentation

Beyond the degree of completeness of the SWOT content, a general review of the presentation of the SWOT leads us to the following observations:

- The linkage between the SWOT and the preceding Socio-Economic Analysis is insufficient
- The current presentation of the SWOT as a basis for developing a Competitiveness OP strategy and priorities can be improved

The following changes are thus recommended to increase the relevance and coherence of the SWOT:

- a. Including a *Summary Findings section* that links the findings of the Socio-Economic Analysis to the SWOT
- b. Providing an *Introductory section* explaining the purpose, content, and structure of the SWOT

c. Considering **dividing the SWOT Analysis into at least 2 sections**:

- A *GENERAL Section*, focussing on factors that are considered ‘external’ to the focus of the Competitiveness OP
- A *Section on Competitiveness, SMEs and Innovation*, focussing on the factors considered most relevant to the focus of the Competitiveness OP and which will be addressed in the Competitiveness OP Strategy, Priorities and Operational Measures. An example of this structure, using the existing “Strengths” parameter of the SWOT, is provided in the table below.

*Example of Revised SWOT Analysis Presentation<sup>7</sup>*

STRENGTHS
<p><i>General Factors</i></p> <ul style="list-style-type: none"> <li>• Macroeconomic stability and sustainable growth; <a href="#">(1.1)</a></li> <li>• Stable and improving investment and credit rating of the Bulgarian economy; <a href="#">(1.1)</a></li> <li>• Increasing share of the private sector in economy; <a href="#">(1.1.1)</a></li> <li>• Favourable geographic and climate conditions; <a href="#">(1.7)</a></li> <li>• Favourable tax rates; <a href="#">(1.1.1)</a></li> </ul> <p><i>Competitiveness, SMEs and Innovation Factors</i></p> <ul style="list-style-type: none"> <li>• Increasing contribution of SMEs in GDP; <a href="#">(1.3.1)</a></li> <li>• Good production traditions in certain sectors of the economy; <a href="#">(1.2.2)</a></li> <li>• Sustainable bank sector; <a href="#">(1.2.1)</a></li> </ul>

It should be noted that Ministry staff consider that enlarging the SWOT and dividing it into General and Specific parts will only hamper the reading of the section, and that general findings in the SWOT on macroeconomic and other factors (e.g. issues on privatization and transport sector) have no direct connection with the OP content and are provided in the SWOT of the National Strategic Reference Framework document. The evaluation team agrees in part with this concern. One possible compromise might be to include general macro-economic factors in a one-page Annex to the OP document (thereby tracking relevant macro factors the impacts of changes in same could influence the SWOT factors directly relating to the COP.

<sup>7</sup> Just as it is not always easy to classify a competitiveness finding as a strength/weakness/opportunity or threat, it will not always be easy to classify a factor as COP-extraneous or COP-specific.

## 4.5 List of Disparities

The List of Disparities in the March 2006 version of the COP has been reviewed by the evaluation team<sup>8</sup>.

### Competitiveness OP (March 2006 Edition) – List of Disparities

<p><b>Macro indicators</b></p> <ol style="list-style-type: none"> <li>1. Low GDP per capita</li> <li>2. Employment level (for the population between 15 and 64 years of age) in Bulgaria is significantly below the EU (15) average</li> <li>3. Unemployment level in Bulgaria is still one of the highest among the newly accessed countries and the candidate countries</li> <li>4. Labour productivity is only 31.8% of the EU (25) average, and the lowest in comparison to the new EU members and the other candidate countries</li> <li>5. Forms of follow-up education still not well developed</li> <li>6. Large current account deficit</li> <li>7. Big territorial disproportions in SMEs distribution</li> </ol> <p><b>Industry</b></p> <ol style="list-style-type: none"> <li>1. Low productive efficiency in industry – insufficient utilization of productive capacities.</li> <li>2. High export share of goods with relatively low level of processing.</li> <li>3. High energy intensity of the economy.</li> <li>4. Out-dated technologies and equipment.</li> <li>5. Insufficient use of renewable energy sources.</li> </ol> <p><b>SMEs</b></p> <ol style="list-style-type: none"> <li>1. Low labour expenses per employee compared to EU-25 and low value added generated per employee.</li> <li>2. Low labour productivity compared to EU countries.</li> <li>3. Low level of introduction of quality management systems.</li> <li>4. Low level of compliance with EU requirements and standards.</li> <li>5. Insufficient effectiveness of marketing and low quality of professional management.</li> </ol> <p><b>Financial instruments</b></p> <ol style="list-style-type: none"> <li>1. Difficult access to bank credits for investment purposes.</li> <li>2. Insufficiently developed system for alternative financial instruments.</li> </ol> <p><b>Business environment</b></p> <p><i>Business services</i></p> <ol style="list-style-type: none"> <li>1. Poor spread of business-oriented services</li> <li>2. Low quantity and quality of services offered</li> <li>3. Low-level of coordination among institutions offering services to SMEs</li> </ol> <p><i>National quality system</i></p> <ol style="list-style-type: none"> <li>1. Only 18.7% of the introduced European standards are with translation in Bulgarian</li> <li>2. Bulgarian Standardization Institute has no regional structures and does not sell standards and standardization products on the Internet</li> <li>3. Lack of interest for accreditation in the fields “bodies for certification of environment management systems” and “environment auditors”</li> </ol>	<p><i>National quality system (ctd.)</i></p> <ol style="list-style-type: none"> <li>4. Poor product certification</li> <li>5. Poor interest in accreditation of calibration laboratories</li> <li>6. There are no candidates for bodies for evaluation of correspondence for certain groups of products</li> <li>7. Insufficiency of funding for the purchase of new etalons</li> <li>8. No network of laboratories for calibration, as well as no network of independent laboratories for testing and examination of measurement devices</li> <li>9. Problem for the implementation of the harmonized legislation – administrative capacity and outdated laboratory equipment</li> </ol> <p><b>R&amp;D and Innovations</b></p> <p><i>Innovation environment</i></p> <ol style="list-style-type: none"> <li>1. Bulgaria is in the group of catching-up countries according to the General Innovation Index</li> <li>2. Low ratio innovations/GDP per capita</li> <li>3. Poorly developed technology transfer structures</li> <li>4. Poorly developed centres/incubators to support the development and realization of innovative products</li> <li>5. Insufficient market experience for implementation of the patent system</li> </ol> <p><i>Innovation system – universities, laboratories</i></p> <ol style="list-style-type: none"> <li>1. Insufficient and inadequate financing of innovations</li> </ol> <p><i>Human capital</i></p> <ol style="list-style-type: none"> <li>1. The quality of education and qualification does not correspond to the requirements of business</li> <li>2. There is a tendency for reduction of the number of people engaged in R&amp;D</li> </ol> <p><i>Innovations in companies</i></p> <ol style="list-style-type: none"> <li>1. Companies engaging in R&amp;D are only 3.43% of the total number of enterprises</li> <li>2. Poor market orientation of R&amp;D</li> <li>3. The expenditures of companies for R&amp;D as percentage of the GDP for the country is low in comparison to the other European countries and this tendency is stable over the last years</li> <li>4. The financing of the innovation process and the management of scientific research is a problem for Bulgarian business</li> </ol> <p><b>Tourism</b></p> <ol style="list-style-type: none"> <li>1. Unfavourable ratio of incomes from basic and complementary services in tourism – low share of incomes from complementary services.</li> <li>2. Relatively low average incomes per tourist compared to other tourist destinations.</li> <li>3. Insufficient quality level of offered tourist services and products – lack of quality systems and standards.</li> <li>4. Insufficient and ineffective national promotion in the filed of tourism</li> </ol>
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<sup>8</sup> The revised version of the Competitiveness OP does not appear to contain a list of disparities.

### *Recommendations*

Overall, this list includes some of the most significant disparities; however the list can be made more comprehensive.

- It is recommended that the list be reviewed in light of the above comments regarding the SWOT Analysis and recommended additional factors to include in the SWOT Analysis.
- It would be helpful if linkages **and inter-relationships were identified between the disparities, and if they could be categorised in terms of the relative importance for the COP Programme**. One possible way of starting this would be to **classify disparities in terms of their anticipated duration** (short-term disparity, medium-term disparity, long-term disparity).
- The **balance** of the list can likely also be improved, for example there are 5 disparities listed for Industry and a further 5 disparities relating to SMEs, whereas there are 9 disparities listed regard the national quality system.
- Additional specific disparities could be inserted in respect of core focus areas of the COP, for e.g. some disparities with regard to the situation and performance of the Bulgarian high-tech sector.
- Finally, the list of disparities should be also reviewed with respect to the monitoring indicators, or more precisely the monitoring indicators should take into account the final list of disparities.
- Greater linkage between the Competitiveness OP measures and the list of disparities would also be helpful. For example, each priority area could list the principal disparities that would be addressed by the measures under the given priority.

It should be noted also that the Ministry of Economy & Energy has also launched a large-scale survey of the SME sector in Bulgaria. This is expected to provide significant other information on the sector in Bulgaria, which hopefully can feed into later reviews of the Socio Economic and SWOT Analyses.

## 5. PREVIOUS EVALUATION RESULTS

One of the weaknesses of the Competitiveness OP is the lack of attention paid to the experience of previous projects and experience, in terms of learning from successes and mistakes made in project design and project implementation and in identifying realistic project targets.

### 5.1 *Conclusions from Programming Documents*

The NDP ex-ante evaluation makes references to lessons learned from the Phare-funded projects but in most cases it does not distinguish between sectors, therefore making it impossible to clarify whether the conclusions apply to the economic development sector or not. Among the points raised in the document, particular attention should be paid to the following:

- Overambitious projects in relation to the absorption capacity of the relevant institutions
- Vague objectives of projects and a wide variety of activities under projects.
- Irrelevant or unusable indicators for the measurement of achievement of the project objectives
- Incomplete project preparation (missing documents or data in project fiches)
- Poor preparation of tendering and contract documents and a wide variety of contracting schemes for various components in the Phare project fiches.
- Lack of efficiency in both preparation and implementation of Phare projects, mainly attributable to lack of experienced (key) management staff and to high-turnover. This problem was particularly pronounced in the economic development sector.
- Project effectiveness was generally suboptimal mainly due to delays in implementation.
- Project impacts could not be assessed because the systems of quantified monitoring indicators were not implemented fully.

#### *Recommendations*

Main Recommendations (lessons learned) from NDP ex-ante evaluation.

- Administrative capacity should be increased compared to Phare: improved motivation and remuneration will help to retain and increase staff and stimulate experience and skills in project cycle management.
- Quality assurance and time management should be improved in all relevant institutions.
- The size of the project pipeline should be matched with absorption capacity. It is better to have fewer high quality prepared projects than many low quality projects.

No references to past experiences are made in the National Strategy for SME development or any other relevant documents.

### 5.2 *Previous Experience from Phare and Other Donor-Funded Projects*

Even though several projects relevant to the Competitiveness OP have been implemented in the past – mainly under the Phare programme – little is known regarding their design strengths and weaknesses, their effectiveness and efficiency and their impacts (overall or specific). Even less information is available regarding the attainment of quantified indicators by those projects. This section summarises the projects researched and the main findings of the evaluation team from the desk research it performed.

The review of relevant project experience from past PHARE and other projects was limited by the limited availability of project reports and project and programme evaluations that could be made available to the consultant<sup>9</sup>.

A review of project reports and evaluations that were acquired reveals the following relevant points for consideration:

- *Pilot scheme for development of clusters (BG2003-004-937.02.03)*: The project seeks to promote the introduction of a cluster approach and establishment of a pilot cluster model (in two sectors), the aim of which is to create a strategy for cluster development. It started in 2003, and a second phase of the project is foreseen under the Financial Memorandum 2005 part II. The 2003 PF (project fiche) and the monitoring report No 5, M/BG/ED/0608 were acquired but no Phare Interim Evaluation report. As a consequence, no conclusions can be derived regarding project effectiveness but also regarding average unit costs, SME co-financing ability etc. due to the absence of quantified IoAs in the planning documents.
- *Phare SME Grant Schemes - "SMEs services and technology grant scheme" (BG 0102.01)*: The project implemented 2 components: an IB component including drafting of the operational guidelines for the grant scheme, training, consultancy services to SMEs, etc; an SME technology grant scheme which financed 88 companies.

From the desk research performed the following conclusions regarding average unit costs, demand for the project, SME co-financing ability, outcomes, etc. were reached:

- For the SME technology grant the average grant was €39,000 per company; 70 out of 88 approved companies reached completion which raises the rate of success to 79,5%; the materialised public co-financing rate was 53%, lower than the 57% planned co-financing rate. No ex-post indicator data were kept/reported by the project monitoring reports and therefore it was impossible to reach further conclusions regarding the project effectiveness and overall impact.
- From the monitoring report reviewed<sup>10</sup>, efficiency was compromised due to a lack of sufficiently detailed activities and milestone schedules.
- *"Hi-technology business incubators" (BG 0102.02)*: The project implemented 3 components: an IB component including the drafting of the operational guide for the grant scheme, training, etc; a renovation programme for 6 existing high-tech incubator facilities; an R&D grant scheme which financed 49 companies.

From the desk research performed, the following conclusions were reached regarding average unit costs, demand for the project, SME co-financing ability, outcomes, etc.:

- *Incubator costs*: it was unclear from the monitoring report what the net incubator costs were.
- *R&D grant*: The average grant was €32,000 per company; 37 out of 49 approved companies reached completion which raises the success rate to 75%; the planned as well as the materialised public co-financing rates were 57%. No ex-post indicator data were kept/reported and therefore it is impossible to reach further conclusions regarding project effectiveness and impact.
- From the monitoring report reviewed<sup>11</sup>, key lessons reported were that the grants must exceed €50,000 per company in order to have a more significant impact and that eligible equipment must be closely related to R&D work. Furthermore, applications need to include detailed activities and milestones schedules, and product patent(s) must be required from projects.

<sup>9</sup> No comprehensive documentation on the performance and results were available on the following projects:

- a. *"Capacity building for accelerated growth of small and medium size enterprises sector in Bulgaria" (BG9908.02)*: The project aimed at improving the structure of the Agency for SMEs and at the development of a regional agency network. It was researched because the evaluation team hoped to find useful information regarding the implementation capacity of the agency but no documentation was made available.
- b. *Phare twinning projects i) "Strengthening the capacity of the Ministry of Economy and Energy" (BG 0002.01)*: The projects aimed at strengthening the capacity of the Ministry of Economy and Energy and could be useful for establishing the implementation capacity of MEE as the implementing agency of the COP.

<sup>10</sup> Monitoring report N° 9 M/BG/ED/0602.

<sup>11</sup> Monitoring report №9, M/BG/ED/0603

- “Project 100” – Creation of Competitive Starting Businesses (Ministry of Economy & Energy/UNDP): Project 100 focuses on the creation of a network of business centres to support persons with viable business ideas to start their own business through self-employment, creation of a family business or opening up a small enterprise. No information on results was available from Government Ministries, however some limited data was found on the UNDP Website. The project supports private individuals, and financial support is contingent on applicants completing successfully a 10-day training, developing in some detail a viable idea and business plan, defending their business plan at a national contest and registering their company. Beginner companies will receive comprehensive support from the JOBS Business Centres ranging from business development services to leased equipment. Preference is given to business ideas that involve the use of ICT, the development of new products and services, new technical solutions, new technologies, implementation of energy-saving and environmentally-friendly technologies, alignment of operations with EU standards.

Launched in 2004 in a pilot phase, Project 100 now covers 9 districts in Bulgaria. In order to receive a grant, an applicant need to contribute 20% of its value in own funding for the start of operations. The grant amounts made available to successful applicants range from BGN 10,000 to 20,000. As of beginning of June 2006, the number of new companies started up under the project stood at 145, while 600 individuals had received training. Grant funding was provided to start up small companies in wide variety of sectors, including mechanical engineering, chemical products, food processing and the light industries, rural tourism, and furniture production.

- “Support for increasing the competitiveness of Bulgarian enterprises” (BG2004/016-711.11.04) and (2005/017-586.04.01): The project purpose is to increase the competitiveness of Bulgarian productive sector enterprises and prepare them to cope with the competitive pressure within the EU through targeted support in accession-related aspects of their development, as well as improving the regional and local business environment through promoting the development of public-private partnerships. It was first financed under part II of the 2004 FM (financing memorandum) and subsequently under part II of the 2005 FM. A third phase is foreseen under the 2006 FM. The project is implemented through 2 TA contracts and 3 Grant Schemes and includes assistance in 3 forms: a) consultation assistance, b) investment assistance, and c) vocational training. Under the Consultancy grant scheme, consultancy services<sup>12</sup> projects of up to 5000 euros are eligible and the project finances up to 65% of total costs. The Competitiveness grant scheme<sup>13</sup> finances investments targeted at OSH, quality management, environmental compliance, etc. Grants range from 10000 to 50000 euros and cover 65% of total investment costs. Finally, the PPP (public-private partnership) grant scheme finances mainly service contracts (e.g. project pipelines, data collection, and training) and the upgrade of existing business centres. The grants range from 5000 to 25000 euros and cover 75% of total costs.

The project is still under implementation. There is no data regarding the number of entities financed or other outcomes of the project as yet. Furthermore, there are no quantified indicators in the planning documents or in the monitoring reports. No Phare interim evaluation reports were made available to the evaluator.

The Ministry of Economy & Energy has pointed out that a number of the above projects (namely BG2003-004-937.02.03, BG 0102.01, BG 0102.02, BG9908.02, BG0002.01) were overseen by the previous Project Implementation Unity (PIU) of the Ministry of Regional Development and Public Works, and that given that the Ministry of Economy & Energy has been acting as an Implementing Agency under Phare Programme only since January 2005 the experience gained under these projects is not relevant to the capacity of the Ministry in the field. The evaluators totally understand this viewpoint, however a review of relevant PHARE project experience should not simply be restricted to projects for which the Ministry of Economy & Energy have had formal responsibility, but rather should include any PHARE project experience that may have some useful lessons for the current Competitiveness OP.

<sup>12</sup> Most common business consultancy services are eligible.

<sup>13</sup> Apart from the pure investment component it also includes a consultation and a vocational training element.

Implementation is ongoing for a number of other relevant projects for which the Ministry of Economy and Energy acts as IA, and it is important that relevant experience is extracted as appropriate for the benefit of the design of projects under the Competitiveness OP:

- BG 2004/016-711.11.04 – Support for increasing the competitiveness of the Bulgarian enterprises
- BG 2005/017-586.04.02 - 02 Cluster Development Initiatives – Phase II
- BG2005/017-353.10.06 Support to the implementation of the Bulgarian National Innovation Strategy

Finally, the evaluation team has also reviewed the UNDP report on the absorption capacity of NGOs and businesses in Bulgaria with respect to the Structural Funds<sup>14</sup>. The report identifies a significant capacity gap among NGOs, and in particular significant regional challenges, that need to be addressed in order to ensure that NGOs can play a full role in ensuring optimal absorption of Structural Funds. Challenges identified include lack of sufficient NGO training, insufficient understanding of how the Structural Funds work, insufficient absorption capacity, co-funding, unrealistic expectations and a lack of long-term vision. While some of the challenges will already be addressed through such actions as the information and publicity campaign launched by the Ministry, it is important that a comprehensive strategy is developed towards the NGO sector. The fact that a member of the Competitiveness OP team at the Ministry has been involved in the UNDP study peer group can only facilitate the Ministry in adopting a comprehensive strategy towards addressing the challenges identified by the report.

### **5.3 Conclusions from Stakeholder Interviews**

In order to supplement the information gathered from the desk research, the evaluation team conducted several interviews with key officials of the Ministry of Economy & Energy, BSMEPA and Phare project Implementing Agencies. These interviews revealed the following “key information” related to the Competitiveness OP:

- The document (COP) mostly expresses the “wishes” of the Ministry of Economy and is not always a realistic representation of what can be reasonably expected to be achieved through an operational competitiveness programme at this stage of development of the Bulgarian economy and SMEs especially considering the country’s readiness to implement such programmes. In a sense, it is the “ideal” programme and not the “implementable” version of it.
- There has been insufficient participation of other stakeholders (e.g. the banks, SME associations, chambers, other Ministries and government agencies, agencies working with SMEs, etc) in the drafting of the Competitiveness OP. This results in a double handicap. First, the Ministry (in its capacity as the author of the Competitiveness OP) may not be familiar with data and other general information (that these stakeholders may possess) regarding the state and the capacity of Bulgarian enterprises to make investments, their predisposition towards certain forms of investments (e.g. innovation), their facility to locate financing to back-up these investments, etc. Second, the stakeholders (e.g. banks, SMEs, etc) are not sufficiently informed about the Competitiveness OP, and therefore cannot start preparing in order to be in a position to play their role once the Competitiveness OP starts being implemented.
- This lack of communication among the various stakeholders also becomes evident from the varying expectations regarding the capital levels SMEs are likely to be able to invest through the measures of the Competitiveness OP. Conservative interviewees estimates put the maximum investment capital per SME to be around €25,000 per investment and €5,000 per micro-enterprise, while optimistic estimates raise the maximum investment capital per SME to be around €250,000 per investment. Apparently, more in depth investigation of this question (i.e. the SME capacity to invest) needs to be done before finalising the details of each grant scheme foreseen in the Competitiveness OP. In this, it is key to identify absorption capacity by SME size category (e.g. micro-enterprises, small businesses etc.) and if needed by specific sector.

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<sup>14</sup> UNDP Bulgaria, ‘Assessment of the Capacity of Non-Governmental Organisations and Businesses to Participate in the Absorption of EU Structural and Cohesion Funds’, April 2006.

- From past project implementation experience, it seems that there is a notable lack of preparation on the part of the implementing agencies: missing or insufficiently prepared implementation guides and/or other documents (e.g. application forms, evaluation sheets, etc), insufficient publicity, lack of instruments to raise the capacity of applicants to respond adequately to the requirements of project procedures, etc. It will be important that past challenges and learning are sufficiently absorbed by the managing authority for the Competitiveness OP.
- Some stakeholders emphasise the need for strong publicity and awareness-raising among SMEs and relevant collective bodies (i.e. chambers, business associations, etc) in order to ensure sufficient take-up of COP financial measures. There are some concerns about the level of preparedness of SMEs for the rather strict prerequisites or the commitments that need to be made in order to benefit from these opportunities.
- There is general agreement among interviewees on the following.
  - Grant subsidy rates need to be rather high in order to attract enough demand for the programmes. A 50% co-financing rate raises a lot of questions regarding how attractive it will be to companies.
  - SMEs in general have limited own funds. In addition they seem to have a hard time securing bank loans to finance investments due to their inability to provide collateral. Therefore, their capacity to provide private co-financing may be extremely limited. Again, the same qualification mentioned above regarding variations in co-financing by SME size category applies here, as well as possible sector variations – for example, software companies that are have significant client revenue emanating from foreign markets may have increased co-financing capacity.
  - Financing difficulties, coupled with insufficient publicity and inability of SMEs to fulfil application requirements and the rest of the programme administration burden, may well result in very low demand for the programme. Therefore, indicator targets should be set at very low levels during the beginning phase of the Competitiveness OP. It should be emphasised that the relative success of project pipeline generation actions, publicity and awareness-raising (e.g. actions that are envisaged as part of Twinning project and under the implementation of the Communication Strategy project) will likely reduce some absorption constraints and may allow targets to be increased.

It should also be emphasised that the Ministry of Economy and Energy has launched a survey in June 2006 on the capacity of SMEs to participate in the absorption of EU funds. The survey envisages large national represented survey among SMEs in all 28 administrative regions, relevant NGOs, stakeholders (branch associations, banks, academic circles, etc.). The survey will be used for further elaborating and improving the design of the separate actions under the OP in order to fulfil the real needs of the enterprises. The survey will focus on the evaluation of the present condition of enterprises, needs and problems, as well as on their capacity to participate in the absorption of EU funds. The survey started in mid June and first preliminary results are expected in July.

#### **5.4 Summary of Key Issues to be Addressed from Previous Experience**

The above stakeholder feedback suggests that current the Competitiveness OP version has not sufficiently incorporated lessons from past experience. These lessons include:

- There is a notably low degree of preparation of past programmes.
  - a. Phare project implementing agencies (IAs) seem to lack the skills required for programme implementation, therefore resulting in reduced efficiency in the administration of projects.

- b. Projects seem to have been poorly prepared (insufficient or inappropriate documentation requiring subsequent changes, insufficient publicity, etc).
  - c. Beneficiaries seem to be insufficiently prepared to face the requirements of the grants.
  - d. Project targets (IoAs) seem to have been determined without any real knowledge of the target group, its real needs and its ability to respond. This is evident from evaluator recommendations to change the size of some grants, or the eligibility requirements, to include detailed plans of activities and milestones (in order to ensure that beneficiaries have the ability to finish the investment), etc. In addition, no implementing agency seems to be conducting any serious ex-post appraisals of project IoAs in order to determine the degree of effectiveness and impact of the projects, the reasons behind them, etc.
- There are indications that the planning of the Competitiveness OP needs to incorporate significantly more effort in analysing and using past experience if the challenges experienced under previous Phare projects are to be avoided. The lack of sufficient use of previous experience can be seen in the COP's lacking performance (i.e. quantified Indicators of Achievement), as well as the under-utilisation of experience and information from other stakeholders in the drafting process and the low degree of their preparation to participate in Competitiveness OP measures, etc.
  - No systematic fact-finding and documentation has been done so far and no data from past project experience (no matter how limited they may be) have been used in the drafting of the Competitiveness OP. This is evident from the varying expectations of different stakeholders regarding company behaviour and capacity to participate in grants, and even more importantly the fact that these expectations seem to diverge from past experience.

This mainly concerns: a) rates of co-financing, and b) max levels of investment. In the first case, while stakeholders seem to agree that 50% co-financing is not an important enough motivation for companies to participate in grant programmes, Phare experience shows that – at least in the case of a technology grant – the materialised co-financing rate was 53% even though a higher rate was allowed by the grant. Regarding levels of investment, Phare experience shows – in the above mentioned case of the technology grant – that companies on the average were able to invest €35,000, raising the level of the grant to €39,000. This figure definitely contradicts what would appear as an optimistic viewpoint that companies can invest amounts as high as €250,000, but also the conservative estimate that the amounts are lower than €25,000. Perhaps, a figure closer to a maximum €50,000 per company may be more realistic. This amount seems to definitely be a lot higher in the case of business infrastructure, such as business incubators (see evaluator comments for project BG 0102.02).

## 6. REVIEW OF COMETITIVENESS OP STRATEGY AND PRIORITIES

### 6.1 Summary Review of the COP Strategy and Objectives

#### Presentation of the COP Strategy

The Competitiveness OP strategy, and the rationale underpinning this strategy, is set out on pages 85-88 of the existing document (page 33-37). An overview of this strategy is presented in diagrammatic form below.

The following points are worth noting regarding the strategy:

The strategy is presented in the form of:

- 1 Global Objective
- 2 Specific Objectives
- 12 Operational Objectives (compared with 14 Objectives in the March Edition of the COP)

#### Global Objective and Specific Objectives

Regarding the **Global Objective**, the following points are worth noting.

- The document outlines the rationale for the COP Programme, and presents what can be distinguished as 4 reasons (or groups of reasons) that justify the need for the Competitiveness OP, and this is presented directly below. (Note: The text in underlined font is the evaluators' summary of the challenge and the text "*between quotes in italicised form*" is the text in the Competitiveness OP document).
  1. Challenges regarding traditional production, low-value added creation in exports, and conservative management: "*Bulgarian economy is characterised mainly with traditional productions, low level of processing and low added value to exported production, as well as with conservative management in enterprises*".
  2. Poor science-industry relationship, leading to low innovation and low business investment in R&D: "*On the other hand, the relation between science and business is very poor or non-existing, which is the reason for the low percent of innovative enterprises and low level of business investments in R&D*".
  3. Lack of access of SMEs to quality information and consultancy services: "*Bulgarian companies do not have the access that European enterprises have to well-organised quality informational and consultancy services, which puts them in a non-equivalent position*".
  4. Lack of access of SMES to external sources of funding and poor integration in international business networks: "*Their chances for an equal competition are additionally decreased by the limited external funding, as well as by the poor integration in the international business networks*".

The document emphasises that the Competitiveness OP Strategy is "*directly related with both the conclusions of the analysis and the guidelines, provided by the National Strategic Reference Framework for 2007-2013*"

Regarding the two **Specific Objectives**, these two objectives are described as covering "*both aspects of competitiveness*:"

- *The preparedness of Bulgarian enterprises for the Common European Market and for the fast changing conditions on international markets, as well as*
- *The condition of the environment in which they function*".

### *Overview of COP Specific Objectives (SOs) and their Rationale and Expected Future Result*

Specific Objective	Rationale and Expected Future Result
SO1: <b>Encouraging innovations and increasing the efficiency of enterprises.</b>	<p><b>Rationale:</b> Innovations contribute to the dynamics of economy, and efficiency is directly related to the cost of production and to competitiveness.</p> <p><b>Expected Future Result:</b> Encouraging innovation shall strengthen the connection between science and business; it will increase investments of enterprises in R&amp;D activities and raise the value added of services and goods, offered by them. Decreasing the consumption of energy and resources through modernizing the equipment, the technologies and the production processes shall contribute to increasing the productivity of labour and the efficiency of labour as a whole.</p>
SO2: <b>Improve the business environment.</b>	<p><b>Rationale:</b> Business environment is significantly important for the development of micro, small and medium-sized enterprises, because they do not have the ability and capacity to establish specialised inter-company units and rely on the informational and consultancy services, offered on the market. Micro, small and medium-sized enterprises are mostly dependant also on the quickness and quality of receiving services from the administration, as well as from the existing regulating and administrative environment. Because of its limited capital and access to information, micro and SMEs rely for the development of their businesses on getting timely and reliable information from state and local authorities. Furthermore, the participation of enterprises in international business networks and their presence at the international markets depends on easing the non-tax limitations, which is directly related to the access to certification, standardisation and metrological services.</p> <p><b>Expected Future Result:</b> The quicker handling of business by the administration will contribute to a more dynamic economy, and the easier-to-access and better quality consultancy, informational, standardisation, certification and metrological services – to an improved competitiveness of economy</p>

#### **COP – Priority Axe/Operational Objectives**

There are 12 Priority Axe Objectives in the revised current (April) version of the Competitiveness OP, compared with the 14 “Operational Objectives” in the March version of the Competitiveness OP.

Regarding the 12 Priority Axe Objectives, these have been reduced and adapted somewhat from the previous 14 Operational Objectives:

- those objectives in *italics* are those that have been retained in the same form in the April version
- Others, marked in **bold**, have been dropped (e.g. the tourism-related objective in the March 2006 COP edition) or added (e.g. the patent-related objective included in the April 2006 COP edition)

A number of others are formulated to the effect that they are modified slightly or significantly.

The Priority Axe Objectives are each allocated to the 4 (substantive) Priority Axes in the April COP edition, as in the previous COP version. However there is one Priority Axe Objective listed under Priority Axe 4 which does not seem to be included in the list on page 38 – ‘Relieving the access to the European and other international markets’.

**March 2006 COP Version**
**Revised April 2006 COP Version**

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| <ol style="list-style-type: none"> <li>1. <i>Improvement of the development capacity of technology start-ups</i></li> <li>2. Accelerating the process of developing and introduction of new technologies and procedures by small and medium-sized enterprises</li> <li>3. Improvement of the access of micro, small and medium-sized enterprises to pro-innovative networks and services</li> <li>4. <i>Modernisation of the technologies and the management in small and medium-sized enterprises</i></li> <li>5. Raising the entrepreneurial activities for start-ups.</li> <li>6. <i>Decreasing the energy consumption and diversifying the energy sources</i></li> <li>7. <i>Strengthening the production capacity and the access to markets through using the advantages of business co-operation</i></li> <li>8. <i>Facilitating the conditions for (non)bank credits of micro, small and medium-sized enterprises</i></li> <li>9. <i>Providing funding of high-risk investments</i></li> <li>10. Providing easier-to-access and better quality consultancy and informational services for business</li> <li>11. Facilitating the conditions for access to European and world markets</li> <li>12. <i>Increasing the volume and economic effect of the attracted investments</i></li> <li>13. <i>Providing topical and quality information about the foreign markets</i></li> <li>14. <b>Increasing the quality and the added value of tourist services</b></li> </ol> | <ol style="list-style-type: none"> <li>1. <i>Facilitation of creation of businesses based on innovative ideas;</i></li> <li>2. Promotion of R&amp;D activities in MSMEs;</li> <li>3. <b>Support for promotion of the patenting activity;</b></li> <li>4. Development of favourable pro-innovative environment supporting MSMEs.</li> <li>5. <i>Modernization of the technologies and management skills in SMEs.</i></li> <li>6. Providing accessible and quality consultancy and information services to businesses.</li> <li>7. <i>Decreasing the energy intensity of the production and diversification of energy sources</i></li> <li>8. <i>Strengthening of manufacturing capacities in enterprises and improving their access to markets through the advantages of business cooperation and clustering</i></li> <li>9. <i>Facilitating the conditions for (non)bank financing to micro, small and medium-sized enterprises</i></li> <li>10. <i>Providing funding of high-risk investments</i></li> <li>11. <i>Increasing the volume and economic effect of the attracted investments</i></li> <li>12. <i>Providing topical and quality information about the foreign markets</i></li> </ol> |
|--|--|

## 6.2 **Structure and Presentation of the Priority Axes**

The layout of the OP priority measures was discussed with the Ministry staff, and the revised April 2006 version includes a revised presentation format. The revised presentation format includes

- Justification for the Priority Axe in the Context of European and National Strategies (rationale)
- Background of the Priority Axe
- Priority Axe Objectives
- A description of the indicative Actions and Target Groups
- Relations/linkages to Other Ops
- State Aid Issues and Flexibility Facility
- Monitoring indicators

Compared to the previous Competitiveness OP Version, which provided a summary description of the Priority Axe, the relevant Operational Objectives and a short description of the operational measures (Title, Indicative Budget Allocations, ERDF & National co-financing rates, and component projects/scheme [types of activities, beneficiary, eligible costs, etc.]), the revised version represents an improved presentation structure.

Regarding the wider presentation and structure of this section of the Competitiveness OP, the April version represents an improved structure and presentation. One example is that the List of Monitoring Indicators is now broken up and allocated to each of the relevant Priority Axes and one section on Horizontal Indicators.

The balance and respective weight of the COP Priority Axe Objectives may however need to be reviewed. For example, Priority Axe Objective 12 – ‘*Providing topical and quality information about the foreign markets*’ – is hardly a worthwhile objective in its own right, rather one would think that it is more a key sub-objective of (a possibly adapted) Priority Axe Objective 12 – ‘*Strengthening of manufacturing capacities in enterprises and improving their access to markets through the advantages of business cooperation and clustering*’.

#### *Recommendations*

The following recommendations can be made

- The balance and respective weight of the COP Priority Axe Objectives may need to be reviewed
- It is possible that further improvements could however be made in adapting somewhat the above presentation structure. It is recommended that the first four sections be re-organised as follows:
  - **Priority Axe Objectives**
  - **Background of the Priority Axe**
  - **Justification for the Priority Axe in the Context of European and National Strategies (rationale)**
  - **A description of the indicative Actions and Target Groups**
  - Relations/linkages to Other Ops
  - State Aid Issues and Flexibility Facility
  - Monitoring indicators

It should however be pointed out that the present format of presenting priorities is based on the structure proposed in the Aide Memoire Paper and the European Commission may therefore not favour further changes.

The inclusion of some diagrams would also help the reader of the document gain more easily an overview of the priorities and type of measures proposed in the Competitiveness OP. An example of such a diagram is included at the end of Section 6.3:

### **6.3 General Comments on the Priority Axes**

This section sets out some comments for the Priority Axes:

#### **Priority Axe 1**

- The overall strategic thrust makes sense, and is coherent with EU and national goals

#### *Recommendations*

- Regarding the section “Description of Indicative Action” and Target Groups (1<sup>st</sup> paragraph), it should not be necessarily assumed that more venture capital operators would solve the financing gap facing high-innovation start-ups. In Europe, VCs have more often than not addressed this financing gap and European seed capital has not experienced the relative success it has in the USA

- The focus on financing R&D activity at Public Research Organisations – and not infrastructure and fixed operating costs – is good, and is consistent with national efforts with regard to Bulgaria’s research structure
- There is no explication as to why implementation under Priority Axe 1 will be concentrated on grant-based financing

### **Priority Axe 2**

This Priority Axe represents a key area of focus in helping SMEs across sectors to improve their competitiveness through a variety of means, including enhanced management skills capacity, increased energy efficiency, improved technological modernisation and the provision of business consultancy and support services.

#### *Recommendations*

- It is recommended that other market support actions be also included here, as it is unlikely that support initiatives focussed on clustering and business co-operation would be sufficient on their own. For example, export promotion support and international marketing and sales support could be two other areas. (However, if such type of market support is intended to be solely provided via Priority Axe 4, then this comment should be disregarded).

### **Priority Axe 3**

Priority Axe 3 represents the central axe where non-bank financial assistance is made available for Bulgarian enterprises.

#### *Recommendations*

- A general recommendation is that greater detail is provided, as well as greater clarity in explaining how the initiatives under this Priority Axe will work – for example it is not quickly apparent that what is proposed in part are grant and loan mechanisms
- Regarding the second target group - provision of financial resources for the creation of venture capital funds - it is recommended that a full market study is first undertaken. Such market research may have already been undertaken, but the consultant is not aware that it has been:
  - Review the existing accounting, tax and regulatory environment for VCCs in Bulgaria, in particular in terms of the potential attractiveness for foreign venture capital funds
  - Identify the likely size of the potential market for such funds, likely amounts needed. This will allow greater precision in establishing which kind of financial support is most appropriate

### **Priority Axe 4**

Priority Axe 4 focuses on strengthening the international market position of the Bulgarian economy, with 3 specific objectives

1. Increasing the volume and economic effect of the attracted investments;
2. Providing topical and quality information about the foreign markets;
3. Relieving the access to the European and other international markets.

#### *Recommendations*

Priority Axe 4 focuses on strengthening the international market position of the Bulgarian economy, with 3 specific objectives

- Greater rigour would be added to this Priority by a concise description of the strengths and weaknesses of Bulgaria’s existing infrastructure for attracting foreign direct investment.
- Regarding export support activities, initial data on likely sectors of the Bulgarian economy to be targeted, as well as priority foreign markets, would also add greater robustness to this section.

## Indicators

### Priority Axe 1:

Need more result indicators – e.g. Number of companies supported by BSOs

### Priority Axe 2:

Need more output indicators to cover performance across this Priority Axe, including for example:

- Number of companies to who financial support is provided for increasing management skills and scale of finance made available
- Number of companies to who financial support is provided for increasing technological modernisation and scale of finance made available
- Number of companies to who financial support is provided for implementing energy-saving technologies

## General Recommendations

The following general observations are made regarding the overall strategy and priorities:

- Greater focus on the innovation providers, in particular the universities and research organisations
- Following the revision of the Socio-Economic Analysis, the Priority Axe measure should then also be further developed to show how they will leverage the strengths of the sector and help address its weaknesses)
- Greater and more explicit focus on providing funding (project-based funding) for development of the research infrastructure (while this is alluded to in the text in Priority 1, it can be usefully expanded.
- It is understood that the Ministry has received some comment from stakeholders regarding the allocation of budget lines/funding to launch ad-hoc studies and research to answer key questions related to the overall strategy, priorities and projects, including for example further research and consultancy to develop foresight findings on innovation, and this is a recommendation the evaluation team endorses.
- There will also be a need to develop increased level of detail regarding various SME sectors, as well as exploring designs for projects, commission external help in developing project concepts and terms of references
- There is a clear need to be far more specific as to the types of high-tech firms that will be supported, at both the start-up, early-stage and development stages. The Priority Axe interventions under Priority 1 will also need to build from a clear Socio-Economic Analysis and SWOT Analysis as to where existing Bulgarian high-tech companies have had success in targeting international business (business models, software and hardware focus, service and product offering, etc).
- Overall, the Competitiveness OP document and the underlying planning can be further developed to display a greater leveraging of the opportunity for complementarity between the Structural Funds and the EU RTD Framework Programmes. For example, the EU Framework Programmes in general tend to focus on financing research (but not equipment and infrastructure), while the Structural Funds could be used in part to help finance targeted and well-thought out infrastructure and equipment investment in specific research areas that are part of a coherent vision for the research sector and that allocated such funding to research organisations on clear performance criteria.

## SAMPLE OVERVIEW OF THE PRIORITY AXES OF THE REVISED COMPETITIVENESS OP (APRIL 2006 EDITION)

PRIORITIES	RELEVANT PRIORITY AXE OBJECTIVES	TARGET GROUPS	IMPLEMENTATION VEHICLE		SUMMARY DESCRIPTION OF PRIORITIES
<b>Priority 4</b>  “Strengthening the international market positions of Bulgarian economy”	<ol style="list-style-type: none"> <li>1. Increasing the volume and economic effect of the attracted investments;</li> <li>2. Providing topical and quality information about the foreign markets;</li> <li>3. Relieving the access to the European and other international markets.</li> </ol>	<ol style="list-style-type: none"> <li>1. Investors potentially willing to invest in Bulgaria</li> <li>2. SMEs</li> </ol>	Invest Agency	Bulgarian	<p>1. Includes investment marketing, information campaigns, advertising activities, ensuring easier access to investment information including marketing surveys and improving the quality of promotional and marketing materials.</p> <p>Another field of actions is oriented towards creation of an information system supporting the foreign investors - introduction of a standard “package” of services and access points to those services, and national/regional marketing of Bulgaria as a target market for investors.</p> <p>2. Preparation of researches and analyses, development of system and action plan for informing and promoting the country export, marketing activities, information and popularization campaigns, creation and development of export promotion system – unified e-information system and data bases - free access, opportunity of exchanging information and looking for partners, advertising and promotion of separate groups of products will be also eligible under the axis, Support for participation in exhibitions, training of companies in respect to carrying out exhibitions, organization and carrying out of international business forums, advertising activities for export increasing, protection of Bulgarian product names, branding of the Bulgarian products in foreign countries.</p> <p>3. Some actions for strengthening the authorities of the national quality infrastructure through investments, institutional building and provision of information and awareness campaigns</p>

## 6.4 Coherence with the EU Structural Fund Guidelines on Cohesion

There are three dimensions to European Cohesion Strategy for the period 2007-2013: *economic, social and environmental*. In the light of the Lisbon agenda, and the basic premises of EU Structural Fund Intervention, these three dimensions take shape into the following priority areas (guidelines):

- improving the *attractiveness of Member States, regions and cities* by improving *accessibility*, ensuring adequate *quality and level of services*, and preserving their *environmental potential*;
- encouraging *innovation, entrepreneurship and the growth of the knowledge economy by research and innovation capacities*, including new *information and communication technologies*; and
- creating *more and better jobs* by attracting more people into employment or entrepreneurial activity, improving *adaptability of workers* and enterprises and increasing *investment in human capital*.

**A.** Under the first guideline (*Making Europe and its regions more attractive places to invest and work*), Cohesion policy concentrates on modern infrastructure and the quality of the environment. The following 3 areas are suggested as priority actions:

- A1. Expanding and improving transport infrastructures.
- A2. Strengthening the synergies between environmental protection and growth.
- A3. Addressing Europe's intensive use of traditional energy sources.

**B.** Under the second guideline (*Improving knowledge and innovation for growth*), Cohesion policy concentrates on shifting the European economy from traditional to knowledge-based production activities. The following 4 areas are suggested as priority actions:

- B1. Increasing/improving investment in RTD
- B2. Facilitating innovation and promoting entrepreneurship
- B3. Promoting the information society for all
- B4. Improving access to finance.

**C.** Under the third guideline (*More and better jobs*), Cohesion policy concentrates on the strife for full employment and higher productivity. The following 5 areas are suggested as priority actions:

- C1. Attracting and retaining more people in employment. Modernising social protection systems.
- C2. Improving the adaptability of workers and enterprises and the flexibility of the labour market.
- C3. Increasing investment in human capital through better education and skills.
- C4. Reinforcing the administrative capacity of Member States.
- C5. Helping to maintain a healthy labour force.

The Competitiveness OP is based on the basic philosophy of EU Cohesion policy, in the sense that it encompasses all these dimensions of the Cohesion Strategy 2007-2013, even though its focus is primarily on the second priority area. This is evident from cross-cutting interventions such as "Support for start-ups", "Support for energy-saving and renewable technologies", "Promotion of FDI" and "Support for new tourist products". With respect to the 4 recommended action areas of the second guideline, the Competitiveness OP is more relevant to actions B1, B2 and B4. A more detailed analysis of Competitiveness OP compliance with EU guidelines is presented in the following matrix.

**Table 3 - COP Consistency with EU Guidelines**

*Table Legend:*

**Yes** = directly related (**3 points**)

**(Yes)** = indirectly related or under conditions (**2 points**)

**(No)** = marginally related (**1 point**)

**No** = not related (**0 points**)

Priority Axis (PA)	Measure	Action	EU Cohesion Strategy Guidelines			Score
			More attractive places to invest and work	Improving knowledge and innovation	More and better jobs	
PA1	M1.1	Provision of consultant services for technology start-ups	(No)	Yes	(Yes)	6
		Provision of integrated support for start-ups	(No)	Yes	(Yes)	6
	M1.2	Increasing the innovative potential of enterprises..	No	Yes	No	3
	M1.3	Support of innovative business incubators...	(No)	(Yes)	No	3
		National network of innovative enterprises...	No	Yes	No	3
PA2	M2.1	Integrated grant scheme for technology development – OSH, OMS, ...	No	Yes	No	3
		Integrated grant scheme for technology development – management systems	No	Yes	No	3
	M2.2	Creating a positive image of entrepreneurship ...	No	Yes	No	3
	M2.3	Integrated grant scheme for energy saving technologies	Yes	Yes	No	6
		Integrated grant scheme for renewable energy resources	Yes	Yes	No	6
	M2.4	Business networking for SMEs	No	Yes	No	3
		Business networking for enterprises	No	Yes	No	3
PA3	M3.1	Support for Guarantee funds	(No)	Yes	No	4
	M3.2	Support for new risk capital funds	(No)	Yes	No	4
		Support for working risk capital funds	(No)	Yes	No	4
	M3.3	Micro credits	(No)	Yes	No	4
PA4	M4.1	Networking of consultancy organisations	No	(Yes)	No	2
	M4.2	Strengthening the authorities of the national quality infrastructure ...	No	(Yes)	No	2
		Equipment of referent laboratories...	(No)	(Yes)	No	3
		Standardization ...	(No)	(Yes)	No	3
PA5	M5.1	Promoting FDI	(Yes)	Yes	(Yes)	7
		Information system for foreign investors	(Yes)	(Yes)	No	4
		IB for Industrial Zone bodies	(No)	(Yes)	No	3
	M5.2	Increasing export efficiency	No	Yes	(Yes)	5
		Advertising and promotion of separate groups of products	No	Yes	No	3
		Protection of intellectual property	No	(Yes)	No	2

Priority Axis (PA)	Measure	Action	EU Cohesion Strategy Guidelines			
			More attractive places to invest and work	Improving knowledge and innovation	More and better jobs	Score
	M5.3	Orientation of tourism to new markets/marketing	(No)	(Yes)	No	3
		National tourist information system	(No)	(Yes)	No	3
		Support for development of new competitive tourist products	(No)	Yes	(Yes)	6
<b>Totals</b>			<b>23</b> <b>(Avg. 0,79)</b>	<b>77 (Avg.</b> <b>2,66)</b>	<b>10</b> <b>(Avg. 0,34)</b>	<b>110</b> <b>(Avg. 1,26)</b>

As it is expected, the Competitiveness OP is highly relevant to the second EU Guideline (Improving Knowledge and Innovation) and less so to the other two guidelines. Nineteen out of twenty-nine different programme interventions under the March 2006 edition of the Competitiveness OP are directly related to the second guideline and the rest are indirectly related or under certain conditions. It is notable that the programme encompasses all three dimensions of EU cohesion policy, i.e. economic, social and environmental.

## 6.5 Cohesion with the National Development Plan

As requested in the Terms of Reference for this ex-ante evaluation, the team has undertaken an assessment of the coherence between the National Development Plan (NPD) 2007-2013 and the Competitiveness OP.

The assessment of coherence was based on a review of the Ex-Ante Evaluation of the NDP<sup>15</sup>, as it was understood that an English-language version of the NDP did not exist at this stage.

### Socio-Economic Analysis

The overall coherence with the NDP appears high. The socio-economic analysis identifies key strengths and weaknesses corresponding to those in the Competitiveness OP Socio-Economic Analysis

#### Macro-Economic Framework

The socio-economic analysis identifies key macro-economic strengths and weaknesses corresponding to those in the Competitiveness OP Socio-Economic Analysis

Overall, the summary of the macro-economic framework in the ex-ante evaluation report reads well and this could be used in part for the text for the corresponding section of the Competitiveness OP. Table 1 (page 11) of the ex-ante report provides a useful tabular comparison of Bulgaria's macro-economic performance compared to the EU-25, although the comparison is made on 2003 figures.

#### Productive Sector

The socio-economic analysis highlights similar key challenges facing the SME sector as those identified in the Competitiveness OP, including:

- Limited Access to financing for start-ups
- Inefficiencies in administrative, regulatory and support systems (including insufficient business support structures and
- Lack of Entrepreneurial skills (and limited availability of business consulting services)
- Insufficient preparation for joining the (EU) Internal Market

<sup>15</sup> First Draft, December 2005

### **List of Disparities**

Given that the coverage of the NDP is much wider than the Competitiveness OP, it is thus likely that parts of the List of disparities of the NDP do not “map” onto those in the Competitiveness OP. For example, the NDP does not have a specific section in its SWOT and List of Disparities devoted to SMEs.

Based on a review of the disparities in the Ex-Ante report on the NDP, the majority of disparities listed in the relevant sections of the NDP Disparities List (Economy, and to a lesser extent Regional Development and Human Resources sections) are included in one form or another in the Competitiveness OP disparities, sometimes in a somewhat different wording.

The only NDP disparities identified that were not in the Competitiveness OP were:

- Restrictions on SMEs for starting a business
- Lack of entrepreneurial skills

It is recommended that these factors be included in the Competitiveness OP List, but in such a way that reflect more a disparity (e.g. Restrictions on SMEs for starting a business – level of restriction on business start-ups).

## **6.6 Coherence with the National Strategic Reference Framework**

### **Introduction**

The ultimate goal of the National Strategic Reference Framework (NSRF) is to support the country’s strategic vision to become by 2013 a county with a *high standard of living, with a sustainable socioeconomic growth and in the process of full integration with the rest of the EU Member States.*

In order to do that, it has developed a strategy that aims at the achievement of two medium-term goals:

- *high economic growth* by developing a dynamic knowledge-based economy (in accordance with the principles of sustainable development); and
- *employment, income and social integration levels which ensure high living standards*, by developing high quality human capital.

In order to achieve the above strategic goals, the following *6 strategic priorities* will be pursued through respective Operational Programmes:

1. Development of the competitiveness of the Bulgarian economy;
2. Development of human resources and improvement of the social infrastructure;
3. Improvement and development of the basic infrastructure;
4. Sustainable and balanced regional development;
5. Development of agriculture and rural areas; and
6. Development of fisheries and aquaculture

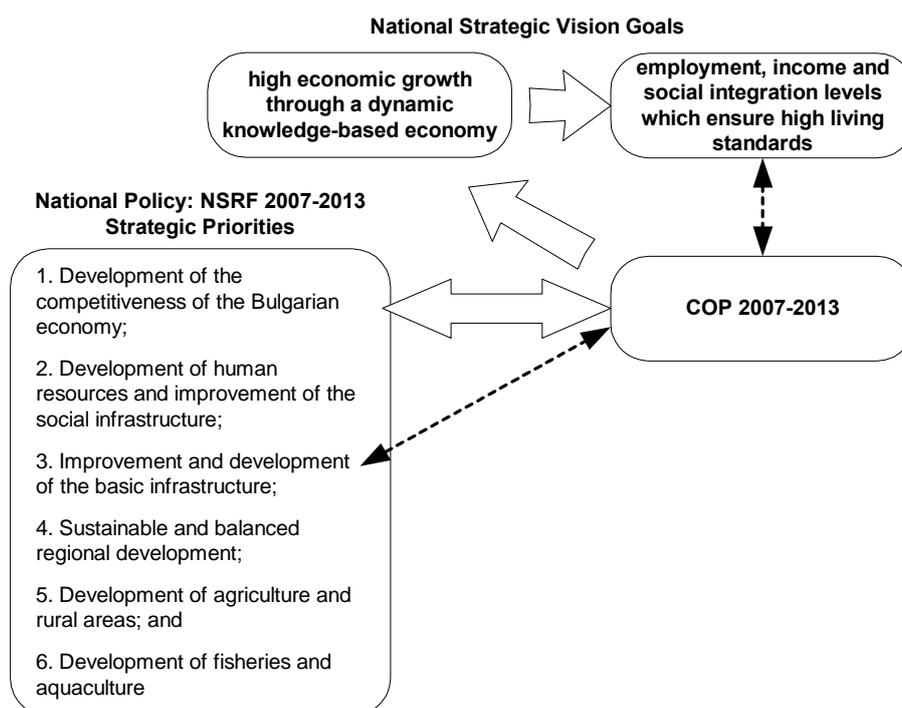
The implementation of the interventions envisaged under these strategic priorities will require that the following **thematic areas** be tackled:

- Productive sector (priority 1);
- Human capital (priority 2);
- Transport and Environment (priority 3);
- Regional development (priority 4);
- Agricultural and rural areas (priority 5);and
- Fish and aquaculture (priority 6).

### **Assessing the COP’s Coherence with the NSRF Strategic Objectives**

It is therefore evident that the Competitiveness OP implements the interventions needed in order to attain the first strategic priority of the NSRF, one of the most important ones, since it directly supports one of the two major constituents of the country’s development vision (i.e. reaching high economic growth). Even though not specifically mentioned in NSRF, the second constituent of the country’s vision is supported by the second strategic priority. Priorities 5 and 6 also complement the Competitiveness OP, but as far the primary production sector is concerned.

Priority 3 plays a secondary role in the country’s economic development efforts by providing an attractive environment for high productivity companies to locate, thereby presenting a high



correlation/complementarity with the Competitiveness OP. In addition, priority 3 also provides an attractive environment for people to live and work in, and ease to people and goods to travel, thereby presenting a high correlation/complementarity to priority 2. Priority 4 is directly related to the strategic vision of high social integration.

In summary, the Competitiveness OP is directly related to the first NSRF priority and the strategic vision of high economic growth. It presents a high degree of synergy/complementarity with priority 3 (development of basic infrastructure) and to a lesser extent with priority 4. Priorities 5 and 6 are parallel to the Competitiveness OP – serving the same strategic priority but in different sectors.

**Table 4 - COP Consistency with the NSRF’s First Strategic Vision**

**Legend:**

**Yes** = directly related (**3 points**)

**(Yes)** = indirectly related or under conditions (**2 points**)

**(No)** = marginally related (**1 point**)

**No** = not related (**0 points**)

COP Priority Axe (PA)	Measure	Action	Country Strategic Vision 1			Score
			High econ; Growth	Through a dynamic knowledge- based economy	In accordance with the sustainability principles	
PA1	M1.1	Provision of consultant services for technology start-ups	(Yes)	Yes	(Yes)	7
		Provision of integrated support for start-ups	(Yes)	Yes	(Yes)	7

COP Priority Axe (PA)	Measure	Action	Country Strategic Vision 1			Score
			High econ; Growth	Through a dynamic knowledge-based economy	In accordance with the sustainability principles	
	<b>M1.2</b>	Increasing the innovative potential of the enterprises..	Yes	Yes	No	<b>6</b>
	<b>M1.3</b>	Support of innovative business incubators...	(Yes)	(Yes)	No	<b>4</b>
		National network of innovative enterprises...	Yes	Yes	No	<b>6</b>
<b>PA2</b>	<b>M2.1</b>	Integrated grant scheme for technology development – OSH, OMS, ...	(Yes)	(Yes)	(No)	<b>5</b>
		Integrated grant scheme for technology development – management systems	(Yes)	(Yes)	(No)	<b>5</b>
	<b>M2.2</b>	Creating a positive image of entrepreneurship ...	(Yes)	(No)	No	<b>3</b>
	<b>M2.3</b>	Integrated grant scheme for energy saving technologies	(No)	(Yes)	Yes	<b>6</b>
		Integrated grant scheme for renewable energy resources	(No)	(Yes)	Yes	<b>6</b>
	<b>M2.4</b>	Business networking for SMEs	(Yes)	(Yes)	No	<b>4</b>
		Business networking for enterprises	(Yes)	(Yes)	No	<b>4</b>
<b>PA3</b>	<b>M3.1</b>	Support for Guarantee funds	(Yes)	No	No	<b>2</b>
	<b>M3.2</b>	Support for new risk capital funds	(Yes)	No	No	<b>2</b>
		Support for working risk capital funds	(Yes)	No	No	<b>2</b>
	<b>M3.3</b>	Micro credits	(Yes)	No	No	<b>2</b>
<b>PA4</b>	<b>M4.1</b>	Networking of consultancy organisations	(Yes)	(Yes)	No	<b>4</b>
	<b>M4.2</b>	Strengthening the authorities of the national quality infrastructure ...	(No)	(Yes)	No	<b>3</b>
		Equipment of referent laboratories...	(No)	(Yes)	No	<b>3</b>
		Standardization ...	(No)	(Yes)	No	<b>3</b>
<b>PA5</b>	<b>M5.1</b>	Promoting FDI	Yes	No	No	<b>3</b>
		Information system for foreign investors	(Yes)	No	No	<b>2</b>
		IB for Industrial Zone bodies	(No)	(No)	(Yes)	<b>4</b>
	<b>M5.2</b>	Increasing export efficiency	(Yes)	No	No	<b>2</b>
		Advertising and promotion of separate groups of products	Yes	(Yes)	No	<b>5</b>
		Protection of intellectual property	(Yes)	Yes	No	<b>5</b>
	<b>M5.3</b>	Orientation of tourism to new markets/marketing	Yes	(No)	(No)	<b>5</b>
		National tourist information system	(Yes)	Yes	No	<b>5</b>
		Support for development of new competitive tourist products	Yes	(No)	(No)	<b>5</b>
<b>Totals</b>		<b>58 (Avg. 2,0)</b>	<b>46 (Avg. 1,59)</b>	<b>16 (Avg. 0,55)</b>	<b>120 (avg. 1,38)</b>	

## Conclusions

As it is obvious from the above matrix, the COP programme is highly relevant to the country's first strategic vision, aiming primarily at fostering rapid and high growth, and secondarily at developing a knowledge-based economy. Sustainability concerns, even though marginally present<sup>16</sup> in the programme's measures, they nevertheless complete a comprehensive framework for the attainment of the country's strategic vision. It is recommended that during implementation of all grant schemes preference is given to companies contributing to a sustainable model of development<sup>17</sup>, thereby reinforcing this dimension of the country's economic vision.

<sup>16</sup> It is still uncertain how definitive a role they are going to play in the implementation of the programme, since we do not have the grant implementation guides at this point.

<sup>17</sup> All types of investments in sustainable technologies should be given preference and not only energy saving and use of renewable energy sources.

**Table 5 - COP Consistency with the NSRF's 2<sup>nd</sup> Strategic Vision**

**Legend:** Yes = directly contributing (3 points), (Yes) = indirectly contributing or under conditions (2 points), No = irrelevant (0 points), (No) = marginally contributing (1 point).

COP Priority Axis (PA)	Measure	Action	Country Strategic Vision 2			
			Employment	Income	Social integration	Score
PA1	M1.1	Provision of consultant services for technology start-ups	(Yes)	(Yes)	(No)	5
		Provision of integrated support for start-ups	Yes	Yes	(No)	7
	M1.2	Increasing the innovative potential of the enterprises..	No	(Yes)	No	2
	M1.3	Support of innovative business incubators...	(No)	(No)	No	2
		National network of innovative enterprises...	No	No	No	0
PA2	M2.1	Integrated grant scheme for technology development – OSH, OMS, ...	No	(No)	No	1
		Integrated grant scheme for technology development – management systems	No	(Yes)	No	2
	M2.2	Creating a positive image of entrepreneurship ...	(Yes)	(Yes)	(No)	5
	M2.3	Integrated grant scheme for energy saving technologies	No	(No)	No	1
		Integrated grant scheme for renewable energy resources	(No)	(No)	(No)	3
	M2.4	Business networking for SMEs	(No)	(Yes)	(No)	4
		Business networking for enterprises	(No)	(Yes)	No	3
PA3	M3.1	Support for Guarantee funds	(Yes)	(Yes)	(Yes)	6
	M3.2	Support for new risk capital funds	(Yes)	(Yes)	(No)	5
	M3.3	Support for working risk capital funds	(Yes)	(Yes)	(No)	5
PA4	M3.3	Micro credits	(Yes)	(Yes)	(Yes)	6
	M4.1	Networking of consultancy organizations	(No)	(Yes)	No	3
		Strengthening the authorities of the national quality infrastructure ...	(No)	(No)	No	2
	M4.2	Equipment of referent laboratories...	(No)	(No)	No	2
Standardization ...		(No)	(No)	No	2	
PA5	M5.1	Promoting FDI..	Yes	Yes	No	6
		Information system for foreign investors	(Yes)	(Yes)	No	4
		IB for Industrial Zone bodies	(No)	(No)	No	2
	M5.2	Increasing export efficiency	Yes	Yes	No	6
		Advertising and promotion of separate groups of products	Yes	Yes	No	6
		Protection of intellectual property	(Yes)	(Yes)	No	4
	M5.3	Orientation of tourism to new markets/marketing	(No)	(Yes)	(No)	4
		National tourist information system	No	(Yes)	No	2
		Support for development of new competitive tourist products	Yes	Yes	(No)	7
<b>Totals</b>			<b>41 (Avg. 1,41)</b>	<b>53 (Avg. 1,83)</b>	<b>13 (Avg. 0,45)</b>	<b>107 (avg. 1,23)</b>

## Conclusions

The COP programme is relevant to the country's second strategic vision – even though not designed to directly address it – contributing more to the generation of income (e.g. higher-paying jobs), and less to new employment. Integration issues come into play as secondary and in some cases perhaps unintended side-effects (e.g. through SME promotion measures or micro-credit schemes which could provide the opportunity to less developed areas to grow). This type of concerns was perhaps expected to be addressed only through the Regional Development OP.

**Table 6 - COP Consistency with the NSFR strategic intervention themes under the “Development of competitive enterprises and improving the business environment” Priority**

**Legend:** Yes = directly linked (3 points), (Yes) = indirectly linked or under conditions (2 points), No = irrelevant (0 points), (No) = marginally relevant (1 point).

COP Priority Axis (PA)	Measure	Action	“Development of competitive enterprises and improving the business environment”			
			Increasing the competitiveness of SMEs on international markets	Strengthening links between business, science, education & NGOs	Attraction of more qualitative investments	Decreasing the energy intensity of the Bulgarian economy
PA1	M1.1	Provision of consultant services for technology start-ups	Yes	(No)	(Yes)	No
		Provision of integrated support for start-ups	Yes	(No)	(Yes)	No
	M1.2	Increasing the innovative potential of the enterprises..	Yes	Yes	Yes	(No)
	M1.3	Support of innovative business incubators...	(Yes)	(Yes)	(Yes)	No
		National network of innovative enterprises...	(Yes)	Yes	(Yes)	No
PA2	M2.1	Integrated grant scheme for technology development – OSH, OMS, ...	(No)	(No)	(No)	No
		Integrated grant scheme for technology dev't. - mngt. Systems	(Yes)	No	(No)	No
	M2.2	Creating a positive image of entrepreneurship ...	(Yes)	No	(No)	No
	M2.3	Integrated grant scheme for energy saving technologies	(No)	(Yes)	No	Yes
		Integrated grant scheme for renewable energy resources	(No)	(Yes)	No	Yes
	M2.4	Business networking for SMEs	Yes	(Yes)	(No)	No
		Business networking for enterprises	Yes	(Yes)	(No)	No
PA3	M3.1	Support for Guarantee funds	(Yes)	No	(No)	No
	M3.2	Support for new risk capital funds	(Yes)	No	(No)	No
		Support for working risk capital funds	(Yes)	No	(No)	No
M3.3	Micro credits	(Yes)	No	(No)	No	
PA4	M4.1	Networking of consultancy organisations	(Yes)	(Yes)	(Yes)	No
	M4.2	Strengthening the authorities of the national quality infrastructure ...	(No)	(No)	Yes	No
		Equipment of referent laboratories...	(No)	(No)	Yes	No
		Standardization ...	Yes	(No)	Yes	No
PA5	M5.1	Promoting FDI..	(Yes)	(No)	No	No
		Information system for foreign investors	(Yes)	(No)	No	No
		IB for Industrial Zone bodies	(No)	(No)	No	No
	M5.2	Increasing export efficiency	Yes	No	No	No
		Advertising and promotion of separate groups of products	Yes	No	No	No
		Protection of intellectual property	(Yes)	No	No	No
	M5.3	Orientation of tourism to new markets/marketing	Yes	No	(Yes)	No
		National tourist information system	Yes	Yes	(Yes)	No
		Support for development of new competitive tourist products	Yes	No	(Yes)	No

## Conclusions

The Competitiveness OP covers the full spectrum of the identified strategic intervention themes in the NSRF. More weight is naturally placed on the first strategic theme (Increasing the competitiveness of SMEs on the international markets). Strategies for attracting more qualitative investments are also strongly present in the programme. The other two strategic themes though are not very well represented in the programme,

and they probably need to be strengthened through suitable adjustments in the implementation guides (e.g. through eligibility criteria) of the individual grant schemes.

## General Conclusions

Following on from the above analysis and the analysis of the thematic components of the NSRF, we attempt to determine their relation with the priorities and the specialised action of Competitiveness OP. Based on this consistency analysis, we can conclude that:

1. There is a clear consistency between the Competitiveness OP and the N.S.R.F. with regard to *'Development of competitive enterprises and improving the business environment'*, which records the big progress that has become in this sector the last 15 years. Also reports with clarity that at the following programmatic period a very big part of growth of economy will come from the SME sector, which represents 99.2% of all enterprises in Bulgaria. This particularly large number of enterprises should always - accordingly with the NSRF - be ensured the required economic resources in order to ensure growth in Innovation and R&D. The same moment it makes reason for the creation 'links' between the business, education, science, administration and the non- governmental sector conducive to quicker transfer of the research results into new products. All these are reported with clarity in the Competitiveness OP and are described in the Priorities. More specifically / more concretely it reports below:

In **Priority 1**, *'Development of Knowledge –based Economy and Innovation Activities'* and more concretely in the Operation 2: *'Increasing the innovative potential of the enterprises through stimulating the knowledge dissemination and its reaching to the enterprises'* & Operation 3<sup>18</sup>: *'Improvement of the pro-innovative business infrastructure'*. The Competitiveness OP takes into consideration NSRF directions and promotes the interconnection/ links between the business, sciences, education, as well as the non- governmental sector.

2. There is consistency with the N.S.R.F. with regard to *'Attraction of more qualitative investments'* in this is reported the basic objective of Bulgarian economy *'promoting Bulgaria as an attractive place for investments as an effective tool for sustained economic growth, creation of employment and increased productivity'* It includes 2 types of actions:
  - i) The first type of actions will be targeted at attraction of FDI and the creation of the information system supporting the foreign investors as a part of integrated activities under the Bulgarian Investment Strategy.
  - ii) The second type of the interventions will aim at developing the business and industrial zones. All these are reported with clarity in the Competitiveness OP and are described in the Priorities. More specifically / more concretely it reports below:

Through it's **Priority 4**, *'Development of business support environment'* (and more concretely in the Operation 2 : *'Support for development of national quality infrastructure'*, the Competitiveness OP promotes these main rules of NSRF, and leads one to expect that this action will contribute positively to the objectives of the Competitiveness OP as also as the NSRF.

4. There is clear consistency between the N.S.R.F. with regard to *'Decreasing the energy intensity of the Bulgarian economy'* as an important element of national competitiveness. All these are reported with clarity in the Competitiveness OP and are described in the Priorities. More specifically, the Competitiveness OP via means of **Priority 2** *'Increasing productivity and efficiency in micro, small and medium sized enterprises'* (and more concretely in the Operation 3 *'Support for introduction of energy saving technologies and utilisation of renewable energy resources'*) achieves this. It is almost absolutely identified with the NSRF, in particularly sensitive as much as important from the side of strategic section of energy. The proposed Projects/Schemes, are in line with the objectives of NSRF.
5. The above assessment on the coherence of the Competitiveness OP with the NSRF was undertaken before the evaluation team were aware that a revised version of the Competitiveness OP was to be

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<sup>18</sup> As these Operations are described in the March 2006 Version of the COP

produced during April 2006. While the revised version incorporates some changes and the transferring of actions between priorities, this does not affect significantly the coherence with the NSRF as the core focus and composition of the Competitiveness OP remains largely the same.

## 6.7 Cohesion with National Innovation & SME Policy

The evaluation team have reviewed the coherence of the Competitiveness OP with the *National Strategy for Promotion of SME Development 2002-2006*. Given that an English-language version of the full policy document does not exist, the evaluation team have used the Executive Summary that is available in English.

### Overview of the National Strategy for Promotion of SME Development 2002-2006

The key priorities of the *National Strategy for Promotion of SME Development 2002-2006* include:

- to stimulate the R&D for the industry and the cooperation between the R&D departments, universities and companies;
- to increase the financing for innovation through establishing mechanisms for attracting private investments;
- to encourage companies to introduce new technologies and to improve their innovation activity;
- to encourage the establishment of clusters in traditional sectors;
- to support start-ups and well-functioning companies with the aim to increase their innovative potential;
- to build up mechanisms for attracting foreign investments to scientific areas.

These objectives are targeted to be achieved through a mix of financial and non-financial measures, as set out in the Table below.

**Table 7 – Overview Financial and Non-Financial Measures  
Foreseen under the National SME Development Strategy 2000-2006**

Financial Measures	Non-Financial Measures
<ul style="list-style-type: none"> <li>• Stimulate innovation and technological development through establishment of a National Innovation Fund that will ensure financing to innovative and market-oriented projects through partnerships with the state administration, scientific institutions and companies;</li> <li>• Encourage the employment of experts in the field of science and SME technologies through adequate financial stimuli;</li> <li>• Create new and/or to enlarge existing technology centres which should expand the opportunities for utilisation of scientific achievements from the real business.</li> </ul>	<ul style="list-style-type: none"> <li>• Optimise the potential of the scientific and technological sector with the help of a continuous dialogue among all participants in the process of creating, implementing and realising scientific knowledge;</li> <li>• Provide entrepreneurship training;</li> <li>• Establish clusters in Bulgaria, i.e. to activate the vertical and horizontal integration of the value-added chains;</li> <li>• Adopt European indicators that measure the innovation potential of enterprises aiming to create a system for assessment and analysis of innovation processes and opportunity to take management decisions;</li> <li>• Attract foreign investments in the field of R&amp;D and to encourage the transfer of technology thus making use of the achievements of established Bulgarian scientific units;</li> <li>• Support existing technology parks and set up new ones;</li> <li>• Organise centres for entrepreneurship at the universities, which will teach modern business practices to students that are willing to transfer their knowledge into practice.</li> </ul>

## Overview of the National Strategy for Promotion of SME Development 2002-2006

The table below compares the Competitiveness OP Priorities and 12 Priority Axe Objectives with the National Strategy for Promotion of SME Development 2002-2006.

**Table 8 – Review of COP Priorities and Priority Axe Objectives with the National SME Development Strategy**

National SME Strategy 2000-2006	Consistent with COP Priority	Consistent with COP Priority Axe Objectives
1. To stimulate the R&D for the industry and the cooperation between the R&D departments, universities and companies;	Priority 1	PA Objective 1 PA Objective 2 PA Objective 4
2. To increase the financing for innovation through establishing mechanisms for attracting private investments;	Priority 4	PA Objective 9 PA Objective 10
3. To encourage companies to introduce new technologies and to improve their innovation activity;	Priority 2, 1	PA Objective 2 PA Objective 5
4. To encourage the establishment of clusters in traditional sectors;	Priority 2	PA Objective 8
5. To support start-ups and well-functioning companies with the aim to increase their innovative potential;	Priority 1, 2, 3	PA Objective 1
6. To build up mechanisms for attracting foreign investments to scientific areas.	Priority 4	PA Objective 11

As can be seen, the Competitiveness OP Priorities and Priority Axe Objectives are highly consistent with the objectives of the *National SME Strategy 2000-2006*. While this is true across all of the objectives of the National SME Strategy, consistency is probably highest with the first objective of the National SME Strategy, that of *'stimulating R&D for the industry and the cooperation between the R&D departments, universities and companies'*.

## **7. REVIEW OF THE ENVIRONMENTAL DIMENSION**

### **7.1 Bulgarian Environmental Legislation, Policy and Performance in the Industrial Enterprise Sector**

#### **7.1.1 Current Situation: Environmental Legislation and Policy (National, EC and international commitments)**

Chapter 6 “Horizontal objectives” provides a brief and well targeted summary of the sustainable development concept, EU and national requirements and principles for environmental protection to be followed by the priorities and activities of the Competitiveness OP. The evaluation below stresses and adds some more to the issues summarized in Chapter 6.

The Republic of Bulgaria has closed the “Environment” Chapter as an important part of the negotiations for membership and has achieved a very good level of legal approximation by almost fully transposing the EU environmental legislation. Harmonization of the Bulgarian legislation with the Aquis in the “Industrial Pollution and Risk Management” sector and the “Chemicals and Genetically Modified Organisms” sector is strongly directed to industry development and competitiveness. The important international convention for environmental protection has also been ratified.<sup>19</sup>

The most substantial step in the process of full compliance of Bulgarian legislation with the European requirements is the adoption of a new Environment Protection Law (EPL) in 2002. This Law is a framework law that will transpose 57 EU directives. The Water Frame Directive is among them but it is not yet entirely transposed in the national water legislation.

The EU directives and regulations related to the economic sectors targeted by the Competitiveness OP and incorporated into Bulgarian legislation are listed below<sup>2</sup>.

#### **Environmental legislation and SMEs**

Bulgaria applies the same requirements in terms of environmental legislation to SMEs as to all other companies. The SMEs, like other companies, will benefit from transition periods starting from 1 January 2007, that have been granted for transposition of a number of EU Directives, as listed in Annex 1.

#### **Legislative tools for improving the environmental protection related to the industrial policy**

According to the EPL the preventive control for environmental protection in the process of enterprise development is performed through: Environmental assessment of plans and programs for development, restructuring and liquidation; Environmental impact assessment of investment proposals as an obligatory condition for initiation of the design process; Issuance of integrated permits for prevention, limitation and control of the industrial pollution and Environmental audits of operating enterprises.

The EPL regulates the possibilities for voluntary agreements for environmental protection by the organizations in designing, producing, offering and using products. Two national schemes are created for the certification and standardization according to certain criteria of the organizations and/or their products – for environment management and auditing, and for eco-labelling. (For details see Annex 2)

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<sup>19</sup>United Nations Framework Convention on Climate Change (UNFCCC);  
Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade;  
Convention on the protection and use of trans-boundary watercourses and international lakes;  
Convention on access to information, public participation in decision-making and access to justice in environmental matters;  
United Nations Convention on Combating Desertification;  
Stockholm Convention on persistent organic pollutants and European Convention on the Landscapes have also been signed.

<sup>2</sup>Directive on integrated prevention and pollution control;  
Directive on the assessment of the effects of certain plans and programs on the environment;  
Directive on the control of major-accident hazards involving dangerous substances;  
Regulation (EEC) on the voluntary involvement of the industrial sector in the environmental management and auditing schemes and the related decisions, and  
Regulation (EC) on eco-label scheme and the related decisions.

### 7.1.2 Current Situation: Environmental Performance in the Bulgarian Industrial and Enterprise Sectors

Bulgarian enterprises, including SMEs, are registered sources for deterioration of core environmental components (air, water, soils and biodiversity). Industrial installations discharge emissions of solid, liquid and gaseous waste flows containing non-toxic and toxic substances, as well as generate noise and radiating emissions. With regard to SMEs, it is still however the case that relatively little is known about the contribution of SMEs to environmental pollution in Bulgaria.

Table 1 below sets out the major sources for environmental pollution and the relevant industrial sectors:

**Table 9: Key industrial sources of environmental pollution**

Area of Environmental Pollution	Key Sensitive Sectors	Type of Pollution
Ambient / Air	Metallurgical and chemical industry and energy production facilities.	Chemical and organic substances, heavy metals, and dust
Water	Chemical, ternary, food-processing, oil-processing, cellulose, paper and metallurgical industry	Chemical and organic substances, and heavy metals
Soil	Chemical and mining industry, extraction of oil and natural gas, cellulose and paper industries	Chemical and organic substances, and heavy metals
Waste	Production and founding of metals, and minerals, chemical, refined oil, food and beverage industries.	Hazardous waste, organic and chemical waste

The main constraints and problems faced by the industries and SMEs in compliance with the environmental requirements and in environmental protection are identified in the National Environmental Strategy as follows:

- lack of staff, expertise and competence;
- obsolete manufacturing facilities;
- high energy-intensity of the manufacturing and high material costs;
- inefficient use of the raw materials;
- lack of financial resources and insufficient amount of investments;
- lack of access to appropriate information and inefficient scientific service;
- low level of awareness and knowledge of environmental problems and risks,
- lack of understanding for the potential benefits of environmental improvements and weak motivation to meet the environmental standards;
- a view of environmental activity as peripheral to the core business.

## 7.2 Review of the Coherence of the Competitiveness OP with National Policy

### 7.2.1 Coherence with the National Strategic Reference Framework (NSRF) 2007 - 2013

#### *Introduction*

The main purpose of the NSRF is to present the government's strategy to counter the existing development gaps or disparities between Bulgaria and the countries of EU and to foster the development of the sectors in which Bulgaria has or can potentially have a comparative advantage. By 2013 Bulgaria should become a country with a high standard of living, based on a sustainable socio-economic growth in the process of full integration in the European Union.

To achieve this vision, Bulgaria has to realize two strategic medium-term goals:

- To attain and maintain high economic growth by dynamic knowledge economy in accordance with the principles of sustainable development;
- To improve the quality of human capital and to achieve employment, income and social integration levels, providing high living standards.

The Environment Chapter of the NSRF identifies the following areas for improvement:

- Air and noise pollution,
- Water supply and wastewater collection and treatment,
- Waste management system,
- Treatment of non-regulated waste dumpsites and old polluted terrains,
- Biodiversity protection,
- Agri- and forestry environment, and
- Monitoring of and information on environmental dynamics.

#### ***Assessment of Environmental Coherence of the Competitiveness OP with the NSRF***

The first NSRF strategic mid-term goal is related to the environmental protection and sustainable development. The second one doesn't consider any environmental issues. The environmental coherence of the Competitiveness OP general objective and priorities are compared with the first NSRF goal and the areas for environmental improvement identified in section "Environment".

The methodology for assessment of this section and the sections below regarding environmental coherence of the Competitiveness OP with the NDP and Environmental Operational Programme is made for three levels of contribution to fulfilment of the goals namely: direct coherence, indirect coherence, and neutral coherence. The assessment is based on the assumption that the Competitiveness OP objective and priorities have a direct coherence if they contribute to environmental improvement, the indirect coherence provides conditions for environmental improvement, while neutral coherence neither promote nor negate the goals of the NSRF, NDP and EOP relating to environmental protection. The environmental coherence of the Competitiveness OP with the NRSF is shown in Table 10. The environmental assessment is made on two levels: (1) NSRF goals - Competitiveness OP objective level and (2) NSRF areas of environment improvement - Competitiveness OP priorities.

Regarding reading this table and the tables below the following legend should be noted:

**Legend:** Level of coherence; **D** = Direct coherence , **I** = Indirect coherence, **NR** = Neutral Coherence

**Table 10 - Assessment of Environmental Coherence between COP and NDSF**

	<b>COP general objective and priorities</b>				
<b>NSRF strategic goal and areas for environmental improvement</b>	<b>Level of COP Environmental coherence with NSRF</b>				
	<b>COP General Objective:</b> Development of a dynamic economy, competitive at the European and world market	<b>COP Priority 1:</b> Development of a Knowledge-based Economy and Innovation Activities	<b>COP Priority 2:</b> Business Development	<b>COP Priority 3:</b> Financial Resources for Developing Enterprises	<b>COP Priority 4:</b> Strengthening the international market positions of Bulgarian economy
<b>NSRF Strategic goal: Attain and</b>	I				

maintain high economic growth by dynamic knowledge economy in accordance ...					
<b>AoEI<sup>20</sup></b> : Air and noise pollution		I	D	I	NR
<b>AoEI</b> : Water supply and wastewater collection and treatment		I	D	I	NR
<b>AoEI</b> : Waste management system		I	D	I	NR
<b>AoEI</b> : Treatment of non-regulated waste dumpsites and old polluted terrains		NR	NR	NR	NR
<b>AoEI</b> : Biodiversity protection		I	I	I	TR
<b>AoEI</b> : Agri- and forestry environment		NR	NR	NR	NR
<b>AoEI</b> : Monitoring of environmental dynamic		NR	NR	NR	NR

Note: AoEI: Areas of environmental improvement

### Conclusions

The following conclusions can be drawn from the above analysis:

- The Competitiveness OP promotes fulfilment of the NSRF purpose and contributes indirectly to its first strategic medium-term goal.
- The second Competitiveness OP priority “Business Development” corresponds directly to the Section „Environment” of the NSRF.
- The first and the third Competitiveness OP priorities have an indirect coherence to the NSRF environmental areas and will provide conditions for environmental improvement.
- The fourth Competitiveness OP priority demonstrates a neutral relation to the NSRF environmental areas.
- The Competitiveness OP priorities are not related to the NSRF areas: „Agri- and forestry environment” and „Monitoring of environmental dynamics”. This however is not a weakness because measures within this area will be supported by the Agricultural and Environmental Operational Programmes.

### Recommendation:

The environmental coherence between the Competitiveness OP and NSRF is not sufficiently clearly stated in the Competitiveness OP global and strategic goals. It is recommended that it is stated more clearly that the Competitiveness OP goal “*Development of a dynamic economy, competitive at the European and world market*” is in accordance with the principles of sustainable development.

## 7.2.2 Review of Coherence with the National Plan for Economic Development (NPD) 2000-2006 in Sector Programme Environment

### Introduction

The Competitiveness OP is coherent with the following two the long-term strategic goals of the NDP, updated in 2003 namely: (1) Achieving sustainable and balanced economic growth based on improved

<sup>20</sup> AoEI: Areas of environmental improvement

competitiveness at the level of industry, company and human resources and (2) Improvement of the basic infrastructure, protection and restoration of the environment consist environmental aspects.

The NDP Sector Programme “Environment” formulates the following long-term strategic objective “Improving the quality of life of the country population by ensuring healthy and favourable environment and by preserving the rich natural heritage based on sustainable management of the environment” and six strategic objectives:

- Ensure good quality and sufficient quantity of water for all purposes,
- Achieve and maintain high quality of environment in the settlements,
- Protect natural heritage and maintain rich biological diversity,
- Integrate environmental policy into policies for economic sectors and regions,
- Ensure effective environment management, and
- Fulfil Bulgaria’s commitments for solving global environmental problems

The NPD envisages increasing the share of environmentally-friendly productions and products through:

- Developing and adopting a system of economic incentives and instruments for introduction of environmentally-friendly technologies;
- Improving the management and use of industrial waste;
- Developing environmental standards in making management decisions in the industry;
- Building information and consultation systems for the most advanced technologies and practices in the area of environmentally-friendly productions;
- Promoting the public and private partnership for reducing industrial pollution and management of the environment in compliance with the EU norms and standards.

***Assessment of the COP’s Environmental Coherence with the NDP Sector Programme “Environment”***

The Competitiveness OP priorities are assessed in terms of their environmental coherence to the NDP long-term strategic goals and the strategic goals of the NDP Sector Environment. The assessment is made for three levels of contribution to fulfilment of the above goals namely: direct coherence, indirect coherence, and neutral coherence.

The methodology for assessment explained above has been followed in assessment of the environmental coherence between Competitiveness OP and NDP. The assessment is shown in Table 3. The environmental assessment is made on two levels:

- 1) NDP long-term strategic goals - Competitiveness OP objective, and
- 2) NDP Environment – Competitiveness OP priorities.

**Table 11: Assessment of Environmental Coherence between COP and NDP**

	<b>COP General Objective and Priorities</b>				
<b>NDP long and short-term strategic goals</b>	<b>Level of COP Environmental coherence with NDP and the “Environment” Sector Programme</b>				
	<b>COP General Objective:</b> Development of a dynamic economy, competitive in the European and world market	<b>COP Priority 1:</b> Development of a Knowledge-based Economy and Innovation Activities	<b>COP Priority 2:</b> Business Development	<b>COP Priority 3:</b> Financial Resources for Developing Enterprises	<b>COP Priority 4:</b> Strengthening international market positions of Bulgarian economy
<b>NDP 1 LT SG:</b> Achieving sustainable	I				

and balanced economic growth					
<b>NDP 2 LT SG:</b> Improvement of the basic infrastructure	D				
<b>NDP Environment LT SG:</b> Improving the quality of life by ensuring healthy & favourable environment	I	I	D	I	NR
<b>1 SG:</b> Ensure good quality and sufficient quantity of water for all purposes		NR	NR	NR	NR
<b>2 SG:</b> Achieve and maintain high quality of environment in the settlements		I	D	I	NR
<b>3 SG:</b> Protect natural heritage and maintain rich biological diversity		I	I	I	NR
<b>4 SG:</b> Integrate environmental policy into policies for economic sectors and regions		I	D	I	NR
<b>5 SG:</b> Ensure effective environmental management		I	D	I	NR
<b>6 SG:</b> Fulfil Bulgaria's commitments for solving global env. problems		I	D	I	NR

**Note:** LT SG: Long-term strategic goal; SG: Strategic goal

#### *Conclusions:*

The following conclusions can be drawn from the above analysis:

- The Competitiveness OP priorities achieve a satisfied level of environmental coherence with the NDP and its Sector Programme “Environment”.
- The second Competitiveness OP priority has a higher level of environmental coherence with the Sector Programme “Environment” and significant part of the measures will contribute directly to the environmental protection.
- The first and the third Competitiveness OP priorities will contribute indirectly to fulfilment of the NDP general and sectoral goals.
- There are no links between the Competitiveness OP priorities and the first strategic goal of the NDP Sector Programme “Environment” namely to “Ensure good quality and sufficient quantity of water for all purposes”. Activities under this priority are not within the competence of the enterprises except in case the enterprises perform water supply activities. There are no links between the fourth Competitiveness OP priority and the NDP goals as well.

### **7.2.3 Review of Coherence with the Environmental OP**

#### ***Introduction***

The general objective of the Environmental OP is “Improvement, protection and recovery of the natural environment and development of environmental infrastructure directed to improvement of the quality of life and increase opportunities for investments in economy”. The EOP priorities are divided in to two groups-

priorities to be financed by the Cohesion Fund and priorities to be financed by the Regional Development Fund.

The Environmental OP priorities are:

- Construction of waste water collection and treatment infrastructure,
- Construction of waste management infrastructure,
- Improvement of the air quality,
- Closing illegal dumps and improvement of old waste disposal sites, and
- Biodiversity protection”, and “Establish an Environmental monitoring system.

**Assessment of Environmental Coherence of the Competitiveness OP with the Environmental OP**

The Competitiveness OP objective and priorities have been assessed in terms of their environmental coherence with the objective and priorities of the EOP. The methodology applied for assessment explained above has been followed in assessment. The environmental coherence between the general objectives and priorities of the Competitiveness OP and the Environment OP is shown on Table 4.

The environmental assessment is made on two levels:

- 1) EOP objective – Competitiveness OP objective and
- 2) EOP priorities – Competitiveness OP priorities.

**Table 12: Assessment of Environmental Coherence between COP and EOP**

	COP general objective and priorities				
EOP objective and priorities	Level of COP Environmental coherence with EOP				
	<b>COP General Objective:</b> Development of a dynamic economy, competitive at the European and world market	<b>COP Priority 1:</b> Development of a Knowledge-based Economy and Innovation Activities	<b>COP Priority 2:</b> Business Development	<b>COP Priority 3:</b> Financial Resources for Developing Enterprises	<b>COP Priority 4:</b> Strengthening the international market positions of Bulgarian economy
<b>EOP General objective:</b> Environment protection and development of environmental infrastructure ...	I				
<b>1 Priority:</b> Waste water collection and treatment infrastructure		I	D	I	NR
<b>2 Priority:</b> waste management infrastructure		I	D	I	NR
<b>3 Priority:</b> Improvement of the air quality		I	D	I	NR
<b>4 Priority:</b> Closing		NR	NR	NR	NR

illegal dumps					
<b>5 Priority:</b> Biodiversity protection		I	I	I	NR
<b>6 Priority:</b> Environmental monitoring system		NR	NR	NR	NR

*Conclusions:*

The following conclusions can be drawn from the above analysis:

- The COP general objective shows a satisfied level of coherence with the EOP objective. The COP objective is to development of a dynamic economy and will contribute directly to the second part of the EOP objective namely: improvement of the quality of life and increase opportunities for investments in economy. The COP objective doesn't stress environment protection and development of environmental infrastructure.
- The COP priorities contribute to fulfilment of the EOP priorities in general. The second COP priority demonstrates a satisfied and direct coherence with the EOP priorities. The measures under the second priority will support implementation of modern and new technologies hopefully considering environmental protection and energy saving and efficiency including for waste water treatment, waste management and air improvement.
- The first COP priority has an indirect coherence with the EOP priorities and assumes that the measures financed under this priority will provide conditions for environmental improvement.
- The third COP priority will provide access to financial sources that indirectly could support implementation of green and environmentally friendly technologies.
- The fourth COP priority is not relevant to any of the EOP priorities and will not cause any adverse environmental effect.
- All of the three COP priorities are not relevant to the EOP measures for closing illegal dumps and old disposal sites and for establishing an environmental monitoring system, as the central and local authorities have responsibilities for implementation of such systems which are outside the competence of SMEs (except in the cases they are subcontracted for such activities).

**7.2.4 Summary Conclusions on Environmental Coherence of the Competitiveness OP**

The COP global objective and priorities demonstrate a satisfying level of environmental coherence with the NSRF, NDP Sector Programme "Environment" and EOP objective and priorities.

*Weakness:* The COP strategic goal doesn't state clear that the "Development of a dynamic economy, competitive at the European and world market" is in accordance with the sustainable development principles as it is stated in the NSRF and DNP strategic objectives.

The second COP priority "Business Development" provides support to SMEs that compliment fulfilment of the NSRF area „Environment" and have a higher level of environmental coherence with the NDP "Environment" Sector Programme and EOP objectives and priorities. Modernization of the management, implementation of new technologies and energy saving technologies and renewable energy sources are some of the measures to be supported.

The first COP priority "Development of a knowledge-based economy and innovation activities" will contribute indirectly to implementation of the environmental aspects of the NSRF, NDP and EOP including by marketing of new technologies, feasibility studies for development of new products, improvement of the access to standardization products etc.

The third COP priority „Financial resources for developing enterprises" provides financial resources and indirectly contributes to fulfilment of the NSRF, NDP and EOP by ensuring investments in clean, environmentally-friendly and green technologies.

The fourth COP priority for promoting the international market positions of Bulgarian economy are not coherent with the environmental aspects of the NSRF, NDP and EOP and it is not necessary.

The COP is not coherent with some of the priorities like closing illegal dumps, water supply or environmental monitoring system. It is not required because the measures under these priorities are not within the competences of the enterprises and will be financed by the other operational programmes.

#### *Recommendations*

- The COP general objective should stress on the condition that the dynamic economy will be developed based on the sustainable development principles.
- It is recommended that the measures set out below be considered in evaluating projects to be supported by the COP:
  - Developing and adopting a system of economic incentives and instruments for introduction of environmentally-friendly technologies;
  - Improving the management and use of industrial waste;
  - Implementing environmental standards in making management decisions in the industry;
  - Building information and consultation systems for the most advanced technologies and practices in the area of environmentally-friendly productions;
  - Promoting the public and private partnership for reducing industrial pollution and management of the environment in compliance with the EU norms and standards.

### **7.3 General Environmental Assessment of the Competitiveness Operational Programme**

#### **7.3.1 Review of the Competitiveness OP Analysis Sections (Socio-economic Analysis, SWOT Analysis and List of Disparities)**

##### ***Review of the Socio-Economic Analysis***

The accession of the enterprises including the SMEs to the Common European Market is a very important step for their development and prosperity. The COP provides a socio-economic analysis of the current situation, the problems and directions for future development and improvement to be supported by the COP measures and recognises that environmental protection is a key factor for achieving high competitiveness and sustainable development for the Bulgarian economy.

##### ***Review of the SWOT Analysis***

The SWOT provides correct summary of the main strengths, weaknesses, opportunities and treats directly or indirectly related to the environmental issues.

In terms of SMEs competitiveness, the “high energy intensity of economy”, “low technology level”, “conservative management in companies”, “low share of enterprises with introduced management systems” and “difficult access to finance for SMEs” could be defined as the main weaknesses in the area of environmental protection and sustainable development.

The opportunities recognized in the COP like access to systems for technology, product and management transfer will support enterprises and particularly the SMEs in developing environmental protection activities as waste and wastewater management.

The above-mentioned positive factors could be seriously affected if the SMEs demonstrate “lack of change in enterprises’ behaviour after accession, insufficient capacity for absorption of EU Funds” and if they “are not able to fulfil in time the EU requirements”.

##### ***Review of the List of Disparities***

The COP defines the main disparities of the development of the Bulgarian economy. The disparities listed below are related to the sustainable development and environmental protection as well:

- Out-dated technologies and equipment;
- Insufficient use of renewable energy sources;
- Low level of introduction of quality management systems by the SMEs;
- Low level of compliance with EU requirements and standards;
- Difficult access to bank credits for investment purposes;
- Lack of interest for accreditation in the fields “bodies for certification of environment management systems” and “environment auditors”; and
- Poorly developed technology transfer structures.

#### **7.3.2 General Environment Review of the Competitiveness OP Priorities and Measures**

##### **Environmental focus of the COP priorities and measures**

This section reviews the environmental focus of the COP priorities and operational measures. The review of the operations is included as this was already completed before the revised COP version was produced, and thus includes the Operations-level detail described under the March COP edition but not included in the revised version.

**Priority Axis 1** “Development of a Knowledge-based Economy and Innovation Activities”.

The operations under this priority will play an indirect impact of the environmental protection by supporting the process of introduction of new production and management technologies including environmentally-friendly and clean technologies.

**Priority Axis 2 “Business Development”**

The operations under this priority will contribute to achieving the sustainable model of economic growth of SMEs and has a clearly defined environmental focus.

- *Operation 1* will support SMEs for technology development and modernisation in implementation of projects with EU requirements conformity, new technologies and products and introduction of IT based management systems and quality management systems. A priority should be given to products and technologies implementing EU environmental requirements and standards.
- *Operation 2* will promote creation of business support networking and business incubators that are structures with potential to develop and implement environmental protection and sustainable development principles.
- The measure “Institutional building for the Management bodies of industrial zones-already existing and/or projects for development of zones received support under the Regional Operational Programme-for elaboration of development strategies” could contribute significantly to environmental protection of the industrial zones.
- *Operation 3* will provide support for introduction of energy saving technologies and utilisation of renewable energy resources. Such projects should be considered as tools for reducing the quantity of the used natural resources and the waste generated in the production process.

**Recommendations:**

It is recommended that support should be given to:

- Projects achieving conformity with Common market requirements - Occupational Safety and Health (OSH), environmental standards, EU eco-label, Eco-Management and Audit Scheme (EMAS), and environment management systems (ISO);
- Projects for networks and Business centres developing and implementing environmental protection and sustainable development principles;
- Projects supporting establishment/ improvement of the environmental infrastructure in the industrial zones. It is important to provide support to SME in order to make the shift from “business as usual” to more sustainable practices by providing funding, subsidized consultancy, training etc.
- SMEs can play an important role in develop new sectors, based on small innovative companies and can contribute to move towards a more sustainable future. They need support to increase or at least to maintain them eco-efficiency ideas (e.g. waste minimization).

**Priority Axis 3 “Improvement of the access to finance for micro, small and medium-sized enterprises”** has an indirect effect on the environmental protection.

It is recommended that support be given to projects will facilitate the enterprises in their access to financial sources for green investments, introduction of clean technologies, eco-products etc.

**Priority Axis 4 “Strengthening the international market positions of Bulgarian economy”** doesn’t focus on the environmental issues.

**Expected environmental effect of the COP priorities and measures**

The environmental effect of the activities supported by the COP is assessed in terms of their contribution to protection and improvement of the environment. The environmental effect is assessed in four levels: direct positive effect, indirect positive effect, neutral effect and negative effect. Projects contributing directly to improvement of the water, air and soil quality, waste management and biodiversity protection are considered as projects with direct positive effect. Projects providing conditions for environmental protection and improvement are assessed as projects with indirect positive environmental effect. Projects are not focused on environmental issues and naturally don’t have negative environmental effect are categorised as projects with neutral effect. Actions that don’t take into account environmental standards and cause environmental

contamination like pollution of waters, air and soils, or destroy and distract soils, destroy biodiversity, manage the waste in inappropriate way are assessed as actions with negative environmental impact.

The *general requirement* is that the projects financed by the COP should avoid and/or minimize the negative environmental impact. This requirement could be achieved by providing support to projects meeting the environmental standards and to projects with positive environmental statement (projects, programmes and plans for which the legislation requires an environmental assessment).

The expected environmental effect of the COP priorities and measures are assessed in Table 13. Regarding reading the table below the following legend should be noted:

**Legend: Level of environmental effect:** D = Positive Direct Effect , I = Indirect Effect, NT = Neutral Effect, N = Negative Effect

**Table 13: Expected Effect of the COP priorities and measures on the environment**

COP Priorities	COP Measures	COP Actions	Environmental Effect
<b>Priority 1:</b> Development of a Knowledge-based Economy and Innovation Activities	M1.1	Implementation of business plans, including marketing of the new technologies, products...	I
	M1.2	Innovative enterprises – support of, engaged in development of new products or introduction of new production and management technologies	I
		Introduction of new technologies and products, or process's innovations	I
		Protection of the intellectual property in the field of the Common European market...	NT
	M1.3	Creation and support of innovative business incubators, technology transfer offices...	I
		R&D organisations through investments related to the implementation of R&D activities ... benefiting SMEs.	I
<b>Priority 2:</b> Business Development	M2.1	Modernization of the management and technologies in SMEs.	D
		Integrated grant scheme for new technologies and products	D
		Integrated grant scheme for compliance with international market standards for SMEs	I
	M2.2	Networking of organizations offering consultancy ...	NT
		Creation of business incubators..	NT
		Institutional bodies for the Management bodies of industrial zones..	I
	M2.3	Integrated grants scheme for introduction of energy saving technologies..	D
		Integrated grant scheme for introduction of renewable energy sources..	D
	M2.4	Integrated grant scheme supporting business networking for SMEs..	NT
<b>Priority 3:</b> Financial Resources for Developing Enterprises	M3.1	Support for Guarantee funds	I
	M3.2	Support for new risk capital funds	I
		Support for working risk capital funds	I
	M3.3	Micro credits	I
<b>Priority 4:</b>	M4.1	Promoting the country as investment destination..	NT

Strengthening the international market positions of Bulgarian economy		Creation of an information system..	NT
	M4.2	Increasing export efficiency	NT
		Advertising and promotion of separate groups of products	NT
	M4.3	Strengthening the authorities of the national quality infrastructure	NT
		Equipment of referent laboratories..	NT
		Improvement of quality of the access to standardization products	NT

### Conclusions:

The following conclusions can be drawn from the analysis:

#### Priority 1: Development of a Knowledge-based Economy and Innovation Activities

The measures under the first priority will have indirect effect and will provide conditions for implementation of further activities that will lead to direct environmental effect. The support will improve enterprises' opportunities to accelerate the process of developing and implementing new technologies including for clean and environmentally friendly technologies.

#### Priority 2: Business Development

Most of the measures under the second priority will have a direct environmental effect and will support investments, consultations and training for:

- Modernization of the management and technologies;
- Implementation of new technologies and products;
- Compliance with the international market standard and meeting the international requirements including - Occupational Safety and Health (OSH) requirements; environmental standards, EU eco-label, Eco-Management and Audit Scheme (EMAS), and environment management systems (ISO), and
- Introduction of energy saving technologies and renewable energy sources.

The measure "Institutional building for the management bodies of industrial zones" will have an indirect environmental effect by improving the capacity of the management bodies in building environmental infrastructure of the industrial zones.

The above actions will promote achieving the following results:

- Enterprises will discharge industrial wastewater and air emissions meeting EU environmental standards;
- The industrial and hazardous waste, generated by the enterprises will be managed following the EU requirements for waste minimization, recycling, recovery and composting;
- The usage of natural resources and energy will be reduced;
- The energy efficiency will be increased;
- The number of SMEs certified for OSH, EMAS, eco-label and ISO will be increased.
- The quality of the water basins and ambient air will be improved;
- The health and environmental conditions of the industrial and urban zones will be improved; and
- The improved water, air and soil conditions will promote biodiversity protection.

#### Priority 3: Financial Resources for Developing Enterprises

The measures under the third priority will have an indirect environmental effect. The financed activities will contribute to environmental protection by supporting investments in new and modern environmentally friendly or clean technologies, energy saving technologies etc.

#### Priority 4: Strengthening the international market positions of Bulgarian economy

The fourth priority will have a neutral environmental effect.

There are no actions assessed to be actions with potential negative impact.

## **7.4 Summary Conclusions and Recommendations**

### **Conclusions**

- The COP global objective and priorities demonstrate a satisfying level of environmental coherence with the NSRF, NDP and its “Environment” Sector Programme and EOP objective and priorities.
- The COP strategic goal doesn’t state clear that the “Development of a dynamic economy, competitive at the European and world market” is in accordance with the sustainable development principles.
- The second COP priority “Business Development” provides support to SMEs and has the highest level of environmental coherence. Modernization of the management and implementation of new technologies and energy saving technologies as well as introduction of renewable energy sources are some of the measures to be supported.
- The first COP priority “Development of a knowledge-based economy and innovation activities” will contribute indirectly to implementation of the environmental aspects of the NSRF, NDP and EOP.
- Most of the measures under the second priority will have a direct environmental effect and will support investments, consultations and training for:
  - Modernization of the management and technologies;
  - Implementation of new technologies and products;
  - Compliance with the international market standard and meeting the international requirements including - Occupational safety and health (OSH) requirements; environmental standards, EU eco-label, Eco-management and audit scheme (EMAS), and environment management systems (ISO), and
  - Introduction of energy saving technologies and renewable energy sources.
- The measure “Institutional building for the management bodies of industrial zones” will have an indirect environmental effect by improving the capacity of the management bodies in building environmental infrastructure of the industrial zones.

The above actions will promote achieving the following results:

- The enterprises will discharge industrial wastewater and air emissions meeting the EU environmental standards;
- The industrial and hazardous waste, generated by the enterprises will be managed following the EU requirements for waste minimization, recycling, recovery and composting;
- The usage of natural resources and energy will be reduced;
- The energy efficiency will be increased;
- The number of SMEs certified for OSH, EMAS, eco-label and ISO will be increased.
- The quality of the water basins and ambient air will be improved;
- The health and environmental conditions of the industrial and urban zones will be improved; and
- The improved water, air and soil conditions will promote biodiversity protection.

The measures under the third priority will have an indirect environmental effect. The financed activities will contribute to environmental protection by supporting investments in new and modern environmentally friendly or clean technologies, energy saving technologies etc.

### **Recommendations**

Based on the general environmental analysis, the following recommendations are suggested:

- The COP general objective should stress on the condition that the dynamic economy will be developed based on the sustainable development principles.
- COP should support actions that avoid and/or minimize the negative environmental impact and the supported projects should meet the environmental standards and/or to have a positive environmental statement (for projects, programmes and plans for which the legislation requires an environmental assessment).

It is recommended that priority<sup>21</sup> should be given to:

- Introduction of environmentally friendly, safe, and clean technologies;
- Stimulating the entrepreneurs to invest in modern management and production technologies along with the business development policy;
- Promoting the public and private partnership in compliance with the EU environmental norms and standards;
- Obtaining certificates for introduced systems of quality management and environmental management as well as environmental markings;
- Facilitating access to financial resources to support green technologies;
- Provoking managers' active attitude towards environmental protection;
- Building information and consultation systems for transfer of know-how, experience, and practices in the area of environmentally-friendly productions;

Other priorities which lie outside of the scope of the Competitiveness OP and therefore should be targeted by the Environment OP and the Human Resources OP, include:

- Improving the water, air and soil quality;
- Implementing systems for industrial waste management, recovery and recycling;
- Improving the control including environmental impact over the production process and product quality;
- Training of managers and staff in the environmental legislation

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<sup>21</sup> It may well be that some of these recommended priorities are more suitable for the level of Call for Proposals and Guidelines for applicants.

## 8. REVIEW OF THE ENERGY DIMENSION

### 8.1 Introduction

#### Objectives of the Energy-Related Review of the COP

In this section of the Ex-Ante, the Energy Expert comments on the energy related content of the Competitiveness Operational Programme (COP) in cross-examination to published national policy and general bibliography on the country's energy-environment-competitiveness debate. The Expert's aim is to ensure that the final document acknowledges EC legislation and published national long-term plans on energy efficiency (EE) and renewable energy sources (RES)<sup>22</sup>.

The objectives of the energy-related review of the COP are:

- Validate that the energy concerns of the competitiveness of the Bulgarian economy within the context of the COP were incorporated in a systematic and informed basis in reviewed draft of the COP.
- A secondary objective is to look forward into the implementation activities of the COP, to be drafted at a later stage as Measures and Actions, and notify of potential barriers, constraints and bottlenecks to the policy makers.

The following, section considers the boundaries of the Energy Expert's feedback on the COP document by clarifying the context and acknowledging the limitations of the review. A summary of international experience on the energy efficiency debate is presented in order to familiarise the reader to the challenges of energy efficiency policy making aiming on one hand to identify activity relevant to the opportunities and constraints for EE present in the COP while on the other hand provide the drafters and COP Working Group with the broader image of a successful EE strategy.

#### Methodology

The energy-related assessment of the COP involved the following broad activities:

- **Review of national energy policy and strategy:** Reviewing all operational energy-related documents referring to national policy, in order to assess the cohesion of the COP with national policy. In addition, topics on the opening up of the energy market and private capital investments in energy have been broadly reviewed to ensure the COP's suggested strategic interventions are in line with the overall energy picture in the country and the region.
- **Review of energy efficiency and renewable energy activity:** A brief survey has been undertaken of projects and programmes relating to energy efficiency in the productive sector and the building stock run by other governmental and international organisation or agencies operating in Bulgaria. An understanding of the country's experience dealing with EERE promotion, programme design and implementation is of importance to the ex-ante evaluation in order to verify the ambitions expressed in the draft text as well as to pin-point areas where the COP could complementary benefit.
- **Interviews & meetings:** A series of interviews were undertaken with officials from the Ministry of Economy and Energy and energy organisations in Bulgaria. These interviews had a number of purposes, including understanding the rationale and thinking behind the proposed measures in the COP, obtaining local expert feedback on current energy-related strategy and issues, and obtaining stakeholder feedback on the current measures proposed with the COP.

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<sup>22</sup> Collectively these terms can be also referred to as EERE – energy efficiency & renewable energy.

## **8.2 Energy-Related Initiatives in the Competitiveness OP**

### **Rationale for Energy-Related Initiatives in the COP**

The main energy concern of Bulgaria is manifested in the national energy intensity figure that is multiple times larger to the EU-15 average and is commonly contributed to the low productivity and outdated equipment in business, municipal district heating systems, utility energy conversion as well as distribution losses.

The issue, in its generic articulation, is portrayed as a critical barrier to economic development in the draft COP as well as the COP's sources in national policy documents (NDP, NSRF) and other national economic review reports and documents. The COP managing authority has verbally stated the intention to channel funds to EERE projects across most priorities (from innovation to training) in addition to the dedicated Priority 2 mainly concerned with actual installations as listed in the draft text. Nevertheless, this has been partly communicated in the draft COP's Priorities and Operations reviewed by the Energy Expert as such detail is not required by the EC guidelines, yet the Expert understands there is a weakness when coming to envisage practical, market oriented measures and mechanisms in the implementation of a coherent EERE policy. A review of best practice and policy instruments in support of EERE interventions in SMEs in other EU countries is highly recommended when the COP managing authority is in the stage of drafting the specific actions under each priority.

### **Conceptual boundaries of the COP**

It should be emphasised that the OP under the current ex-ante evaluation is by no means to be considered as an Energy OP. The competitiveness of the Bulgarian economy has a number of pressing priorities to face of which energy utilisation is an important part.

In this context, all references and activities relating to energy should have a clear expected benefit to the competitiveness of the SME sector in the country. For example, RES should be considered as far as related technologies and suggested actions have a proven impact on improving SME competitiveness, i.e. reduced carbon emissions in the face of compliance to regulations.

#### **Greek Competitiveness OP Experience Regarding EERE...**

Experience with the Greek COP suggests letting the EERE proposals widely defined but devise a well-structured screening and appraisal methodology for awarding funds to projects. In this way, one does not dictate the technological path for energy savings and competitiveness allowing the SMEs to discover their hidden value while it also leaves the onus on them to prove it satisfies the criteria for support, e.g. reduced cost per unit produced, tonnes of CO<sub>2</sub> avoided, fuel savings etc.

### **Eligibility Boundaries of the COP**

Most of the businesses in the SME sector, even with the recent update of its definition, are micro-enterprises with the majority in "Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods", thus having limited potential on energy savings. There should be real concern in choosing the best areas, projects or enterprises, to provide the available structural funds to in order to achieve the desired results for SMEs within the required planning period. The programme should aim to support high 'energy gain' or 'learning gain' projects first.

### **Expected Outcome Considerations**

The boundary of the COP and effectively of this evaluation is defined by the pressing requirement to face up to the energy intensity problem. However, the expert considers that it is unlikely the initial funds provided by the COP for energy related projects in the SME sector will have any significant effect on the country's energy intensity statistics and that should not be adopted as a goal, or expected outcome. The goal should be located in the output, unit cost or profitability of SMEs; a comparison baseline to remain common to all activities under the competitiveness prism.

Much of the funds will also need to be spent on preparing the grounds for a mentality shift of business practices and the establishment of institutional, financial and business structures and an energy market (from consultancy to equipment providers and installers) to support developments in the sector in the long run.

### Elaborating the Boundaries of the COP

Considering energy issues within the competitiveness programme and in relation to SMEs one should address issues of sustainability, security of supply, diversification and similar energy policy concerns as overarching objectives. However, for the purposes of the COP one must narrow down the scope of such topics. Below is an effort in this direction with what the Expert considers topics of relevance from the wide energy-environment-competitiveness debate.

**Table 14 – Energy Policy Topics and their Relevance to the Competitiveness OP**

Energy Policy Topics	Relevance to the COP
Market liberalisation	<ul style="list-style-type: none"> <li>▪ Uncertainty in the price of the fuels and electricity. Volatility of energy costs. Funds to accommodate SME participation in the process of establishing the market rules and provide training in managing energy trading, book keeping etc. Professional training, academic curriculum changes (introduce energy and environmental management modules).</li> <li>▪ Entry of SMEs in the sector as auto-producers or independent producers. Consultancy and expertise development. Financing resources. Technical and management upgrade of national grid to face intermittency and grid connections bottlenecks.</li> </ul>
Renewable Energy	<ul style="list-style-type: none"> <li>▪ Impact of mixed (regulatory &amp; financial) interventions and market-based mechanisms to business practices and devise a cost baseline.</li> <li>▪ Entry of SMEs in the sector as auto-producers or independent producers as in the previous.</li> <li>▪ Entry of SMEs to the sector as equipment and services suppliers and/or manufacturers/installers.</li> </ul>
Energy Efficiency	<ul style="list-style-type: none"> <li>▪ Most relevance to the SME sector and those enterprises with recognisable energy cost. Improvements on site, usually applied directly to the production process.</li> </ul>
Energy Delivery & Storage	<ul style="list-style-type: none"> <li>▪ Market development and technology availability will affect distributors, major producers, independent producers and the grid operator.</li> <li>▪ Issues in distributed generation access to the grid. Can affect SMEs that enter energy generation or SMEs that go into commercial co-generation.</li> </ul>

## 8.3 The Case for Improved Energy Utilisation in Bulgaria

### Establishing a Baseline

In February 2002, the Bulgarian government issued a Letter of Intent, which describes the policies that Bulgaria intends to implement in the context of its request for financial support from the IMF. In this letter, the policy makers stated that:

*Establishing a more competitive and efficient energy sector is of key importance for accelerating economic growth and reducing fiscal risk. With this objective in mind, we are revising our medium-term national energy strategy with a view to speeding up liberalization, increasing private sector participation, privatizing the production and distribution companies, and increasing transparency and competition in the electricity and gas markets. We will ensure that these changes also meet EU accession requirements.*

Bulgaria has a large potential for energy saving as recognised by EC run programmes (Save, Altener, Thermie) and international organisations such as the EBRD, the IEA and the UN. According to an information note of the IEA on Bulgaria's 2003-2004 National Energy Efficiency Plan and Energy Efficiency Law:

*“[...] the overall energy saving through the technological measures is 1856 million toe (77,707 PJ) per year, which represents 30% of the industrial consumption of fuels and energy in 1995. By investing US\$ 701 million, annual financial savings are US\$ 336 million per year. The saved installed electric power*

*capacity equal to annual electricity saving in industry, at annual usability of 500 hours per year, is 390MW. If the average specific investment were US\$ 1,250/kW, the saved funds for building new electricity generation capacities would be US\$ 489 million, which would constitute more than half the necessary investment for adoption of all measures in industry.”*

### **Policy Pressures**

The main external political driver for Bulgaria to introduce energy efficiency practices is its Kyoto protocol commitments to the UNFCCC with the obligation to achieve the 8% reduction of GHG emissions as well as transposing the Directives of the EC into national legislation (summary provided in *Annex 3*). The EC instructs a number of instruments and mechanisms to practically achieve the energy efficiency and emissions reduction targets across all sectors of the economy. In addition, there have been other actors (ranging from national energy agencies to multi-lateral organisation and banks) that have been assisting Bulgaria to deal with its energy intensity problem. In the Expert's view, there should one official body in Bulgaria charged with summarising all activities in energy saving needs, priorities, running projects and project results to avoid duplication of work and accumulate the knowledge thus allowing for rapid recognition of priority funding areas.

### **Paradigm Shift: Introducing a New Business Mindset**

It is understood that the greatest energy saving potential in Bulgaria lies in the energy conversion efficiency of power plants, in reducing distribution loses and upgrading and/or expanding the municipal heating installations. That theoretically underestimates the potential of significant savings in the SME sector. Nonetheless, as in the case of the environment below, the sector's energy intensity is a *sectoral (or group) problem* that has to be dealt by improving general awareness (copying from the Annual Report on the Condition and Development of SMEs in Bulgaria 2004, Sofia, Ministry of Economy & Energy, Sofia 2005):

*Small and medium-sized enterprises are applying significant pressure on the environment. **Their impact is not so much the result of individual operations but of the overall influence of the sector** on the environmental components through harmful emissions and pollution related to production processes or products. At the same time, SMEs are an important part of the solution of Bulgaria's environmental issues and are therefore the object of special support actions by governmental institutions. At national level, many of EU environmental policies are being applied. **The goal is to improve SMEs level of awareness vis-à-vis environmental legislation and companies' pro-active attitude to the preservation of natural resources.***

The Directives, previous and on-going experience of other European countries and the presence of international donors with their experts provide a wealth of references to design the best implementation projects within the Competitiveness OP with respect to all the Priorities covered in the current text and especially so in energy matters. As discussed already with members of the COPWG and the drafters, it is critical to the competitiveness of the Bulgarian enterprises to comply with European legislation but equally intensely to go as far as possible in certifying themselves to other voluntary standards and practices available. The Competitiveness OP provides a unique opportunity to demonstrate the benefits of such a mentality, a new paradigm. EERE measures should be well researched and targeted within each Priority.

### **The Winning Approach to the COP's Energy Agenda**

As long as energy sector policies are considered in isolation, they are more likely to perpetuate the dominant supply culture which hinders a demand-side and energy saving culture. The Competitiveness OP can have a significant impact in EERE and can deliver important signals from the market and the SME sector back to the policy makers. The best that the Competitiveness OP can achieve is to pick the winner projects with short-term and measurable benefits that will provide policy makers and market actors with hard evidence that EE and RES investments pay off in commercial rates of return and payback periods. That should be the primary focus of Priority 2, Operation 3. Spreading innovation seeds and other non-measurable, in terms of standard market indicators, activity such as clusters, dissemination of information, best-practice to the remaining should be incorporated under the remaining Priorities.

The Expert urges for a line of conceptual continuation and coherence in dealing with energy issues across the Priorities of the Competitiveness OP focussed on what it the learning objective rather than just adopting

recommendations of any much talked about technology of the time. The questions should be “what is the energy (EE or RES) related learning objective (and/or potential) in Priority X (or Operation Y)?”, and soon after a number of suggested proposition are answered again this the following question should follow “how does the expected insight fits into possible energy related learning under the remaining Priorities and Operations?”. By going through this exercise in iteration, the limited budget and downsized energy scope of the Competitiveness OP will produce very concise and rich feedback. However, it still remains to overcome the bottleneck of the absorption capacity of the SMEs. The reach of the Competitiveness OP with respect to energy can be validly extended with clearly articulated measures under the Priority on Access to Finance and Information Society.

### Some Recommendations

- *Eligibility Boundaries of the COP*), there are a few rules of thumb that can be applied: basic statistical analysis and some time spent of reviewing the programmes on EE and RES implemented in the country already. The statistics on enterprise energy consumption can be arrange in a way that the energy consumption data is laid out by sector and is juxtaposed against contributions to the GDP and exports and, available sectoral emissions reduction potential. Selecting an appropriate set of criteria (the obvious one would be to aim SMEs within the mandatory energy audit threshold) will lead to tailoring the programme to those sectors most likely to succeed from the start and will also reduce the workload at the later stage of project appraisal since it will reduce number of eligible applicants under each activity.
- The Competitiveness OP should take under serious account the national commitments of the country towards international treaties on energy efficiency, emissions reduction and share of renewably generated electricity in the energy mix. With respect to the draft Energy End-Use Efficiency and Energy Services Directive the first reading by the European Parliament supports a binding 11.5% energy savings target by 2015 while the Directive foresees the promotion of energy services and more consumer information as critical factors in the success of the targets. According to Mechthild Rothe, president of EUROFLORES, *“We have to raise the awareness for energy saving by the means of information campaigns, energy consultancy and detailed but easy to read energy bills in order to convey to the European citizens the win-win situation energy savings create”*. Therefore, the Competitiveness OP can promptly address the trends in European legislation in its Priority 1 Development of Knowledge Based Economy through specific budgets on energy related consultancy and best-practice guides. We could be also argued that since the recently established Energy Efficiency Fund is not considering renewable energy projects then the Competitiveness OP should aim to address those given the complementarity of programmes proposed earlier and taking under consideration national renewable energy targets. It should also be noted that all energy related investments from all operators and under any donor or Community support programme should have a common appraisal basis which should be emissions reduction gains<sup>23</sup>.

### The Competitiveness OP, Energy & SMEs

This paragraph draws from the *Annual Report on the Condition and Development of SMEs in Bulgaria 2004* by the Ministry of Economy & Energy (Sofia 2005).

Most of the industrial sector consists of micro and small sized enterprises in the “sale and repair of cars, small scale manufacturing” followed by the hotel sector. Despite SMEs reaching up to 90% of sector, SMEs only represent 10% of exports and as much as 15% of imports of the sector. In terms of energy gain, clustering and upgrade of equipment as well as certification and the introduction of environmental standards is expected to improve the energy vector of SMEs. Most of these companies are servicing low demand expectations of an internal economy but as standards of living are increasing local businesses and manufacturing will have to catch up with the qualities of imported goods.

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<sup>23</sup> Suggested reading: Interdisciplinary Analysis of Successful Implementation of Energy Efficiency in the industrial, commercial and service sector, Contract JOS3-CT95-0009 (1.1.1996 to 31.12.1997), Final Report. Research funded in part by The European Commission in the framework of the Non Nuclear Energy Programme JOULE III. Copenhagen, Karlsruhe, Kiel, Vienna, Wuppertal, February 1998. <http://www.psychologie.uni-kiel.de/nordlicht/sme/intersee.htm>

Internal competition (according to the NDP internal demand has been the main driver of the economy for the period 1998-2004) and the need expand the market beyond national borders will force companies to improve procedures as “competition on the domestic market will intensify, entrepreneurs have to invest in order to comply with the new requirements of EU regulations and prepare to apply them more vigorously.” (p.16). The Competitiveness OP must set the setting stones and structures that will help SMEs find the help they need and encourage them to acquire practical experience. However, the money is limited therefore these actions must be communicated very well if they are to have an overall impact. Information on best practices, access to experts, guidelines and a clear Competitiveness OP structure is necessary.

The issue of energy efficiency in the Competitiveness OP should be much focussed and pin pointed to the sub sectors of SMEs that are power consuming and tailor projects to their realistic and short term needs – the point is to spend the money creating favourable pay-backs for the SMEs and the national economy at the same time. Implementing SMEs and the Ministry are risk sharing partners. On the other hand, the Competitiveness OP is should not be expected to reduce the energy intensity figures of the Bulgarian economy significantly. It will however, set a new way of viewing EE investments by the SME entrepreneurs from whom future large players are likely to emerge from.

#### **8.4 Review of the Competitiveness OP**

The Competitiveness OP draft reviewed in this section is the April 2006 update received on April 26, 2006.

##### **The Socio Economic Analysis**

###### *Overview*

The energy reference in the SA is mainly concerned with energy efficiency measures in the country in order to combat the high energy intensity of the economy. Energy use is conceptually and practically attached to the wider backdrop of outdated machinery and management practices, the low efficiency of energy conversion in production while it is rightly viewed under the Kyoto commitments and the overall environmental performance of the country. Under the Macroeconomic Development section of the Socio-Economic Analysis there is clear mention to industry's low productivity and conversion efficiency. However, the Socio-Economic Analysis goes in greater length devoting a section on energy efficiency which is seen very appropriate given the importance of the issue as highlighted in the national documents reviewed and considering that a great share of the OP's budget will be available for actions on the related priority.

###### *Comments and Recommendations*

The following comments and recommendations can be made in respect of the Socio-Economic Analysis:

- There should be a bibliographical reference to the figure on industrial sector energy consumption on page 11:
- “Eurostat data on relative energy consumption, defined as primary energy use per unit of GDP (tons of oil equivalent per 1000 euros), indicate that Bulgaria’s industrial sector energy consumption is two times higher than that of EU-25.”
- There should be justification of why RES are not adequately dealt with. The focus is clearly on energy efficiency measures. Fuel switch and RES should be equally considered and the focus on energy efficiency justified.
- It would be useful to have figures filtered out for the SME sector rather than provide the overall available statistics on the whole of the industrial sector which can be misleading as to the needs of the SME sector.
- Overall, this is a good and useful section that follows well from the NSRF and NDP documents and is in agreement with third-party reports reviewed by the Expert with respect to pressing issues in the energy sector of Bulgaria.

- With respect to section 1.3.2 where indicators are discussed, perhaps there should be some mention to the current consumption of primary energy (in toe) to the gross output of the SME sector (in monetary terms).

### **The SWOT Analysis**

With respect to the energy related issues and the boundaries of the Competitiveness OP as analysed earlier the SWOT analysis is considered satisfactory. Under the Threats the effect of the energy market restructuring and the privatisation of large generating units on the electricity and fuels price should perhaps be included. The developments in the national energy sector bring about well publicised uncertainties. The impact on SME decisions to take advantage of energy efficiency funding is correlated to such uncertainties about the future of prices and it is a factor dependent on national policy making.

### **Objectives of the OP**

The Global Objective describes an overall generic optimum any economy should aim to. However, it reiterates coherently the barriers that drive the policy initiatives in the Competitiveness OP. The Specific Objectives are limited to two headings that both bear consistency to the Global Objective. Energy-wise, the first specific objective on innovation and efficiency in enterprises incorporates most of the energy related content of the Competitiveness OP with respect to technology whereas the second objective on developing the business environment will engulf consultancy and campaign initiatives that will relate and synergise to the actions after the first objective as it has been established by discussions held with the Managing Authority.

### **Coherence Review - Competitiveness OP, NDP & NSRF**

The Competitiveness OP draft version reviewed maintains documented reference to the National Strategic Reference Framework (NSRF). In actual fact, there is a well structured section of Chapter III (section 3) dedicated to the compliance of the Competitiveness OP to a number of national and EC policies as well as political and economic objectives. With respect to energy the following subjects are included under each heading:

**Table 15 - Coherence Review between Competitiveness OP, NDP & NSRF**

<b>COP Section</b>	<b>Comments</b>
3.1 Compliance of the Strategy to EU policies	EU's Kyoto commitments are mentioned and environmental legislation towards that goal as well as which priority actions of the COP cover these.
3.2 Compliance of the Strategy to national policy	References and comments on incorporating the concerns of the National Energy-Saving Programme and Sectoral Short-Term Programme for Energy Efficiency as well as the National Environment Strategy to the COP's priorities.
3.3 Compliance of the Strategy to NSRF.	Energy is included under the mid-term objectives of sustainable development while it falls under the improvement of competitiveness, improvement of basic infrastructure and regional development strategic priorities of the NSRF.
3.4 Horizontal Issues	Under the EC Horizontal objectives, the COP's section on Sustainable Growth and Environmental Protection (3.4.3) makes particular reference to the reduction of energy consumption, diversification of energy resources, stakeholders co-operation for environmentally friendly production systems and the implementation of environmental management systems as well as certification of SMEs to production standards with environmental and efficiency objectives.

### **Relation to Energy-related National Documents**

In order to further comprehend the overall guiding lines of energy policy making in Bulgaria, what are effectively the conceptual sources of the energy dimension in the Competitiveness OP document, here is a summary of the converge objectives of the Energy Strategy (2002), the National Action Plan for Energy Savings (2001) and the New Energy Efficiency Act (2004):

**Table 16 – COP Coherence with Nation Energy Strategy**

<b>Objectives</b>	<b>Relevance to COP</b>
Eliminate price distortions.	No relevance.
Complete the regulatory framework regarding energy consumption and strengthening institutions.	There is relevance under the priorities of strengthening the business environment.
Introduction of EU legislation.	There is relevance under the stated intention of introducing EC legislation and assisting SMEs to get certified to EU standards.
Education and info dissemination and experience from other from other countries (not talking of best-practice directly).	There close relevance to the COP objectives.
Develop financial market for energy efficiency (for installations, consultancy or equipment?) through a trade oriented fund.	There is relevance to the COP objectives.
Public-private partnerships through the BEEF – World Bank will support BEEF on PPPs.	There is complementarity to the COP.

In its Second Bulgarian National Communication to UNFCCC, the policy makers clearly stated the pathway and priorities to mitigate energy intensity and GHG emissions. This list included the following measures:

**Table 17 – COP Coherence with 2<sup>nd</sup> Bulgarian National Communication to UNFCCC**

<b>UNFCCC Communication Priorities</b>	<b>Relevance to COP</b>
1. Reduction of electrical losses	Relevant. Addressed in COP draft.
2. Reduction of thermal losses	Relevant. Addressed in COP draft.
3. Upgrading of heat production plants	Complementary.
4. Micro-hydro potential	For the use of the SME? Needs to be clarified.
5. Hydro power projects	Not relevant.
6. Natural gas combined cycle	Relevant as fuel switch, efficiency upgrade (CHP?)
7. New Belene NPP	Not relevant.
8. TPP rehabilitation	Not relevant.
9. Gas supply to households	Not relevant.

Energy intensity and RES utilisation are also referred to under the Environment OP of the NDP. The stretch of responsibility, the boundaries of support eligibility and the remit of each OP with regards to EERE should have a clear demarcation. It seems necessary in the short-term to initiate a study clearing out the conflicting objectives among different agencies, programmes and OPs running in the country. Creating a national reference to dealing with energy issues will avoid duplication of work and ensure co-ordination of activities to achieve greatest complementarity of supportive activities in the field.

### **Priority Axes**

The new EC regulations require the Priorities of the OPs to stay at the strategic level with more detailed actions and the detailed programme outline to be designed and discussed at a later stage in the procedure of receiving and allocating the structural funds. Therefore the comments of the Expert on the priorities are merely establishing that there is an energy context following coherently and conceptually from the analysis in the draft COP text under review and assesses the degree of relevance to the SME sector.

Priority axis 2 “Increasing efficiency of enterprises & promoting supportive business environment” is focussed on the energy intensity issues highlighted in the COP text. However, a number of measures can be envisaged under the other priority axes too such as exchange of scientists in research, assistance to spin-offs, public information campaigns, SME excellence awards, publication of energy efficiency standards, excellence awards. Despite the provision of a priority specific to energy, the Expert would expect to see an action plan on technological choices (co-generation, fuel switch, eligible renewable energy technologies), a greater integration of the Competitiveness OP to the establishment of the energy market in the country and

more specific and documented references to sustainable development and the Kyoto commitments all of which are very closely linked to the competitiveness and strategic outlook of a European economy. In discussions held with the Managing Authority and the drafters of the Competitiveness OP it has been established that the Ministry is aware of those issues and it remains to be seen how those subjects are going to be dealt with at the next phase of the Competitiveness OP where specific measures have to be designed.

### **8.5 General Aspects of Energy & Competition**

This section provides general insights into the subject of energy and competitiveness aiming to stimulate the Managing Authority and Competitiveness OP drafting team to examine closer international experience in EERE within the SME sector while finalising the text. In addition, where possible and within the length restrictions of this report, the Expert draws insights in what errors and issues are likely to come up in the future while in the phase of designing the actual tools and mechanisms to implement the Competitiveness OP through solid and published actions.

#### **Why Insist on EE?**

Energy-efficiency improvements (also known as energy conservation) can slow the growth in energy consumption, save consumers money and reduce capital expenses for energy infrastructure. Additionally, energy efficiency reduces local environmental impacts, such as water and air pollution from power plants, and mitigates greenhouse gas emissions. Qualitatively, the main benefits to the economy are:

- Reduced need for new power plants. The cost of saving 1 kWh of energy through energy efficiency programmes is much less than producing 1 kWh of energy with a new power plant. It is possible to construct cost-benefit curves on comparing these two options and it is suggested that the Ministry proceeds with such a study as it is a powerful tool for making the right cost effective choice based on actual pay-back figures.
- Reduced greenhouse gas emissions. Less energy production means lower emissions.
- Improved competitiveness for local manufacturers. Local companies that upgrade the efficiency of their appliances can compete better with multi-national companies.
- Higher consumer disposable income. Less spending on electric bills increases consumer purchasing power for other products, which helps local businesses.
- Improved trade balance. Decrease in energy demand will reduce the consumption of indigenous fossil resources and helps alleviate trade deficit regarding imported fuels.

#### **The Existence of Barriers to EE Policy**

Despite the documented benefits, the energy conservation literature argues that numerous cost-effective conservation measures could be undertaken, but they are not because market barriers discourage such investments. However, review of these barriers<sup>24</sup> indicates that, in actual fact, they do not discourage investment and they are not market failures. A conventional investment model suggests that business investments in energy efficiency are made with the same decision rules as any other investments. Consumers who invest in energy efficiency require higher rates of return when the investments are illiquid and they are unable to diversify away the risk. The high discount rates required by consumers for energy-efficiency investments reflect real costs in a competitive market, not artificial market barriers. In the case of Bulgaria, those investment entry costs are likely to be offset by the large efficiency gap that there is in the economy. However, the economy as a whole cannot be targeted within the Competitiveness OP or indeed any other structural programme initiated by the State or the EC, therefore the programme should pick out the winners; that means carefully screen those SMEs that on one hand can provide immediate results and on the other hand are risk-taking SMEs. That will require a methodology for narrowing down eligibility criteria, establishing a thorough project appraisal procedure, monitoring the technological intervention with the correct technological expertise available within the Ministry and finally ensuring full and clearly communicated dissemination of the results.

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<sup>24</sup> Numerous studies have been undertaken by the International Institute for Energy Conservation (IIEC), the USA's Energy Information Administration (EIA) and the International Energy Agency (IEA) in Paris that constitute the source of this paragraph.

## **Overcoming Barriers towards Successful Implementation**

When it comes to publishing the support measures and waiting for the proposals from the SME sector to come in, the existence of barriers and market failures could significantly harm the absorption objectives of the Competitiveness OP. The policy makers should be well acquainted with what can go wrong and try to be as proactive as possible when designing the implementation actions.

Six market barriers are generally identified from international experience of EE programmes worldwide:

1. Misplaced incentives,
2. Lack of access to financing,
3. Flaws in market structure,
4. Pricing distortions imposed by regulation,
5. Decision influenced by Custom, and
6. Lack of information or misinformation.

These barriers can be met in any country at various stages of development and in differing levels of urgency. The Competitiveness OP should identify which of those are affecting the effectiveness of SME market position in Bulgaria and adopt a priority and operational structure to address these. As an example of dealing with market barriers, policies that encourage the dissemination of information, such as appliance labelling, may promote energy efficiency and overall economic efficiency and could be considered in the context of the Competitiveness OP's budget and objectives within the other Priorities (e.g. in Priority 1 under Development of the Knowledge-based Economy). SMEs could innovate in providing energy efficient products to consumers and at the same time fulfil EC regulation on product labelling where energy is relevant.

## **State Intervention to Remove Barriers: Where and When**

There are three main rationales for government intervention that emerge from the market barriers debate and which should be kept in mind when designing energy efficiency policy in Bulgaria, especially in these early stages where cohesion to the EU standards is an opportunity for advancement but also a constraint to the State's presence in the market:

1. Government should intervene to counteract the effects of market failures;
2. Government should intervene to reduce transaction costs; and
3. Government should intervene to help individuals help themselves.

The *efficiency gap*, a phrase used in the energy-efficiency literature, refers to the difference between levels of investment in energy efficiency that appear to be cost effective based on engineering-economic analysis and the (lower) levels actually occurring. It has not been established by the Energy Expert if such a study exists or has even been commissioned. If not, it is highly recommended as it could provide a key document of mapping energy efficiency weaknesses by priority based in cost-benefit criteria where intervention priorities could be decided from in a strategic national level. It perhaps is out of the scope of the Competitiveness OP but a pilot project could be provided through the funds available for the development of the business environment, consultancy and support services.

## **Technological Change and Picking Winners**

Technological and institutional change is an enduring feature of the energy sector both in the supply and demand sides. Public policies must be constantly scrutinised for their continuing appropriateness in view of technological advances and the emergence of new market structures. Nevertheless, the main impacts of energy efficiency measures are expected to be achieved at the level of the power utility, the large industries, the institutional introduction of alternative fuels, building regulations and the introduction of bold measures for the promotion of renewable energy technologies choosing a basket of measures from those applied already in other European countries.

In the context of SMEs improved energy use and energy saving is considered (as in the Competitiveness OP, NSRF and NDP texts) in parallel to overall improvement in the equipment and management practices utilised at the moment. Indeed, the driver of business to invest in energy efficiency lies in the investment's effect on the final price of the product. Inevitably business adopts this as an intrinsic optimisation objective. Policy makers concerned with energy conservation should make sure that non-traditional cost cutting solutions such as investments in energy efficiency are equally represented in the choices board of an entrepreneur (i.e. availability of information, literature, consulting services) and then as rightly put by the COP access to financing – however, the current Competitiveness OP must articulate access to financing statements relevant to energy utilisation once targeting particular high impact sub-sectors within the group.

### **Energy Efficiency vs. Economic Efficiency**

There is a danger that has to be avoided and monitored in the quest for energy efficiency. Investments of SMEs in competitiveness can be characterised along two axes: by effect on energy intensity, and by effect on economic efficiency (see table). Having as a goal the energy efficiency can lead to rejection of investments that do not increase energy efficiency, or even worsen it, but nevertheless increase economic efficiency. In principle, it is possible to conceive a new technological process that requires, for example, reduced labour intensity yet higher energy intensity, and its net contribution is more economically efficient than an existing process. Having increased energy efficiency as the predominant criterion this new technology would be rejected, despite the increased economic efficiency and competitiveness advantages offered.

**Table 18: Energy Efficiency versus Economic Efficiency**

	<b>Decreases Energy Intensity</b>	<b>Increases Energy Intensity</b>
<b>Increases Economic Efficiency</b>	“Energy Efficiency”	“Energy Enhanced Progress”
<b>Decreases Economic Efficiency</b>	Not Promoted	Rejected as Undesirable

## **8.6 Conclusion and Recommendations**

### *Conclusions*

Realising and being able to formulate a statement on the aims and objectives of the funds to be spent under the Competitiveness OP on energy projects is key, as it is essential to state what purpose these funds are not there for. Through interviews held with members of the Competitiveness OP Working Group, discussions with other energy experts with a view in Bulgaria's issues and international bibliography, the expert has established that there have been, are and will be parallel projects running on energy efficiency and renewable energy in the country that will complement what can be achieved under the Competitiveness OP's budget. It is the view of the expert that the ensuing draft of the Competitiveness OP will have, within the working group at least, a clear picture of what gap in the knowledge and application of EERE measures the projects to come will fill. The key is to achieve complementarity of all actions in EE in the country.

Interviews undertaken by the Energy Expert have shown that there is a lack of local knowledge regarding international experience in the application of support for EERE projects in the SME sector, including an appraisal of the available instruments and policy mechanisms appropriate to the Bulgarian SME profile

### *Recommendations*

- It is highly recommended that the Ministry acquires a review of international experience in the application of support for EERE projects in the SME sector included appraisal of the available instruments and policy mechanisms appropriate to the Bulgarian SME profile. This will ensure successful programme implementation and high absorption and success rates. The ex-ante evaluation work has been established by the Energy expert that this knowledge is lacking.

- It is recommended to look into the energy and environment related directives and regulations and draw out those with relevance to SMEs consequently designing the forthcoming Measures along those requirements and objectives.

Despite energy being recognised a significant element in the competitiveness of the economy not only the Competitiveness OP is not enough as well as being out of its scope to address the issue in a coherent and holistic way. The Competitiveness OP should work in synergy with other OPs for the matters relating to energy and there should be a body or authority ensuring complementary Measures under the OPs and avoiding duplication of work. Both the Competitiveness OP and the Agricultural OP are looking into RES utilisation, however members of both Managing Authorities have more than a couple of joint pressing issues to deal with: connection to the grid, pricing, licensing are some of those which by no means can be dealt with not having insured a common strategy. Responsibility for ensuring co-ordination and coherence is likely to lie with the Central Coordination Unit within the Ministry of Finance, as this body is the authority responsible for ensuring complementarity of priorities under the different Ops.

## 9. QUANTIFICATION OF OBJECTIVES AND MONITORING INDICATORS

### 9.1 *Monitoring Indicators in the Competitiveness OP*

#### **Introduction**

The March 2006 version of the Competitiveness OP includes an extensive table of IoAs (almost 140 Indicators) to be used for monitoring and evaluation of the programme. The IoAs suggested are structured at three outcome levels: output, result and impact.

The table identifies the source of information and the measuring intervals but fails to provide any base values and target values alike. At the time the consultants were nearing completion of the review of this list of indicators the revised April edition of the Competitiveness OP was produced.

#### **Revised Competitiveness OP Edition (April 2006)**

The revised April 2006 version of the Competitiveness OP contained some changes with regard to this section of the OP. The main body of the revised OP Document contain indicators at the level of OP, Overall objective and Specific objectives, Priority Axes and Operational objectives. All the rest of the indicators (at the level of operations and actions) were transferred to the Official Annex 3 to the OP, where the explicit list of quantifying objectives is provided. In addition, some more indicators were included in the April version – context indicator for the Programme and indicators for Horizontal issues.

#### **Summary Review of Indicators**

Enclosed below is a review the system of indicators from the March 2006 edition of the Competitiveness OP:

- Comments as to their quality (i.e. relevance, completeness, etc.) and some suggested values based a) on previous evaluation results we received from Phare projects and b) on other similar experience from other EU countries.
- The final column on the right of the table indicates whether the indicator has been retained or removed in the right
- It is important to realise that the revision of the March Competitiveness OP edition did not take account of the comments in the enclosed table below, as this review of the indicators was not complete at the time the revision of the OP was undertaken at the Ministry.

## 9.2 Review of COP Monitoring Indicators

**Table 19 – Review of Competitiveness OP Monitoring of Indicators**

Index	Objectively verifiable Indicators	Type	Source of Information	Evaluator Comments
1	Number of maintained or newly created jobs	Impact	NSI	Only newly created jobs can be verified. Maintained jobs are not directly observable and they require a general equilibrium model to be run (with and without the intervention) in order to obtain the needed comparison data. It is recommended that the indicator be phrased as follows: “ <b>New full-time equivalent private sector employment positions created by the programme</b> ”
2	Increase in expenditures on R&D in GDP	Impact	NSI	It is assumed that the indicator wants to capture the indirect effect (co-financing; leveraging effect) of the subsidies offered by the programme and not the grants given out. The impact is correctly expressed as a percentage of GDP. It is recommended that the indicator be phrased as follows: “ <b>Private investment in R&amp;D (as % of GDP) as a result of the programme state aids offered</b> ”
3	Trade balance as % in GDP	Impact	NSI	The indicator is not directly observable. It needs a general equilibrium model in order to be estimated.
4	Increase in volume of investments as % in GDP in private companies	Impact	NSI	The indicator should isolate the impact of the COP interventions. As such it should measure the leveraging effect of the state aids offered through the programme. . It is recommended that the indicator be phrased as follows: “ <b>Private enterprise investment leveraged (as % of GDP) as a result of the programme state aids offered</b> ”
5	Labour productivity of SMEs	Impact	NSI	Labour productivity can be measured before and after the COP implementation, but it is hard to isolate the productivity increases attributable to the COP interventions. It is recommended that the IoA be <b>deleted</b> . It can only be used as a context indicator. In that case, there is no target value.
6	Energy efficiency per unit of production	Impact	NSI	Same as above. It is hard to isolate the energy efficiency gains attributable to COP interventions.
7	Efficiency in SMEs	Impact	NSI	The IoA is very vague. The term “efficiency” needs to be further defined.
8	Number of maintained or newly created jobs in supported institutions	Impact	NSI, monitoring	Same comments as for IoA 1. It is recommended that the indicator be phrased as follows: “ <b>New full-time equivalent public sector employment positions created by the programme</b> ”
9	Increase in foreign investments volume	Impact	NSI	FDI is measurable before and after the intervention but is impossible to isolate the COP effect on FDI. It is recommended that the IoA be <b>deleted</b> . It can only be used as a context indicator. In that case, there is no target value.
<b>Priority 1 Development of knowledge-based economy and innovation activities</b>				
10	% of innovative MSMEs in all MSMEs	Impact	NSI	The term “innovative” SME needs to be further defined.
11	Survival rate of technology start-ups	Impact	NSI, monitoring	The IoA needs a time horizon. Usually a 2 or 3-year period after the completion of the intervention is defined as the measurement milestone. Since the awarded grants will be completed at various times, there should be a mechanism installed that will monitor them for a period of 2-3 years after the grant completion in order to secure a measurement. Also, the survival rates calculated this way may differ from year to year. It is recommended that the indicator be phrased as follows: “ <b>Average survival rate of new technology start-ups supported by the programme 3 years after the completion of each individual grant</b> ”

Index	Objectively verifiable Indicators	Type	Source of Information	Evaluator Comments
12	Number of new products and services ready to be introduced on the market	Result	monitoring	This indicator largely depends on the data provided by the companies participating in the programme. As such, it may or may not be reliable depending on how “readiness for market” will be verified. There is no base value for the indicator.
13	Increase of revenue generated by supported enterprises	Result	monitoring	There is no way to isolate the impact of the intervention on revenue generated. Therefore, the only other source of information is what the participating companies will report. This (as above) raises issues of verification. There is no base value for the indicator.
14	Survival rate of technology start-ups which developed their activities	Result	monitoring	This IoA is redundant. It replicates IoA 11. We recommend it is replaced by the following IoA: “ <b>Number of new technology start-ups created as a result of COP support</b> ”.
15	Increase of income from sales	Result	monitoring	Same as IoA 13.
16	Number of consulted enterprises	Output	monitoring	The IoA is representative, measurable and verifiable. There is no base value, since it measures an outflow and not an inventory.
17	Number of developed business plans for start-ups	Output	monitoring	Same as 16.
18	Value of investments supported under the operation/ activity	Output	monitoring	Same as 16
19	Number of developed business plans, put into operation	Output	monitoring	Same as 16. The IoA is redundant since it essentially replicates IoA 14. We recommend it be <b>deleted</b> .
20	Number of enterprises participating in training	Output	monitoring	Same as 16.
21	Number of new/innovative products/services on the market	Result	monitoring	Same as IoA 12.
22	Value of sales of innovative products/services developed under the framework of operation	Result	monitoring	Impossible to obtain reliable data. The IoA depends on participating company claims. There is also the issue of how this value will be calculated (i.e. on what time horizon? At what level of product market penetration? Etc) We recommend the IoA be <b>deleted</b> .
23	Number of supported R&D projects for SMEs	Output	monitoring	The IoA is representative, measurable and verifiable. There is no base value, since it measures an outflow and not an inventory.
24	Number of marketing strategies	Output	monitoring	What intervention does the indicator refer to? It is unclear.
25	Number of new/innovative products that have been developed	Output	monitoring	The IoA replicates IoA 21. The only difference is that products under IoA 26 are not launched on the market. In other words, IoA 21 will be a subset of IoA 26. Still, the definition of the IoA needs to be further refined. What is the meaning of the word “developed”? How will it be verified? If a patent is required for an innovative product to be verifiably “developed”, then the IoA should be changed to: “ <b>Number of innovative product/ process/ service patents awarded to programme participating companies</b> ”

Index	Objectively verifiable Indicators	Type	Source of Information	Evaluator Comments
26	Value of supported R&D projects	Output	monitoring	The IoA apparently refers to the total value of the grants awarded plus the private co-financing. The interesting part is only the private co-financing (leverage), which is a results indicator and has already been covered by IoA 2 (in a % form). We recommend the IoA be <b>deleted</b> .
27	Number of new technologies and processes introduced	Output	monitoring	It is covered by IoA 25. We recommend it be <b>deleted</b> .
28	Value of investments related to innovation in supported enterprises	Output	monitoring	Same comments as with IoA 26. We recommend it be <b>deleted</b> .
29	Number of supported projects related to international cooperation of enterprises	Output	monitoring	Same as 23.
30	Number of supported projects related to national cooperation of enterprises	Output	monitoring	Same as 23.
31	Number of supported innovative enterprises by pro-innovative BSIs	Result	NSI, monitoring	The IoA will apparently need time to materialise (i.e. for the companies to locate at the supported BSIs). This timeframe needs to be defined (i.e. 3 years after the end of the intervention). A monitoring system needs to be installed that will collect the respective information. There is no base value since we do not know the participating BSIs.
32	Number of new services offered by pro-innovative BSIs	Result	NSI, monitoring	There is a difficulty in defining what a “new service” will be. We recommend the IoA be <b>deleted</b> .
33	Rate of satisfaction of enterprises using services of pro-innovative BSIs	Impact	monitoring, research	Difficult to measure objectively. We recommend it be <b>deleted</b> .
34	Number of supported innovative business incubators	Output	monitoring	The IoA is representative, measurable and verifiable. There is no base value, since it measures an outflow and not an inventory.
35	Number of supported knowledge transfer offices	Output	monitoring	Same as 34
36	Number of created national networks of pro-innovative business support institutions	Output	monitoring	Same as 34
37	Number of supported technology centres	Output	monitoring	Same as 34
38	Increase of production capacity in supported SMEs	Impact	NSI, monitoring	The indicator depends on data to be provided through the participating companies. An appropriate entry must be made in the application form providing the present production capacity and the production capacity after the completion of the investment. There is no base value since the participating companies are not known yet.
39	Decrease of energy intensity of the production in supported SMEs	Impact	NSI, monitoring	Same as 38.

Index	Objectively verifiable Indicators	Type	Source of Information	Evaluator Comments
40	Increase of labour productivity in supported SMEs	Impact	NSI, monitoring	Difficult to measure. Many companies may be tempted to cut-down on labour resources after the completion of the investments. If, however, the programme places a condition of no labour reduction, any labour productivity calculations will be flawed. We recommend the IoA be <b>deleted</b> .
41	Increase of export volume of supported SMEs	Impact	NSI, monitoring	Difficult to monitor and isolate the effect from the intervention. We recommend the IoA be <b>deleted</b> .
42	Increased productivity of supported SMEs	Result	monitoring	Same as 40.
43	Number of certificates obtained by the beneficiaries	Result	monitoring	Define “certificates”. IoA not clear. Also, what is the timeframe of the IoA?
44	Number of new technologies/products introduced by SMEs	Output	monitoring	The intervention deals with technologies. Therefore, the IoA should not refer to “products”. Even so, it is difficult to define what can be considered a “unit” of a new technology (how small a change constitutes a new process). The IoA is not reliable. We recommend it be <b>deleted</b> .
45	Number of supported SMEs introducing new technologies/products	Output	monitoring, research	We recommend the word “products” be <b>deleted</b> .
46	Number of supported SMEs introducing management systems and/or achieving conformity with ESM requirements	Output	monitoring	OK
47	Number of start-ups registered as result of the training	Result	NSI, monitoring	It is apparent that this intervention utilises many tools (investments, consultations, trainings) to raise entrepreneurship. Hence, the IoA is limited and not representative of the intervention. We recommend it be changed to “ <b>Number of new enterprises registered as a result of the intervention within 2 years from its completion</b> ”. In order to be able to collect the information, the participating entities must be required to report the registration of any new company within 2 years from receiving the assistance.
48	Number of potential entrepreneurs trained	Output	monitoring	The word “trained” must be replaced by “assisted from the programme”.
49	Kilowatts generated in renewable energy sources constructed under the operation	Result	NSI, monitoring	The information must be provided by the participating companies. A monitoring provision must be made. Base value: “total Kilowatts generated from renewable energy sources annually”.
50	Decrease in energy consumption in supported SMEs	Result	NSI, monitoring	It is not necessary that an energy decrease will be observed, since many participating companies may expand their production volume. We recommend the IoA be <b>deleted</b> .
	Scheme 1			
51	Number of SMEs receiving support on energy efficiency	Output	Monitoring	IoA objective, measurable, reliable.
52	Value of projects related to investments in energy saving	Output	NSI, monitoring	The IoA does not reveal much. Only the leverage effect is of some interest, but that is a results indicator. We recommend it be <b>deleted</b> .

Index	Objectively verifiable Indicators	Type	Source of Information	Evaluator Comments
	Scheme 2			
53	Number of SMEs receiving support on renewable energy technologies	Output	Monitoring	IoA objective, measurable, reliable.
54	Value of projects related to investments on renewable energy technologies	Output	NSI, monitoring	Same as 52.
55	Increase of investments in supported enterprises	Result	monitoring, research	The IoA should be rephrased as follows: "Private investments leveraged as a result of the intervention". The values will be derived from the participating companies. The indirect effects are very hard to measure. We do not recommend pursuing that part.
56	Increase of labour productivity in supported enterprises	Result	monitoring, research	Same comments with similar IoAs in other interventions.
57	Increase of long-term assets in supported enterprises	Result	monitoring, research	Participating companies must provide the information. An appropriate information collection procedure must be installed.
58	Volume of sales	Output	monitoring	IoA not directly linked to the intervention. We recommend it be <b>deleted</b> .
59	Products/technologies introduced as a result of the cluster initiatives	Result	monitoring	Hard to ensure that the products/technologies counted are directly linked to the intervention. We recommend it be <b>deleted</b> .
60	Number of clusters created/supported	Output	monitoring	OK
61	Number of cluster utilities created	Output	monitoring	IoA is vague. What s a "cluster utility"?
62	Number of enterprises receiving external financing from institutions supported under the priority compared to all financial institutions	Impact	NSI, monitoring, research	Very hard to monitor. Will the financial facilities assisted be required to report on an annual basis? For how long after the completion of the assistance? Is perhaps "volume of financing provided annually to SMEs" a better measurement?
63	Number of guarantees and loans granted	Result	NSI, monitoring	Same comments as above
64	Value of guaranteed credits granted to enterprises	Result	monitoring, research	Same comments as above
65	Value of loans granted to SMEs by supported funds	Result	monitoring, research	Same comments as above
66	Number of guarantee funds created	Output	monitoring	OK
67	Capitalisation of guarantee fund	Output	monitoring	OK

Index	Objectively verifiable Indicators	Type	Source of Information	Evaluator Comments
68	Number of micro-loan funds created	Output	monitoring	OK
69	Capitalisation of micro-loan funds	Output	monitoring	OK
70	Number of investment projects supported by supported risk capital funds	Result	monitoring	Same comments as in 62
71	Value of capital investments in SMEs	Result	monitoring, research	Same comments as in 62
72	Number of risk capital funds created	Output	monitoring	OK
73	Number of existing risk capital funds supported	Output	monitoring	OK
74	Capitalisation of risk capital funds	Output	monitoring	OK
75	Increase quality and quantity of services in supported organizations	Impact	monitoring, research	IoA is very vague and not measurable.
76	Increase in sales in SMEs using services of the supported consultancy organizations in BGN	Impact	monitoring, research	An information collection mechanism must be set up. A timeframe must be defined for the IoA (e.g. 2 years after completion of project)
77	Number of MSMEs using services from the supported organizations (divided into information services and advisory services)	Result	monitoring, research	OK
78	Number of visits in the data base/on web pages	Result	monitoring	IoA not important. Also, the system must distinguish repeated hits from same origin and not count them.
79	Satisfaction rate of enterprises provided with consultancy organizations services	Result	Research	Hard to measure. Very subjective.
80	Number of consultancy organizations (focused on better quality of services) supported	Output	monitoring	OK
81	Accessibility of consultancy and information services	Output	monitoring, research	How will it be measured? "Accessibility" is a very vague notion. We recommend it be <b>deleted</b> .

Index	Objectively verifiable Indicators	Type	Source of Information	Evaluator Comments
82	Number of new consultancy products available for SMEs	Output	monitoring	How will it be measured? Will participating consultancy companies be required to report the services they offer to SMEs? We recommend it be <b>deleted</b> .
83	Number of laboratories participating in inter-laboratory comparisons	Result	monitoring	OK
84	Number of testing for quality	Result	monitoring	A timeframe must be defined (i.e. no. of testings annually 2 years after completion of programme)
85	Number of standards and standardizing products sold via Internet	Output	monitoring	Hard to measure. We recommend it be <b>deleted</b> .
86	Number of benchmarking laboratories	Output	monitoring	OK
87	Number of accredited laboratories and number of bodies with increased range of accreditation	Output	monitoring	OK
88	Number of standards introduced and translated into Bulgarian	Output	monitoring	OK
89	Number of ratified national etalons	Output	monitoring	OK
90	% of bodies for assessment of conformity	Output	monitoring	IoA not well defined. Clarify.
91	Value of foreign investments in Bulgaria	Impact	NSI	Hard to isolate the impact of the programme from the external factors bringing FDI. It is only valid as a context indicator. We recommend it be <b>deleted</b> from here.
92	Volume of sales of investors supported under the priority	Impact	NSI, monitoring, research	A timeframe must be defined (i.e. 2 years after completion of programme). The increase in sales must be expressed in terms relative to the starting point (i.e. before participation).
93	Increase in income from tourists visiting Bulgaria	Impact	NSI	Hard to link to the intervention. Only valid as a context indicator. We recommend it be removed from here.
94	Number of investors attracted under the operation	Result	NSI, monitoring	OK
95	Increase in volume of export in supported enterprises	Result	NSI, monitoring	OK
96	Value of investments made by supported enterprises	Result	monitoring	OK
97	Number of potential investors, received information	Result	monitoring	OK IoA not very important

Index	Objectively verifiable Indicators	Type	Source of Information	Evaluator Comments
98	Number of services offered by the Investment Agency	Result	monitoring	OK IoA not very important
99	Number of info campaigns held/organized	Output	monitoring	OK
100	Number of visits on foreign investor internet portal	Result	monitoring	Same comments as with 78.
101	Number of enquiries from potential investors received by the Bulgarian Investment Agency	Result	monitoring	IoA not important.
102	Number of management bodies of industrial zones supported	Output	monitoring	OK
103	Number of enterprises registered in the export data-base	Result	NSI, monitoring	OK
104	Number of matches made between Bulgarian and foreign companies	Result	monitoring, statistics of BSMEPA	OK
105	Number of visits on export promotion internet portal	Result	monitoring	Same comments as with 78
106	Number of enterprises participating in promotion projects	Result	monitoring, statistics of BSMEPA	OK
107	Number of registered trade marks, patents, etc. by supported enterprises	Result	monitoring	OK Not very important
108	Number of info campaigns held/organized	Output	monitoring	OK
109	Internet accessible database created for foreign markets	Output	monitoring	Not an important IoA
110	Number of enterprises receiving support for participation in exhibitions	Output	monitoring, statistics of BSMEPA	OK
111	Number of Bulgarian brands protected on the international market	Output	NSI, monitoring	OK

Index	Objectively verifiable Indicators	Type	Source of Information	Evaluator Comments
112	Number of entrepreneurs, received information	Result	monitoring, statistics of BSMEPA	OK
113	Number of applications for protection of the intellectual property developed under the operation	Output	monitoring	OK
114	Number of events annually	Output	monitoring, statistics of BSMEPA	OK
115	Number of visits on tourist IT portal	Result	monitoring	Same as with 78
116	Number of tourist companies receiving quality certificates for the tourist services	Result	monitoring, statistics of Tourism Agency	OK Will it be measured as an annual flow? As a cumulative total?
117	Number of quality certifications for the tourist services	Result	Tourism Agency statistics	Same as above
118	Number of companies visiting organized tourist events	Result	monitoring, statistics of Tourism Agency	Cumulative total for all events organised under the supported programme?
119	Number of info campaigns held/organized	Output	monitoring	OK
120	Tourist IT system created	Output	monitoring	Not important
121	Number of organized tourist events annually	Output	monitoring, statistics of Tourism Agency	OK
122	% of absorbed funds from OP	Impact	NSI, monitoring	
123	number of successfully finished projects under OP	Result	monitoring	
124	Evaluations of the OP performed		monitoring	

<b>Index</b>	<b>Objectively verifiable Indicators</b>	<b>Type</b>	<b>Source of Information</b>	<b>Evaluator Comments</b>
125	Number of supported projects	Result	monitoring	
126	Number of internal procedures elaborated	Output	monitoring	
127	Number of trainings carried out (for MA, IB and partners)		monitoring	
128	Number of tenders announced	Output	monitoring	
129	Number of researches carried out	Output	monitoring	
130	Number of information activities carried out	Output	monitoring	
131	Number of contracts signed	Output	monitoring	
132	monitoring reports submitted to MA and approved	Result	monitoring	
133	number of monitoring visits	Output	monitoring	
134	expenditures of short-term experts for the Monitoring Committee	Output	monitoring	
135	Number of contracts for different operations signed	Result	monitoring	
136	Number of TA contracts signed	Output	monitoring	
137	Number of researches carried out	Output	monitoring	

### 9.3 Conclusions & Recommendations

General conclusions and recommendations that can be made at this point in time regarding the list of monitoring indicators include:

- The initial list of indicators contained in the March 2006 version of the COP is too exhaustive to be effective at monitoring the Competitiveness OP interventions.
- A number of IoAs in their present form may still present challenges in that they need to be more precise or pose challenges in terms of reliability/verification problems. Wherever improvements could be made, the evaluator has made appropriate suggestions. .
- Problems regarding the quantification of target values stem from the lack of past comparative data (mainly unit cost and effectiveness rate data), the split of available funds between 1<sup>st</sup> and 2<sup>nd</sup> operation in measures with more than one operations and the lack of definite information regarding the co-financing rates (especially the regional aid map for Bulgaria). The evaluator can come back with estimates if all the above necessary information is provided.
- Most base values that exist depend on NSI to provide data for the base value year, i.e. 2007. These values need to be completed. It is understood that the Ministry of Economy & Energy plans that the prognosis values will be provided at the moment the financial distribution of the OP is finalized. The baseline values will be completed by NSI sources and provide the latest possible data available.
- It would appear difficult at this state to finalise the list of indicators, until:
  - The detailed component operations for each Priority Axe are finalised. This will allow the programme management to know exactly which type of business support initiatives etc. will be put in place.
  - The lack of sufficient data from previous project experience and evaluations is addressed. There are likely numerous relevant indicators where data is gathered by other organisations, which could be thus added to the Competitiveness OP List without significantly increasing the monitoring workload for the Competitiveness OP managing authority
- Following on from this, it is not possible to review the quantification of objectives in the Competitiveness OP, as the lack of robust assumptions and data from past experience, as well as market demand and absorption data, is not sufficiently available.

## **10. MANAGEMENT AND IMPLEMENTATION**

### ***10.1 Introduction***

Implementation mechanisms, as described in the respective chapter of Competitiveness OP are clear and in line with EU regulations and common practice that has been developed in MS during the 3rd programming period. However, while the text provided in the Competitiveness OP is comprehensive it does stay at a very general level of description, leaving most interesting details regarding the organisation of involved bodies, the systems to be implemented and the procedures to be followed, to be defined at a later stage.

In an effort to shed more light to the stage of preparation at which implementing mechanisms are today, the evaluator has conducted a series of interviews with involved stakeholders, in particular relevant stakeholders at the Ministry of Economy & Energy and BSMEPA, as these are the two “central” bodies in the implementation of the Competitiveness OP.

### ***10.2 Review of Competitiveness OP Managing Authority Arrangements***

The Pre-accession Programs and Projects Directorate (PPPD) within the Ministry of Economy and Energy (MEE) has been appointed as the Managing Authority (MA) for the Competitiveness OP, while most of the implementation responsibilities are delegated to the Bulgarian Small and Medium-sized Enterprises Promotion Agency (BSMEPA), which is the appointed intermediary agency for the entire Competitiveness OP.

This means that a small number of core responsibilities remain within the scope of Pre-accession Programs and Projects Directorate, mainly the responsibility for:

- supporting the operation of the Monitoring Committee,
- annual and final reporting,
- programme monitoring and evaluation (either at set intervals or on-going), and most importantly
- putting forward recommendations for programme revisions (i.e. programming).

It is understood from the Ministry of Economy & Energy that the present structure of the PPP Directorate is built in order to facilitate the smooth transition to MA. For the future, the Ministry plans that the future frame of the MA will consist of four departments:

1. “Programming, Monitoring and Evaluation” Department:
  - a. OP Programming and Evaluation Unit;
  - b. OP Monitoring and reporting Unit;
2. “Implementation Support and Coordination” Department;
3. “Project Development “ Department;
4. “Financial” Department.

The responsibilities of the above-mentioned departments, as communicated by the Ministry, are set out in the table below:

*Table 20: Responsibilities of the 4 MA Departments*

<b>Responsibilities of the 4 MA Departments in the PPD Directorate of the Ministry of Economy &amp; Energy</b>	
1.	<p><b>“Programming, Monitoring and Evaluation” Department:</b></p> <p>Implement all activities related to programming and evaluation of the OP (drafting the OP, negotiating with the European Commission, identification and definition of target groups; definition of instruments, measures etc; steering of programmes/ modification of programmes etc.), sub-programming (drafting detailed description of OP priorities and operations – elaboration of general selection criteria, compliance issues, identification of main target groups; definition of eligibility rules; time and financial frames of priorities/ operations/ activities); compilation of ex-ante evaluation; organising and coordinating OP evaluations; OP monitoring and reporting of the Programme implementation (build up a database for monitoring/controlling of ERDF-type Programmes – registration/ collection and evaluation of programme and project data etc; elaboration of Annual Implementation; secretariat of the Monitoring Committee).</p>
2.	<p><b>“Implementation Support and Coordination” Department:</b></p> <p>Management and control of operational agreements with Intermediate Bodies, management and coordination of capacity building projects (under priority TA of the OP), organizing and coordinating the specialist training for OP MA’s and IBs’ staff, MIS development and maintenance in MA and IBs (IT and electronic network communications system), providing IT support – electronic networking (partial – in close collaboration under support of the MEE - IT Unit), database and software support – day by day, and publicity activities on national level of the national programming documents.</p>
3.	<p><b>“Project Development” Department:</b></p> <p>Ensuring compliance of EU policies, principal and obligation in the areas of competition, public procurement, environmental protection and improvement and gender equality, control of the IB in sound of procurement procedure, developing core project selection criteria and specific criteria for approval by the Monitoring Committee, coordination OP Project pipe line development, coordination the regular calls for proposals, coordinating the project appraisal and selection – issuing of guidance and participation in project selection committees, where appropriate; ensuring that adequate spot checks systems are carried out within the IB, coordination of beneficiaries’ awareness campaigns; issuing contracting guidelines.</p>
4.	<p><b>“Financial” Department:</b></p> <p>Ensuring compliance with the principles of the sound and transparent financial management, administration of means (budget management), preparation of requests of payments and declaration and statement of expenditures to the Paying authority (periodically and finally), elaboration of financial reports (annual/final), elaboration of budgetary forecasting/prognoses, documentation of outlays (expenditures) and incomings (payments/settlements), registration and control of payments, receiving the payment claims from the final beneficiaries; performing validation and authorization of the expenditures; paying to the final beneficiaries; maintaining of a separate accounting system and of adequate accounting records of all the transactions related to the financial support, collecting sums wrongly paid (bad debt collecting unit).</p>

Overall the structure proposed above would appear well thought-out and comprehensive, covering the key functions required under the MA role. Minor recommendations could possibly include:

- Specifying that the core programme reporting function will be included among the tasks of the programming unit (this seems to be implied but not directly stated);
- Including specifically a role of identifying and reviewing good practice from other countries. This role is likely best housed within the programming unit.

Most likely, the staff in the MA units would need to include individuals already involved in the drafting of the current Competitiveness OP, and therefore the experience so far becomes of extreme importance in evaluating the Ministry's preparedness for fulfilling this role.

## **10.2 Review of Competitiveness OP IB Arrangements**

A review of the IB plans for the Competitiveness OP shows that BSMEPA will have to bear the entire load of operational implementation of the programme, which will include:

- disseminating publicity information on the various programme operations,
- announcing Calls for Proposals,
- receiving and ensuring eligibility of proposals,
- assigning assessors to review and score the proposals,
- establishing proposal evaluation lists and reports for the Selection Committees to decide on,
- compiling and signing contracts with the selected beneficiaries (final recipients),
- processing all necessary paperwork related to financial flows (invoices, payments, etc)
- performing first level audits and on-the-spot monitoring,
- collecting and inputting all required information in the Computerised Information Management System,
- providing to final recipients, assessors, etc wherever necessary, and
- generally being the link between final recipients and the Managing Authority.

All this implies a huge workload and **requires both a large and well-trained staff and excellent systems to be in place** by the start of the programme (both in terms of detailed procedures and in terms of available infrastructure, such as IT). Past experience (from Phare projects) indicates that Bulgarian IAs have not been well prepared (especially as project cycle management and time management are concerned) in the past to deal with the rigors of an EU-funded programme, therefore resulting in reduced programme efficiency. High turnover has also been pointed to as a source of problems.

### *Recommendations*

The following recommendations are put forward by the evaluation team:

- Even though BSMEPA has received IB support from past Phare projects, there still remains the question of how well prepared for COP implementation it is today, and it is recommended that **BSMEPA should become the focus** of any organisational efforts to be undertaken by the Bulgarian Government in preparation for the Structural Funds between now and the beginning of 2007. These efforts should particularly concern the production of complete programme documentation. This should include implementation guides, standard application, reporting and payment forms (consistent with a central MIS to be used for the monitoring of all structural fund programmes), complete procedure manuals in conformity with the central procedures set for all structural fund programmes but more detailed and specialised for COP, etc.
- It is important that a comprehensive external review of BSMEPA's state of preparation for implementing the Competitiveness OP be undertaken during Q4 of 2006, if this is not already foreseen.
- Especially crucial in the administration of the Competitiveness OP measures is the development of the application evaluation system, which would normally require a significant number of independent application assessors experienced in evaluating applications in the various grant schemes of the

Competitiveness OP, since this function cannot be performed internally due to the large expected numbers of applications and the tight timeframes for approval. Undoubtedly, a certain number of such individuals already exists in the country and has probably been used in the past (e.g. for Phare projects) but implementation of the Competitiveness OP would most likely require a significantly larger and more experienced crowd. The evaluator recommends that a series of publicity and training activities be conducted in order to raise the available pool of such professionals. Also, consideration should be given to holding a call(s) for compiling a registry of such professionals as official application assessors for Competitiveness OP measures.

### **10.3 Competitiveness OP Monitoring Committee Arrangements**

Regarding the Competitiveness OP Monitoring Committee, the representation list is quite exhaustive and covers all necessary stakeholders. It is common in such committees to have a rather large representation of central government institutions and a rather limited representation of regional and local government, and even worse representation of the social partners. However, since the role of the Monitoring Committee is a rather strategic one and is not concerned with every-day implementation issues, we recommend that extra care is taken, when defining the precise member list, to ensure a large and wide representation both from local government and social partners. At the same time, however, MC should maintain a manageable size (should not exceed 40-50 members) in order to make MC meetings effective. The size of the MC becomes even more important if its charter foresees the use of a “written-procedure” for making decisions on urgent matters and/or secondary matters. Large committees usually make written procedures more time consuming and difficult to administer. Last but not least, it is not recommended that the MC convenes more than once a year.

### **10.4 Competitiveness OP Arrangements – State Aids, Publicity & Beneficiaries**

Regarding the definition of final recipients, the list will probably have to be further defined and refined at later stages of COP development. For the moment, the information contained in the Competitiveness OP is adequate<sup>25</sup>. We **caution** regarding the issue of BSMEPA being a **final beneficiary (FB) and an intermediary body (IB) at the same time**: these two roles **must be clearly separated** within the administrative structure of BEMEPA, i.e. entirely different sections should be defined to act as IB and as FB.

The section on State Aids is very extensive and exhaustive and generally in compliance with EU regulations on competition – all state aids defined for the Competitiveness OP thus far are either de minimis aid or under a block exemption. Also, a specific body responsible for notification procedures is foreseen in case other state aids will be necessary.

The section on publicity is extensive and defines in great detail the objectives of publicity, the target groups, the messages to be conveyed and the tools to be used. However, the timeframes defined do not seem to be very realistic taking into consideration the current stage of COP development and the evaluation team considers that they may well have to be slightly postponed in reality. Still, the timing of the publicity campaign is not as important as the proper organisation of the campaign, and therefore we underline **the importance of a detailed and well-structured overall publicity plan and of specialised annual publicity plans**. The Competitiveness OP rightly envisages these plans to be the responsibility of the MA but be developed in cooperation with the IB, since the most part of the implementation of these plans falls on the shoulders of BSMEPA.

#### *Recommendations*

Recommendations with regard to state aids, publicity and final beneficiaries include:

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<sup>25</sup> It should be noted that information on State Aid and the Publicity Plan are separated in the official annexes of the OP, and are part of the main body of the programme.

- Reviewing the timeframes defined in the current Competitiveness OP version, with a view to assessing whether they may need to be postponed somewhat
- Regarding the joint development of publicity plans by the MA and BI, this is an area where extra care should be taken since Phare experience – for example - indicates that publicity has not been sufficient in the past, possibly lowering the level of demand, not directing/preparing adequately the applicants for the programmes, and not raising awareness among SMEs and banks alike of the possibilities that are being opened through EU-funded programmes.

## ***10.5 Competitiveness OP Arrangements for Evaluation***

The section on evaluation is a rather formal one and does not provide enough information on the Competitiveness OP “vision” of how such evaluation will be structured and used. The part of this section which refers to various types of indicators for information and publicity is rather extensive but dissociated from the rest of the provisions.

This is not unlike the experience from Phare projects, where the IoA sections have been rather weak and undocumented and no follow-up evaluations have been conducted to either confirm the assumptions (i.e. unit costs, effectiveness ratios, etc) used during the planning stage or revise/update them.

### *Recommendations*

We caution against the usual phenomenon of considering evaluation a formality and we urge **the MA to develop both a strong evaluation unit (with high-level specialised staff) and regular use of evaluative techniques** for monitoring the implementation and especially the effectiveness of the programme. Only well-documented evaluation can provide a substantiated basis for any programme revisions put forward to MC and/or to European Commission. Apart from the evaluations required by the EU regulations, we believe that the MA evaluation unit should conduct:

- an implementation timeliness assessment on an annual basis
- a review of institutional/procedural obstacles to implementation on a 6-month basis
- a contracting/expenditure forecast on a 6-month basis
- an IoA assessment on an annual basis
- an audit/monitoring results assessment on an annual basis.

## ***10.6 Competitiveness OP Development Process - General Comments***

As already mentioned in section 3.3.3 of this report, a review of the Competitiveness OP development process and interviews with stakeholders suggests there is a need to increase the level of stakeholder participation in the development process. Part of the reason for this is the time required for such consultation and the pressure on staff resources.

To-date, the evaluation team have observed that reviewing the Competitiveness OP has been rendered more difficult by a lack of clearly documented assumptions, variable factors, boundary conditions etc., in particular in relation to the thinking behind the various Competitiveness OP Priorities and measures. Often, this information exists in separate disparate files or in the memory of one of the Ministry’s staff, thus making the task of understanding and reviewing Competitiveness OP measure more complicated and time consuming.

### *Recommendations*

Another key area where the Competitiveness OP document can be strengthened is in acquiring and incorporating learning and evaluation results from previous and current projects in the field of economic development undertaken in Bulgarian, in particular Phare projects. This will help in the effort to develop

quantified targets that are grounded on rigorous analysis and realistic projections, one of the areas where the Competitiveness OP planning needs to be significantly strengthened.

Support for this effort can be procured (through outsourcing) at any stage of the implementation process through technical assistance, as is ongoing through the work of the TA project team supporting the Ministry across a wide range of issues.

It is vital for MEE staff to be able to oversee and judge the quality of any such services provided by independent consultants, and b) MEE staff should be able to perform these tasks at any time in-house, since outsourcing procedures can be time-consuming and it is not always practically feasible to have a consultant stand-by.

The evaluator therefore recommends that MEE further builds its programming-planning capability, especially by ensuring that all necessary monitoring/evaluation skills are fully developed among PPPD staff. We further recommend that there is a separate unit (e.g. staff member) within PPPD with the overall publicity and stakeholder participation responsibility.

Finally, it is recommended that a number of separate planning tools be developed (preferably in English) in parallel to the Competitiveness OP document.

- A general planning tool, setting out forward planning across all aspects of the Competitiveness OP development and implementation preparation
- A second management tool that:
  - Clearly documents assumptions, variable factors, boundary conditions etc., underline
  - Provides a record of various discussions held on Competitiveness OP policy and strategy choices, pros and cons of same, decisions taken
  - Records strategic and operation issues kept open, pending further information or analysis

## 11. GENERAL CONCLUSIONS AND RECOMMENDATIONS

This section provides a summary of key conclusions and recommendations from the ex-ante evaluation. It should be emphasised that for reasons of brevity this list is not exhaustive, and should not be seen as replacing the more detailed conclusions and recommendations set out in the earlier sections of this report.

In order to facilitate reading the conclusions and recommendations, each section has been broken down into sub-sections that reflect either specific focus areas of the ex-ante evaluation and/or specific Sections of this report (e.g. SWOT Analysis, Monitoring Indicators and Quantification of Objectives etc).

### 11.1 Conclusions

#### *Socio Economic Analysis*

- Regarding the *Socio-Economic Analysis*, the structure and presentation of the Socio-Economic Analysis has been significantly improved in the last revision of the Competitiveness OP, and core sections on the SME Sector and the Research and Innovation sector have been improved
- Notwithstanding this improvement, the Socio-Economic Analysis remains significantly incomplete, for example in respect of a sectoral breakdown of the SME sector and sub-sector profiles, as well as the innovation governance section, as well as analysis of previous evaluation experience and lessons from Phare and other programmes.

#### *SWOT Analysis*

- Regarding the *SWOT Analysis*, this is not completely consistent with the SWOT Analysis, and there are numerous elements missing.
- The structure of the SWOT Analysis's also does not probably provide the optimal means of identifying and tracking the key areas where the Competitiveness OP can make a difference.
- The SWOT analysis will need to be further changed, once the Socio Analysis has been redone

#### *List of Disparities*

- It would be helpful if linkages and inter-relationships were identified between the disparities, and if they could be categorised in terms of the relative importance for the Competitiveness OP.

#### *Coherence with EU Structural Fund Rules on Economic and Social Cohesion*

- The Competitiveness OP is coherent with EU Structural Fund rules on Economic and Social Cohesion, mainly through its relevance to the second EU Guideline (Improving Knowledge and Innovation).

#### *Coherence with Key National Policy Documents*

- Regarding coherence with the NSRF, the Competitiveness OP is generally highly relevant to the NSRF, in particular to the NSRF's first strategic objective of fostering rapid and high growth, and secondarily at developing a knowledge-based economy. While the revised version incorporates some changes and the

transferring of actions between priorities, this does not affect significantly the coherence with the NSRF as the core focus and composition of the Competitiveness OP remains largely the same.

- Similarly, the Competitiveness OP's coherence with the National Development Plan is also high, with the findings of the NDP Socio-Economic Analysis being broadly consistent with that of the Competitiveness OP, and similar challenges are highlighted regarding the SME sector. Given that the coverage of the NDP is much wider than the Competitiveness OP, it is to be expected that parts of the NDP List of disparities do not "map" neatly onto those in the Competitiveness OP. The majority of disparities listed in the relevant sections of the NDP Disparities List (Economy, and to a lesser extent Regional Development and Human Resources sections) are included in one form or another in the Competitiveness OP disparities, although sometimes in a somewhat different wording.
- The Competitiveness OP Priorities and Priority Axe Objectives are highly consistent with the objectives of the *National SME Strategy 2000-2006*. While this is true across all of the objectives of the National SME Strategy, consistency is probably highest with the first objective of the National SME Strategy, that of '*stimulating R&D for the industry and the cooperation between the R&D departments, universities and companies*'.

#### *General Environmental Assessment of the Competitiveness OP*

- The Competitiveness OP global objective and priorities demonstrate a satisfying level of environmental coherence with the NSRF, NDP and its "Environment" Sector Programme and the Environmental OP objectives and priorities.
- The Competitiveness OP strategic goal doesn't state sufficiently clearly that the "Development of a dynamic economy, competitive at the European and world market" is in accordance with the sustainable development principles.
- Most of the Competitiveness OP priorities environmental impact is of an indirect positive nature. Positive effects include for example COP-financed activities contributing to environmental protection by supporting investments in new and modern environmentally friendly or clean technologies, energy saving technologies, and promoting compliance with international market standards such as the Eco-management and audit scheme (EMAS) and environment management systems (ISO).

#### *Energy Efficiency & the Competitiveness OP*

- Interview fieldwork undertaken by the energy expert has established that there will be parallel projects running on energy efficiency and renewable energy in the country that will complement what can be achieved under the Competitiveness OP's budget. However, the current version of the Competitiveness OP does not provide a clear picture of what gap in the knowledge and application of EERE measures that future projects will fill, and this is key is to achieve complementarity of all actions in EE in the country.
- Stakeholder interviews have revealed that there is a lack of local knowledge regarding international experience in the application of support for EERE projects in the SME sector, including assessments of the available instruments and policy mechanisms appropriate to the Bulgarian SME profile.
- Despite energy being recognised a significant element in the competitiveness of the economy, the scope of the Competitiveness OP does not allow it to address on its own the issue in a coherent and holistic way. For example, both the Competitiveness OP and the Agricultural OP are looking into RES utilisation, however members of both Managing Authorities have more than a couple of joint pressing issues to deal with: connection to the grid, pricing, licensing are some of those which by no means can be dealt with not having insured a common strategy.

### *Competitiveness OP Objectives and Priorities*

- The balance and respective weight of the Competitiveness OP Priority Axe Objectives may however need to be reviewed. For example, Priority Axe Objective 12 – *‘Providing topical and quality information about the foreign markets’* – is hardly a worthwhile objective in its own right, rather one would think that it is more a key sub-objective of (a possibly adapted) Priority Axe Objective 12 – *‘Strengthening of manufacturing capacities in enterprises and improving their access to markets through the advantages of business cooperation and clustering.*
- Stakeholder feedback suggests that further work needs to be undertaken as a matter of priority in validating the current proposals for Competitiveness OP financial support measures, including determining the exact financial situation and needs of SMEs in Bulgaria and the absorption capacity among SMEs for Competitiveness OP. No doubt, previous project experience and the ongoing SME survey may shed further light on this but it is unlikely to provide a comprehensive picture and guidance.

### *Competitiveness OP Development Process*

- While the last year has witnessed progress in the development of the Competitiveness OP document, there is an urgent need to increase the rate of progress. Staff in the Ministry’s PPPD Directorate has worked hard to develop the document on top of ongoing work, however we believe there is now a need to increase the rate of progress and involve more stakeholders.
- The lack of general consensus on the appropriateness of current assumptions regarding the financial assistance measure in the Competitiveness OP also suggests that this process has not sufficiently involved key stakeholders in a structured discussion. Stakeholder estimates as to the investment capital available at SMEs vary significantly. While some
- Ministry staff acknowledges that the process is a learning one for all involved, something which will continue for all stakeholders through the rest of the development process and during the implementation of the Competitiveness OP. A large Working Group has been created and maintained during the development process, requiring time from the Ministry to co-ordinate this.

### *Monitoring Indicators and Quantification of Objectives*

- A number of IoAs in their present form may still present challenges in that they need to be more precise or pose challenges in terms of reliability/verification problems.
- Problems regarding the quantification of target values stem from the lack of past comparative data (mainly unit cost and effectiveness rate data), the split of available funds between 1<sup>st</sup> and 2<sup>nd</sup> operation in measures with more than one operations and the lack of definite information regarding the co-financing rates (especially the regional aid map for Bulgaria). The evaluator can come back with estimates if all the above necessary information is provided.
- Most base values that exist depend on NSI to provide data for the base value year, i.e. 2007. These values need to be completed, and this is foreseen by the Ministry staff when the financial distribution of the OP is finalised.
- Following on from this, it is not possible to review the quantification of objectives in the Competitiveness OP, as the lack of robust assumptions and data from past experience, as well as market demand and absorption data, is not sufficiently available.

### *Management and Implementation Arrangements*

- A review of the IB plans for the Competitiveness OP shows that BSMEPA will have to bear the entire load of operational implementation of the programme, ranging from announcing Calls of Proposals to selection and contracting, administration and reporting and auditing. This makes it imperative that adequately trained staff and systems are in place. Both the Ministry and BSMEPA should be cognisant of the mixed experience from past Phare projects regarding Bulgarian IAs not having been sufficiently well prepared to deal with the rigors of an EU-funded programme.

## 11.2 Recommendations

### *Socio-Economic Analysis*

- Significant additional research and work is needed in order to ensure that this Analysis provides a robust and rigorous foundation for a successful OP implementation. The work here needs to focus in particular on:
  - Addressing the specific omissions identified in the enclosed review of the Socio-Economic Analysis, for example the missing gaps in the analysis of the services sector, foreign direct investment etc.
  - Including more analytical data on the research and innovation sector
  - Including more analytical data on the high-tech and knowledge-intensive sectors
  - Ensuring that previous project and evaluation experience is acquired and incorporated in this section

It is of course impossible to include all of this data in the Competitiveness OP itself, and the approach adopted by the Ministry of including a summary of the Socio-Economic Analysis the version included in the Competitiveness OP document should be Significant additional research and work is needed in order to ensure that this Analysis provides a robust and rigorous foundation for a successful OP implementation. The work here needs to focus in particular on:

- Overall, the summary of the macro-economic framework in the NDP ex-ante evaluation report reads well and this could be used in part for the text for the corresponding section of the Competitiveness OP. Table 1 (page 11) of the ex-ante report provides a useful tabular comparison of Bulgaria's macro-economic performance compared to the EU-25, although the comparison is made on 2003 figures.

### *SWOT Analysis*

- It is recommended that the points raised in the review of the SWOT Analysis are reviewed by the Ministry, with a view to deciding whether they should be considered for inclusion in the SWOT.
- The following changes are thus recommended to increase the relevance and coherence of the SWOT:
  - a. Including a Summary Findings section that links the findings of the Socio-Economic Analysis to the SWOT
  - b. Providing an Introductory section explaining the purpose, content, and structure of the SWOT
  - c. Considering *dividing the SWOT Analysis into at least 2 sections*:
    - *A General Section*, focussing on factors that are considered 'external' to the focus of the Competitiveness OP
    - *A Section on Competitiveness, SMEs and Innovation*, focussing on the factors considered most relevant to the focus of the Competitiveness OP and which will be addressed in the Competitiveness OP Strategy, Priorities and Operational Measures

### *List of Disparities*

- The only NDP disparities identified that were not in the Competitiveness OP are the level of restrictions on SMEs for starting a business and the lack of entrepreneurial skills. It is recommended that these factors be included in the Competitiveness OP List, but in such a way that reflect more a disparity (e.g. Restrictions on SMEs for starting a business – level of restriction on business start-ups).

- Regarding improving the presentation of the Disparities and their utility in designing the Competitiveness OP Programme of measures, the Ministry should consider one possible way of starting this may be to *classify disparities in terms of their anticipated duration* (short-term disparity, medium-term disparity, long-term disparity).

#### *General Environmental Assessment of Competitiveness OP*

- Based on the general environmental analysis, the following recommendations are suggested:
  - The Competitiveness OP general objective should stress on the condition that the dynamic economy will be developed based on the sustainable development principles.
  - Competitiveness OP should support actions that avoid and/or minimize the negative environmental impact and the supported projects should meet the environmental standards and/or to have a positive environmental statement (for projects, programmes and plans for which the legislation requires an environmental assessment).
- A number of specific recommendations regarding Competitiveness OP priorities in the area of environmental impact are provided in the Chapter on the general environmental assessment of the Competitiveness OP, and consideration should be given to incorporating these suggestions. Some of these recommendations are outside the scope of the Competitiveness OP and therefore need to be incorporated in other relevant Ops, in particular the Environment and Human Resources OPs

#### *Energy Efficiency and the Competitiveness OP*

- It is important that the next version of the Competitiveness OP provides a clear picture of what gap in the knowledge and application of EERE measures that future projects will fill, in order to ensure that Competitiveness OP energy efficiency issues achieve complementarity with all other actions in EE in the country.
- It is highly recommended that the Ministry acquires a review of international experience in the application of support for EERE projects in the SME sector, including an appraisal of the available instruments and policy mechanisms appropriate to the Bulgarian SME profile. This will ensure successful programme implementation and high absorption and success rates.
- A review of energy and environment related directives and regulations should be undertaken with a view to identifying those with relevance to SMEs and subsequently designing future Competitiveness OP measures along those requirements.
- The Competitiveness OP needs to work in synergy with other OPs for the matters relating to energy and there should be a body or authority ensuring complementary Measures under the OPs and avoiding duplication of work.

#### *Competitiveness OP Objectives and Priorities*

- It is possible that further improvements can be made in adapting somewhat presentation and structure of the Section on the *Competitiveness OP Objectives and Priorities*.
  - Consideration should be given to organising the four sections be re-organised as recommended in the body of this report.

- Regarding the Priority Axes, a diagrammatic overview of the Priority Axes, the relevant Priority Axe objectives, the target groups and component measures would also help the readability of this section of the Competitiveness OP document.
- The Priority Axe Objective ‘Relieving the access to the European and other international markets’ listed under Priority Axe 4 needs to be checked against the list on page 38, and included in this list if necessary.
- Overall, the balance and respective weight of the Competitiveness OP Priority Axe Objectives may need to be reviewed, as mentioned in the conclusions above. A clearer presentation of the key need and disparities, however need to be reviewed. For example, Priority Axe Objective 12 – ‘*Providing topical and quality information about the foreign markets*’ – is hardly a worthwhile objective in its own right, rather one would think that it is more a key sub-objective of (a possibly adapted) Priority Axe Objective 12 – ‘*Strengthening of manufacturing capacities in enterprises and improving their access to markets through the advantages of business cooperation and clustering.*’
- It is recommended that an external study is undertaken as a matter of priority to validating the current proposals for Competitiveness OP financial support measures. Such a study could include the following work axes:
  - Reviewing the exact financial situation and needs of micro-enterprises and SMEs in the high-tech sector and other sectors
  - Provide a clear overview of the current financial assistance instruments in the Bulgarian market for SMEs (guarantee instruments, grants, loans, overdraft, venture capital, venture lending etc).
  - Identify and clearly document current bank and non-bank lending practices and the challenges facing SMEs seeking financial support
  - Identify financing gaps that currently exist and may exist in the future during the lifetime of the Competitiveness OP
  - Assess the likely absorption capacity of SMEs both now and over the coming 3 years, based on a number of development scenarios.
  - Assess the likely key factors in financial intermediary absorption capacity during the implementation phase of the Competitiveness OP (factors that will influence capacity of banks to lend COP financial products or hybrid products: e.g. attractiveness of COP financial support measure for financial intermediary, publicity and marketing channels, loan application procedures, lending criteria, loan size, loan approval process etc.).
  - Possibly review quickly experience and good practice in a number of other New Member States
  - Clearly signpost how COP measures can provide optimal value-added and *additionality* in the market, and for example not displace or crowd out any private sector lending activity.

Some of this work may only require reviewing existing information, while some may require interviews with key financial players, a small number of SMEs etc.

#### *Monitoring Indicators and Quantification of Objectives*

- Regarding the specific indicators:
  - Wherever improvements could be made, suggestions and recommendations have been provided by the evaluation team.
- Values for the base value year, i.e. 2007 need to be completed, as foreseen by the Ministry staff when the financial distribution of the OP is finalised.
- At the general level, It is recommended that:

- Before the indicators are finalised that the Socio-Economic Analysis and SWOT are redrafted and the detailed component operations for each Priority Axe are finalised. This will allow the programme management to know exactly which type of business support initiatives etc. will be put in place and know exactly what information is available from previous evaluations and other organisations.
- The lack of sufficient data from previous project experience and evaluations is addressed. There are likely numerous relevant indicators where data is gathered by other organisations, which could be thus added to the Competitiveness OP List without significantly increasing the monitoring workload for the Competitiveness OP managing authority

### *Management and Implementation Arrangements*

- For the implementation phase that the Pre-accession Programs and Projects Directorate should consider an organisational structure that could (at least) include two sections i) a “secretariat-type” section, and ii) a “planning-monitoring” section.
- It is recommended that the Ministry further builds its programming-planning capability, especially by ensuring that all necessary monitoring/evaluation skills are fully developed among PPPD staff.
- It is recommended that a number of separate planning tools be developed (preferably in English) in parallel to the Competitiveness OP document:
  - A general planning tool, setting out forward planning across all aspects of the Competitiveness OP development and implementation preparation
  - A second management tool that:
    - Clearly documents assumptions, variable factors, boundary conditions etc., underline
    - Provides a record of various discussions held on Competitiveness OP policy and strategy choices, pros and cons of same, decisions taken
    - Records strategic and operation issues kept open, pending further information or analysis
- It is important than a comprehensive external review of BSMEPA’s state of preparation for implementing the Competitiveness OP be undertaken during Q4 of 2006, if this is not already foreseen.
- Regarding the development of the application evaluation system, which will typically require a significant number of independent application assessors experienced in evaluating applications in the various Competitiveness OP grant schemes, the evaluator recommends that a series of publicity and training activities be conducted in order to raise the available pool of such professionals. Consideration should be given to holding a call(s) for compiling a registry of such professionals as official application assessors for Competitiveness OP measures.

### 11.3 Concluding Remarks

The quality of the Competitiveness OP will ultimately be determined by a number of key factors, including:

- a. The quality of the analysis and diagnostic (what is the problem?) i.e. *The Socio-Economic Analysis, SWOT and List of Disparities*
- b. The quality of the proposed strategy and component measures (what is the proposed solution to the problem?) i.e. *The Competitiveness OP Strategy, Priorities and Operational Measures*
- c. The quality of the programme planning and implementation effort
- d. The level of commitment and support of all relevant stakeholders to this shared vision

It should be emphasised that this ex-ante evaluation only can address a. and part of b. (strategy, objectives and priority axe objectives) and a limited consideration of the component Competitiveness OP measures that are being developed but are at this point in time incomplete.

The ex-ante evaluation therefore can only provide a snapshot of the state of play regarding the development of the Competitiveness OP development process *at this point in time*, as seen by the external evaluation team. Thus, it cannot take account of how some future developments will influence and improve the current draft of the Competitiveness OP, for example plans of Ministry staff, the ongoing survey on SME needs that is being undertaken etc.

The following remarks should be emphasised as concluding recommendations:

1. ***Reworking the Socio-Economic Analysis & Swot Analysis:*** A first key step is to further rework the existing Socio-Economic Analysis and SWOT Analysis into a document that reflects a rigorous, insightful and well-grounded assessment of Bulgaria's current and future challenges with regarding to areas of scope of the Competitiveness OP. This will involve incorporating greater input from relevant stakeholders inside and outside the Ministry and from previous project experience, and will have the following benefits:
  - Greater levels of consensus and agreement on the quality and accuracy of the diagnostic of this revised Socio-Economic and SWOT Analysis, and therefore greater buy-in and commitment to the Competitiveness OP as a 'shared vision'
  - Creating a national SME, innovation and competitiveness diagnostic that provides an outstanding platform for the further design of well researched and effective Competitiveness OP measures

Reworking the Socio-Economic Analysis should therefore be seen as a key but necessary first step in order to ensure that solid foundations are laid for a successful Competitiveness OP implementation. While this means more work in the short term it will save time that in the future by avoiding discussions that go around in circles due to lack of a proper information basis for the policy discussion.

If this task is address in a focussed and intensive manner, a revised Socio-Economic Analysis could be available by October 2006. Ideally this task should be completed before the detailed development of Competitiveness OP objectives and priorities but this is of course no longer an option given the pressing timeframe.

2. ***Further Development and 'Fleshing Out' of the OP Operational Measures:*** Given the limited time, work on completing the first draft of component Competitiveness OP operational measures should be completed as soon as is possible, as is no doubt the goal of the Ministry. In the absence of a solid research and diagnostic background, those working on these measure will need to use clearly documented assumptions such that targets can be quantified, and later adapted as necessary in the light

of better intelligence (e.g. from a revised Socio-Economic Analysis). As recommended above, setting out clear assumptions, variable factors, boundary conditions etc. is important, at the lack of a clear documenting of these in the Competitiveness OP planning process has to-date made it more difficult for third parties to comment on and review the Competitiveness OP.



# **ANNEXES**

## ANNEXES

### ANNEX 1: List of EU Directives for Which Transition Periods Have Been Granted<sup>26</sup>

EU Directive	Length of Transition Period	Relevance for SMEs
Directive 99/32/EC relating to a reduction in the sulphur content of certain liquid fuels	3 years – by 31.12.2009 for gas oil 5 years – by 31.12.2011 for boiler fuels	Not relevant for SMEs
Directive 94/63/EC on control of VOC emissions resulting from the storage of petrol and its distribution	1 year – by 31.12.2007 for 355 stations, 50 road tankers 3 years – by 31.12.2009 for 653 stations, 466 road tankers	Not relevant for SMEs
Directive 94/62/EC on packaging and packaging waste	3 years – by 31.12.2009 for the requirements for 15% recycling of plastics 5 years – by 31.12.2011 for the requirements for 50% recovery	Relevant for SMEs
Directive 99/31/EC on landfill of waste	8 years – by 31.12.2014 for 14 installations referring to the ban on liquid fuel landfilling	Not relevant for SMEs
Regulation EEC/259/93 on waste transportation control	3 years – by 31.12.2009 for import of some types of waste from the yellow list and not included in the recovery list	Not relevant for SMEs
Directive 91/271/EC concerning urban waste water treatment	4 years – by 31.12.2010 for settlements with over 10 000 population equivalent 8 years – by 31.12.2014 for settlements with between 2000-10 000 population equivalent	Not relevant for SMEs
Directive 96/61/EC on Integrated Pollution and Prevention Control	5 years – by 31.12.2011	Relevant for SMEs
Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants	8 years – by 31.12.2014 – the longest agreed transition period. Different transition periods for compliance are negotiated for different facilities within (31.12.2008; 31.12.2010; 31.12. 2014).	Not relevant for SMEs

<sup>26</sup> Starting From 1 January 2007.

## **ANNEX 2: Tools Related to Industrial Policy as a Factor Having an Impact on Environmental Components**

**The Eco-Management and Audit Scheme (EMAS)** is the EU voluntary instrument which acknowledges organisations that improve their environmental performance on a continuous basis. EMAS registered organisations are legally compliant, run an environment management system and report on their environmental performance through the publication of an independently verified environmental statement. They are recognised by the EMAS logo, which guarantees the reliability of the information provided.

**ISO 14000 Environmental Management Systems** could be considered as a market-base tool. The benefit of the SMEs to be certified for ISO 14001 is that they prove to the public and NGOs that their production processes meets the environmental standards and do not cause environmental pollution and damages.

**ISO 14001** adopted as a national standard is another objective for a number of enterprises, which are already certified for the quality of their production under ISO 9001/2000. The idea for establishing an integrated management system within the ten-year period of the National Strategy on the Environment will become a real objective for many enterprises. The integrated management system combines the management of quality management, environment protection, occupational and healthy safety (OHSAS 18001) in companies or organizations.

**The European Eco-Label** makes it easier for consumers to find products with a lower impact on the environment. Its easily recognisable flower logo is used in Europe. It is a voluntary scheme designed to encourage businesses to market products and services that are kinder to the environment and consumers. The European Eco-label is part of a broader strategy aimed at promoting sustainable consumption and production.

**ISO 9000 Quality Management Systems:** The benefit of the SMEs to be certified for ISO 9001 is to prove to their clients and partners that they meet the standards and implement systems for quality control of their production process and products.

**OSH 1800 Occupational Safety and Health Management System:** The benefit of the SMEs to be certified for OHSAS 18001 is to prove to their workers and control agencies that they provide safe and healthy work conditions.

## ANNEX 3: Summary of Energy Related EU Legislation

### LEGISLATION IN PROCESS

#### End-use Efficiency and Energy Services

- Proposal for a Directive of the European Parliament and the Council on the Promotion of End-use efficiency and Energy Services COM (2003) 739

#### Efficiency in Energy using products

- Proposal for a Directive of the European Parliament and of the Council on establishing a framework for setting of Eco-design requirements for Energy-using Products and amending Council Directive 92/42/EEC COM (2003) 453

### LEGISLATION IN FORCE

#### Cogeneration

- Directive of the European Parliament and of the Council on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC 2004/8/EC

#### Taxation

- Council Directive restructuring the Community Framework for the taxation of energy products and electricity 2003/96/EC

#### Buildings

- Directive of the European Parliament and of the Council of on the energy performance of buildings 2002/91/EC
- Council Directive to limit carbon dioxide emissions by improving energy efficiency (SAVE) 93/76/EEC
- Council Directive on efficiency requirements for new hot-water boilers fired with liquid or gaseous fuels 92/42/EEC
- Council Directive on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products 89/106/EEC

#### Domestic Appliances – Labelling

- Commission Directive amending Directive 94/2/EC implementing Council Directive 92/75/EEC with regard to energy labelling of household electric refrigerators, freezers and their combinations 2003/66/EC
- Commission Directive implementing Council Directive 92/75/EEC with regard to energy labelling of household electric ovens 2002/40/EC
- Commission Directive implementing Council Directive 92/75/EEC with regard to energy labelling of household air-conditioner 2002/31/EC
- Commission Directive implementing Council Directive 92/75/EEC with regard to energy labelling of household lamps 98/11/EC
- Commission Directive implementing Council Directive 92/75/EEC with regard to energy labelling of household dishwashers 97/17/EC
- Commission Directive implementing Council Directive 92/75/EEC with regard to energy labelling of household combined washer-driers 96/60/EC
- Commission Directive implementing Council Directive 92/75/EEC with regard to energy labelling of household electric tumble driers 95/13/EC
- Commission Directive implementing Council Directive 92/75/EEC with regard to energy labelling of household washing machines 95/12/EC
- Commission Directive implementing Council Directive 92/75/EEC with regard to energy labelling of household electric refrigerators, freezers and their combinations, amended by Commission Directive 2003/66/EC 94/2/EC
- Council Directive on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances 92/75/EEC

### ANNEX 3: Summary of Energy Related EU Legislation (Continued)

#### LEGISLATION IN FORCE

##### Domestic Appliances – Minimum Efficiency Requirements

- Directive of the European Parliament and of the Council on energy efficiency requirements for ballasts for fluorescent lighting 2000/55/EC
- Directive of the European Parliament and of the Council on energy efficiency requirements for household electric refrigerators, freezers and combinations thereof 96/57/EC
- Council Directive on efficiency requirements for new hot-water boilers fired with liquid or gaseous fuels 92/42/EEC

##### Office Equipment – Energy Star

- Council Decision of concerning the conclusion on behalf of the European Community of the Agreement between the Government of the United States of America and the European Community on the co-ordination of energy-efficient labelling programmes for office equipment 2001/469/EC
- Commission Decision establishing the European Community Energy Star Board 2003/168/EC
- Regulation of the European Parliament and of the Council on a Community energy efficiency labelling programme for office equipment EC/2422/2001

**ANNEX 4: List of Stakeholders Interviewed**

**STAKEHOLDER INTERVIEWS UNDERTAKEN**

<b>FIRST NAME</b>	<b>LAST NAME</b>	<b>ORGANISATION</b>
<b>Ministry of Economy &amp; Energy</b>		
Atanas	Kirchev	Ministry of Economy & Energy (PPPD)
Andrey	Lalov	Ministry of Economy & Energy (PPPD)
Ivaila	Ilieva	Ministry of Economy & Energy (PPPD)
Filip	Kroumov	Ministry of Economy & Energy (PPPD)
Filip	Stojanovic	Ministry of Economy & Energy (Phare Clusters Project)
Joachim	Frede	Ministry of Economy & Energy (Phare COP TA Project)
Nikoloas	Petropoulus	Ministry of Economy & Energy (Phare COP TA Project, External Expert)/Region of Western Greece
Grisha	Zahariev	Energy Efficiency Directorate, Ministry of Economy & Energy
Jordan	Marchev	Energy strategy Directorate, Ministry of Economy & Energy
Iva	Petrova	Projects Department, Ministry of Economy & Energy
Milena	Tsoleva	Energy strategy Directorate, Ministry of Economy & Energy
<b>Other Government Ministries &amp; Agencies</b>		
Lora	Pavlova	Ministry of Education and Science
Albena	Vutsova	Ministry of Education and Science
Vanya	Grigorova	Ministry of Environment and Waters
Jaklin	Metodieva	Ministry of Environment and Waters
Ganya	Hristova	Ministry of Environment and Waters
Boyana	Chavdarova	Ministry of Regional Development and Public Works
Nikolay	Todorov	BSEMPA
<b>Other Agencies</b>		
Zoya	Damianova	ARC Fund
Ljulin	Radulov	Black Sea Regional Energy Centre
<b>European Commission</b>		
Herman	Hagspiel	EU Delegation
Judit	Goldstein	EU Delegation