



BOTSCHAFT DER REPUBLIK BULGARIEN  
IN DER BUNDESREPUBLIK DEUTSCHLAND

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MR. FENG GAO  
Secretary to the Compliance Committee  
UNFCCC Secretariat  
Haus Carstanjen, Martin-Luther-King-Strasse 8  
D-53175 Bonn, Germany

DEAR MR. FENG GAO,

In accordance with paragraph 20 (b) of the Preliminary Finding, which forms an integral part of the Final Decision of the Enforcement Branch, herewith please find attached the updated and complete document "*Compliance Action Plan*".

The Plan includes:

1. "*Analysis of the causes of non-compliance of the national GHG inventory system of Bulgaria*" prepared in line with section XV paragraph 2 (a) of the Procedures and mechanisms relating to compliance under the Kyoto Protocol;
2. "*Measures that Bulgaria implements to remedy the non-compliance*", prepared in line with section XV paragraph 2 (b);
3. "*Timeframe for the implementation of measures*", prepared in line with section XV paragraph 2 (c), and incorporated in the document as per item 2.

In accordance with section XV paragraph 3 of the Procedures and mechanisms relating to compliance under the Kyoto Protocol, Bulgaria confirms hereby that it will submit to the Enforcement Branch progress reports on the implementation of the plan on regular basis.

Please accept the assurances of my highest consideration.

Attachment:

1. Compliance Action Plan as referred to under paragraph 20 (b) of the Preliminary Finding and Final Decision concerning Bulgaria

Sincerely,

  
STEFANKA IGOVA  
CHARGÉ D'AFFAIRES A.I.



**Submission of Bulgaria to the Compliance Committee**

**COMPLIANCE ACTION PLAN**

**submitted in accordance with paragraph 20 (b) of the preliminary finding (CC-2010-1-6/Bulgaria/EB), confirmed by the final decision of the Enforcement Branch concerning Bulgaria (CC-2010-1-8/Bulgaria/EB)**

**and in accordance with section XV, paragraph 1 and paragraph 2 and rule 25 bis of the Rules of procedures of the Compliance Committee**

**30 September  
Sofia, Bulgaria**

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## **I. INTRODUCTION**

In accordance with the obligations of the Republic of Bulgaria towards the Kyoto Protocol (KP), ratified in July 2002, and more specifically with article 5(1) of the Protocol, a National System for the Estimation of the Anthropogenic Emissions of Greenhouse Gases according to sources and the removal of all greenhouse gasses not controlled by the Montreal Protocol through the usage of carbon sinks had to be created no later than 01.01.2007. The National system is a complex mechanism with a legislatively determined order and method for acquiring reliable information and data, a corresponding legislative and institutional framework, highly-qualified experts, and a structure ensuring quality, control, analysis and reporting.

Fully understanding the importance of the task, the Ministry of Environment and Water of Bulgaria (MOEW) takes the necessary steps for the creation of a National system relatively early in time (2003-2004) and initiates a dialogue with a number of countries (the Netherlands, Denmark, England, Japan, through programs of the United Nations and the European Union), in order to acquire the necessary experience and financial resources required for the development of the system. Several versions of requests and technical job specifications are completed.

A Study regarding a National system for evaluating the anthropogenic emissions of greenhouse gases is carried out in 2004-2005 with the aim of preparing a thorough examination of the state and needs of Bulgaria in this respect, which should be used as a foundation for the development of a National system in 2006.

## **II. ANALYSIS OF THE CAUSES OF NON-COMPLIANCE OF THE NATIONAL SYSTEM FOR ESTIMATION OF ANTHROPOGENIC EMISSIONS OF GREENHOUSE GASES OF THE REPUBLIC OF BULGARIA TO THE REQUIREMENTS OF ARTICLE 5 OF THE KYOTO PROTOCOL IN THE PERIOD 2007-2009**

In the period 2007-2009 a number of planned developments were not executed and led to the current state of incompliance. These reasons for non-compliance are elaborated below:

### **1. Lack of political responsibility and concern about Climate Change issues by the political regime of the MOEW in the period 2007-2009**

During this period Climate Change policy have been largely neglected by the previous government, which is also evident from the following:

- The Climate Change policy team, responsible for the setting the national policy on Climate Change, harmonization with the EU Climate Change policy and National focal point for the UNFCCC and the Kyoto Protocol, was diminished to a unit consisting of four experts and located within the *Public procurement* department of the Ministry.
- The Third National Action Plan on Climate Change to implement mitigation measures from 2009 has not been started as required in 2007. A project to initiate the development of analysis for such measures was signed in 2009 and de facto initiated by the new government in October 2009.

- The National Allocation Plan for the allocation of allowances of GHG for the period 2008-2012 has not been developed to be approved by the European Commission on time. The NAP was developed and approved only in 2010 by the new government, and only since then Bulgarian installations are able to participate in the EU ETS.

- European legislation has not been transposed and implemented in a timely manner.

**2. Lack of expert team at the Ministry of Environment and Water (MOEW) to control the activities for compliance with Kyoto commitments and UNFCCC reporting obligation**

The capacity of the Climate Change policy team at MOEW has not allowed adequate policy for compliance with Kyoto commitments and UNFCCC reporting obligation

**3. Lack of expertise and human resource at the Executive Environment Agency (ExEA)**

There has been a significant lack of human resource at the ExEA which has not been extended during the period in consideration.

In the period after 2006, the “Air Monitoring” department has stressed the need for improvement of the expert capacity at several occasions. However, due to numerous reasons (manly as a result of the lack of training and experience exchange with countries, successful in this field) the disturbing situation remained largely unaltered.

Only one official is working in the specialized sector “Emission inventory” in the 01.01.2007 - 01.12.2008 period. On 01.12.2008 another expert is employed, but he terminates his contract on 13.04.2009. No Head of sector is ever elected.

From February 2009 the expert responsible for performing the greenhouse gases inventory is in a long-lasting maternity leave. In this period neither a substitute expert nor a Head of sector “Emissions Inventory” is appointed.

**4. Neglect of the problems and issues with planning, preparation and management of GHG inventory by the previous Minister of Environment and Water and the Executive director of the ExEA**

The Management of the MOEW and ExEA has not implemented adequate measures to increase the capacity of ExEA for preparation of GHG inventory.

**5. Shift of responsibility for the preparation of GHG inventory without capacity building and creation of expertise at the ExEA**

Until 2006 the National GHG inventories for the UNFCCC have been prepared by external contracted consultant - the *Energy Institute*. In 2007 the Minister of Environment and Water, Mr. Dzhevdet Chakarov, introduces changes in the procedure for performing the inventory and the structures responsible for its completion in the Ministry of

Environment and Water's system with Order 54/25.01.2007. The responsibility for the planning, preparation and management of the inventory is assigned to the ExEA.

The change in the National Inventory System was made, however, without accounting for the lack of expertise, human resource and capacity of the ExEA. In practice the inventory for GHG for UNFCCC and for the Convention on Long-Range Transboundary Air Pollution would have to be prepared by two experts without the necessary training and technical expertise. MOEW has not supported the ExEA with the necessary training for the execution of the functions delegated for the preparation of inventory.

#### **6. Lack of financial resource to acquire the necessary capacity and expertise by developing educational projects**

No projects to support the technical preparation, training in expertise and developing capacity for the preparation of the NIR have been started during this period by MOEW and ExEA;

External consultants have not been identified to support in the preparation of the GHG inventory and in training for capacity building and expertise;

Since the end of 2007, the ExAE has introduced technical job specifications for several very important projects, which could help in the improvement of the available expert capacity, involved in the preparation of the two inventories in accordance with the requirements (software product for calculating harmful emissions and recalculation of all data for each base year). For more than two years these task are considered of low priority by the previous leadership of the Ministry of Environment and Water and no funding has been allocated.

#### **7. Lack of remedial actions to amend the recommendations of the ERT conclusions from previous reviews of Bulgarian GHG inventory**

The first annual examination in Bulgaria, performed by the UNFCCC Secretariat in 2007 notices signs of incompliance with the KP requirements regarding the National system for estimation of anthropogenic emissions of greenhouse gases. The examination report includes a detailed list of the problems, detected in the system (insufficient institutional capacity for the preparation and the timely reporting of the national inventory of greenhouse gases and a Plan ensuring quality control of the national inventory) and in the quality of the inventory, performed by an external party.

Not enough attention has been turned to improve the quality of the GHG inventory to answer the recommendations made in this and other reports. No specific and organized measures were taken during the period up to 2009 to establish a functioning National system according to the requirements as set out in art. 5, paragraph 1 of the Kyoto Protocol.

#### **8. Lack of institutional arrangements and legislative basis regulating inter-institutional collaboration and organization of work**

There were no agreements signed between the institutions, who are the main activity data providers in the National Inventory System. The responsibilities of all engaged institutions in functioning of National Inventory System were not regulated.

## 9. Lack of Quality management system

There was no trained expert team at MOEW, ExEA and other agencies to provide for the necessary QA and QC of the NIR; The Quality management system was not operated in accordance with Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories due to the reasons mentioned above.

## CONCLUSION

In the course of the procedure, the responsible institutions (EEA and MOEW) through their actions stated clearly their will for overcoming Bulgaria's state of incompliance. The necessary actions for organizing operational National system for GHG inventories reporting were performed, and the relevant bodies at the Compliance Committee were timely informed.

By the current moment, significant improvement has been achieved both in the quality of GHG emissions inventory for 2008 (finally submitted on 13.08.2010), and in establishing an operational and stable national system. **All actions initiated for overcoming the significant gaps identified by the international reviews, have been presented in the National System Operation Improvement Plan**, which is prepared upon a request placed by the Enforcement Branch after the hearing procedure of Bulgarian delegation at the Branch's 9-th meeting (on 10.05.2010) and has been thoroughly reported at the 11-th meeting held on 16.09.2010.

**III. MEASURES THAT BULGARIA IMPLEMENTS TO REMEDY THE NON-COMPLIANCE AND STATUS OF IMPLEMENTATION OF THE IMPROVEMENT PLAN AS OF AUGUST 2010**

The activities in the improvement plan are planned for the period 2010 – 2012 in order to fulfill the recommendations of Expert Review Team as set out in the annual review report FCCC/ARR/2009/BGR. The table bellow presents the status of implementation of the activity in Improvement Plan as of August 2010.

**IV. TIMEFRAME FOR THE IMPLEMENTATION OF MEASURES, INCORPORATED WITHIN THE DOCUMENT BELOW**

The timeframe covers the period 2010-2012 and the period intended for implementation of each measure is signified in the table below next to each measure.



Issue	Planned improvement for 2010 and next submissions	Priority high - medium -low	Status of implementation August 2010
<b>General Improvements</b>			
<b>Institutional arrangements</b> FCCC/ARR/2009/BGR: ARR § 5 - 67	ARR § 67 (a) (i) New agreements between MoEW and the following data provider have been signed: <ul style="list-style-type: none"> <li>➤ National Statistic Institute (NSI)</li> <li>➤ Ministry of Agriculture and Food (MAF)</li> <li>➤ Ministry of Economy and Energy (MEE)</li> <li>➤ Ministry of Internal Affairs (MIA)</li> </ul>	High priority  March 2010 March 2010 June 2010 June 2010	New agreements have entered into force: <ul style="list-style-type: none"> <li>➤ NSI (RD21-35/12.02.2010)</li> <li>➤ MAF (04-00-517/26.02.2010 and RD 50-47/15.03.2010)</li> <li>➤ MEE (14/06/2010 )</li> <li>➤ MIA (08/06/2010 )</li> </ul>
<b>Legal basis</b> FCCC/ARR/2009/BGR: ARR § 5 - 67	ARR § 67 (a) (i) <ul style="list-style-type: none"> <li>➤ The BGNIS will be enshrined in law through a special Regulation of the Council of Ministers which will be adopted in September 2010. The new regulation will establish and maintain the institutional, legal and procedural arrangements necessary to perform the functions of BGNIS, defined in Decision 19/CMP.1 for national systems. It will reinforce the institutional agreements by specifying the roles of all data providers as well as QA/QC obligations</li> </ul>	High priority September 2010	<ul style="list-style-type: none"> <li>➤ A draft Regulation for the functioning of BGNIS is prepared by an interministerial working group from all engaged institutions. The draft will be approved by the Ministry of Environment and Water and send to the Concil of Ministrets by the end of August.</li> </ul>
<b>Expert capacity in ExEA</b> FCCC/ARR/2009/BGR: ARR § 5 - 67	ARR § 67 (a) (ii) (iii) (iv) <ul style="list-style-type: none"> <li>➤ Strengthening the staff, engaged in planning, preparation and management of the emissions inventory.</li> <li>➤ Training of the staff within the project with the Federal Environment Agency of Austria (workshops in the period December 2009 to June 2010)</li> <li>➤ Incorporation of the results from completed Project 1 “LULUCF”</li> <li>➤ Incorporation of the preliminary results from Project 2 ” Recalculations”</li> <li>➤ Incorporation of the results from completed Project 4 “F-gases”</li> </ul>	High priority 2010 and 2011 submission	<ul style="list-style-type: none"> <li>➤ A new Order №110/30.04.2010 by the Executive Director of ExEA has been issued. The order regulates the name and responsibilities of sector experts from different departments within the ExEA, who are engaged in planning, preparation and management of National GHGs emission inventory (see Figure 1)</li> <li>➤ Incorporated results from completed Project 1 “LULUCF” (CRF tables and NIR)</li> <li>➤ Incorporation of the preliminary results from Project 2 ” Recalculations”</li> <li>➤ Incorporated results from completed Project 4 “F-gases” (CRF tables and NIR)</li> </ul>

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Issue	Planned improvement for 2010 and next submissions	Priority high - medium -low	Status of implementation August 2010
<p><b>Collaboration with consultants and external auditors</b> FCCC/ARR/2009/BGR: ARR § 5 - 67</p>	<p>ARR § 67 (c) (iii)</p> <ul style="list-style-type: none"> <li>➤ Strengthening the contacts with Branch Business Associations.</li> <li>➤ Further intensive cooperation for studies (verification of EFs) with other non-governmental institutions, universities and private consultants</li> <li>➤ Support of external auditors for improvement of QA procedures</li> </ul>	<p>High priority 2010 and 2011 submission</p>	<p>Contracts with external consultants for supporting preparation of GHGs inventory and NIR have been signed:</p> <ul style="list-style-type: none"> <li>➤ Forestry University</li> <li>➤ Denkstatt Ltd</li> <li>➤ Energy Institute Ltd</li> <li>➤ Bulgarian Academy of Science, Geophysical Institute</li> <li>➤ Branch Assosiation for Cement Industry</li> </ul>
<p><b>Quality Management System</b> FCCC/ARR/2009/BGR: ARR § 53 - 57</p>	<ul style="list-style-type: none"> <li>➤ Improvement of the activity in QMS</li> <li>➤ Ensuring that other institutions are engaged in the checking and review of the annual submission as set out in its QA/QC plan</li> <li>➤ Improvement of Sector specific QA/QC procedures</li> <li>➤ Starting the documentation and archiving process</li> </ul>	<p>High priority 2010</p>	<ul style="list-style-type: none"> <li>➤ Update of the National QA/QC Plan due to the newly implemented institutional, legal and procedural arrangements within the BGNIS</li> <li>➤ A new System for sector experts workflow organization, documentation and archiving has been implemented in the ExEA (see figure 2)</li> </ul>
	<ul style="list-style-type: none"> <li>➤ ARR § 55 During the in-country review, Bulgaria provided details of some sector-specific QA undertaken in the industrial processes sector. The Party explained that data obtained under the European Union emissions trading scheme (EU ETS)) and data reported by industry under other regulations (e.g. EPRTR) are used to verify emissions data for the categories cement production, iron and steel production and nitric acid production. However, Bulgaria has provided little evidence or documentation of QA undertaken for the other sectors. The ERT recommends that Bulgaria provide sufficient information in the NIR on the use of EU ETS data for verification of its emissions data, including which tier approach from the EU ETS guidelines was used for the QA and/or verification of the EU ETS data used.</li> </ul>		<ul style="list-style-type: none"> <li>➤ Intensive cross-check with ETS, EPRTR, IPPC permits was undertaken. The relevant data was incorporated into the GHG inventory;</li> </ul>
			<ul style="list-style-type: none"> <li>➤ Internal Review of the national system by EEA/EC in July 2009</li> </ul>

Issue	Planned improvement for 2010 and next submissions	Priority high - medium -low	Status of implementation August 2010
<b>Source categories improvements</b>			
<p><b>Energy sector</b> FCCC/ARR/2009/BGR: ARR § 69 - §90</p>	<p>ARR § 90 (a), § 90 (b)</p> <ul style="list-style-type: none"> <li>➤ Revising of the AD (entire time series) due to differences in IEA/EUROSTAT questionnaire (international reporting obligation) and national energy balance (national reporting obligation with different allocation/definition fuel) due to different reporting obligation on national and international level. Outcome: consolidated "Energy Balance" for national and UNFCCC/ UNECE reporting obligation (High Priority)</li> <li>➤ Revising of the EF. Investigation whether it would be possible to update country specific emission factors (High Priority)</li> <li>➤ A cross-check with ETS, EPRTR, IPPC permits data will be undertaken</li> <li>➤ Providing carbon mass balance</li> <li>➤ Comparison of emissions using alternative approaches.</li> <li>➤ Documentation for the national energy balance, provided by National Statistic Institute will be incorporated.</li> <li>➤ Documentation and archiving of all information required in NIR, Background documentation and archive.</li> <li>➤ ARR § 71 § 72 Transparency - In submission 2010 for CRF 1 information on methodology, activity data and emission factor for the entire time series is provided, but within the next submission further improvements concerning transparency will be undertaken. This will be done by updating and revising EF and AD.</li> </ul> <p>ARR § 73 &amp; § 74 Recalculations and time-series consistency</p> <ul style="list-style-type: none"> <li>➤ To ensure TACCC internal energy experts and external consultants were involved in the submission 2010. Further collaboration is foreseen for the future submission.</li> </ul> <p>ARR § 75 Verification and quality assurance/quality control approaches</p> <ul style="list-style-type: none"> <li>➤ Sector specific QA/QC procedures were implemented in 2010 submission.</li> <li>➤ Support of consultants and external auditors are envisaged for 2010 and next submissions</li> </ul>	<p>High priority 31/07/2010</p>	<ul style="list-style-type: none"> <li>➤ Contract with external consultants Denkstatt for supporting preparation of GHGs inventory and NIR for Sector Energy (excluding sub-sector Transport)</li> <li>➤ Recalculated emissions in Energy Sector based on revised AD for entire time series (IEA/EUROSTAT questionnaire).</li> <li>➤ A cross-check with ETS, EPRTR, IPPC permits was realized;</li> <li>➤ Improved documentation and archiving of the inventory, including work sheets</li> <li>➤ QA procedures have been performed by the Sector expert in the MoEW (Order № RD-218/05.03.2010 by the Minister of Environment and Water )</li> </ul>

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Issue	Planned improvement for 2010 and next submissions	Priority high - medium -low	Status of implementation August 2010
Energy Industries (CRF 1A1)	<ul style="list-style-type: none"> <li>➤ Revising of the AD based on IEA/EUROSTAT questionnaire</li> <li>➤ A cross-check with ETS, EPRTR, IPPC permits data</li>   <li>➤ Revising of the EF - Investigation whether it would be possible to update country specific emission factor (CS EF) for solid and liquid fuels. A comparison of applied EFs and parameters with the (a) IEF with the default EF of the IPCC guidelines, (b) information about NCV of relevant fuels provided by NSI, and (c) the SAI 2009 report (Table 1.4; FCCCWEB/SAI/2009). Point out the need for update/revision of all emission factors. This investigation includes updated/ revised country specific NCV for the important fuels.</li> <li>➤ Allocation emission from autoproducers in the CRF 1.A 1 / CRF 1.A 2</li> <li>➤ Allocation emission from iron and steel industry in the CRF 1.A 2</li> <li>➤ Recalculations and time-series consistency, due to revised AD and EF</li> <li>➤ Investigation on combustion plant types and technology will be carried out (submission 2011/2012) because for the whole period after the base 1988, there have been no changes in methodology of calculation and collection of data.</li> </ul>	<p>High priority 31/07/2010</p> <p>High priority 2010 - 2011 submission</p> <p>High priority 2010 - 2011 submission</p> <p>Medium priority 2011 – 2012 submission</p>	<ul style="list-style-type: none"> <li>➤ Contract with external consultants Denkstatt for supporting preparation of GHGs inventory and NIR for Sector Energy (excluding sub-sector Transport)</li> <li>➤ Recalculated emissions in Energy Sector based on revised AD for entire time series (IEA/EUROSTAT questionnaire).</li> <li>➤ A cross-check with ETS, EPRTR, IPPC was realized;</li> <li>➤ Improved documentation and archiving of the inventory, including work sheets</li> </ul>
Manufacturing industries and Construction (CRF 1.A 2)	<ul style="list-style-type: none"> <li>➤ Revising of the AD based on IEA/EUROSTAT questionnaire</li> <li>➤ Revising of the EF - Investigation whether it would be possible to update country specific emission factor (CS EF) for solid and liquid fuels. A comparison of applied EFs and parameters with the (a) IEF with the default EF of the IPCC guidelines, (b) Investigation whether it would be possible to update country specific emission factor (CS EF) for liquid fuels and gasous fuels. information about NCV of relevant fuels provided by NSI, and (c) the SAI 2009 report (Table 1.4; FCCCWEB/SAI/2009).Point out the need for update/revision of all emission factors. This investigation includes updated/ revised country specific NCV for the important fuels.</li> <li>➤ Recalculations and time-series consistency, due to revised AD and EF</li> <li>➤ Allocation emission from autoproducers in the CRF 1.A 1 / CRF 1.A 2</li> <li>➤ Allocation emission from iron and steel industry in the CRF 1.A 2</li> </ul>	<p>High priority 31/07/2010</p> <p>Medium priority 2011 – 2012 submission</p>	<ul style="list-style-type: none"> <li>➤ Contract with external consultants Denkstatt for supporting preparation of GHGs inventory and NIR for Sector Energy (excluding sub-sector Transport)</li> <li>➤ Recalculated emissions in Energy Sector based on revised AD for entire time series (IEA/EUROSTAT questionnaire).</li> <li>➤ A cross-check with ETS, EPRTR, IPPC permits was undertaken;</li> <li>➤ Improved documentation and archiving of inventory, including work sheets</li> </ul>

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<p>Transport (CRF 1.A 3) FCCC/ARR/2009/BGR: ARR § 83, § 84, § 85, § 86 § 88</p>	<ul style="list-style-type: none"> <li>➤ Revising of the AD based on IEA/EUROSTAT questionnaire and compare to national statistics data to make sure that these are in line.</li> <li>➤ Revising of the EF (gasoline, Diesel, LPG). Investigation whether it would be possible to update country specific emission factor for liquid fuels and gaseous fuels.</li> <li>➤ The model COPERT IV, which is a country support tool for reporting provided by the European Environment Agency (EEA) will be incorporated within the next submission. With this model a higher TIER method for estimation CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub> als well non-GHG will be realized.</li> <li>➤ Investigation of the country specific parameters used in the COPERT IV model concerning the car fleet and vehicle split.</li> <li>➤ Allocation of fuel (kerosene) consumption between civil aviation (1.A.3.a) and international bunkers (aviation) for the complete time-series and ensure time series-consistency.</li> <li>➤ Allocation of fuel consumption between navigation (1.A.3.c) and international bunkers (navigation) for the complete time-series.</li> <li>➤ Recalculations and time-series consistency, due to revised AD and EF</li> </ul>	<p>High priority 31/07/2010</p> <p>2011 submission</p>	<ul style="list-style-type: none"> <li>➤ Recalculated emissions based on revised AD for entire time series (IEA/EUROSTAT questionnaire)</li> <li>➤ Recalculation in accordance with the IPCC GPG</li> <li>➤ Improved documentation and archiving of the inventory, including work sheets</li> </ul>
<p>Other Sectors (CRF 1A4)</p>	<ul style="list-style-type: none"> <li>➤ Revising of the AD based on IEA/EUROSTAT questionnaire</li> <li>➤ Revising of the EF. Investigation whether it would be possible to update country specific emission factor (CS EF) for solid and liquid fuels. A comparison of applied EFs and parameters with the (a) IEF with the default EF of the IPCC guidelines, (b) information about NCV of relevant fuels provided by NSI, and (c) the SAI 2009 report (Table 1.4; FCCCWEB/SAI/2009). Point out the need for update/revision of all emission factors. This investigation includes updated/revised country specific NCV for the important fuels.</li> <li>➤ Recalculations and time-series consistency, due to revised AD and EF</li> </ul>	<p>High priority 31/07/2010</p>	<ul style="list-style-type: none"> <li>➤ Contract with external consultants Denkstatt for supporting preparation of GHGs inventory and NIR for Sector Energy (excluding sub-sector Transport)</li> <li>➤ Recalculated emissions in Energy Sector based on revised AD for entire time series (IEA/EUROSTAT questionnaire).</li> <li>➤ Improved documentation and archiving of the inventory, including work sheets</li> </ul>

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Other (CRF 1A5)	<ul style="list-style-type: none"> <li>➤ Revising of the AD based on IEA/EUROSTAT questionnaire</li> <li>➤ Revising of the EF.</li> </ul>	High priority 31/07/2010	<ul style="list-style-type: none"> <li>➤ Contract with external consultants Denkstatt for supporting preparation of GHGs inventory and NIR for Sector Energy (excluding sub-sector Transport)</li> <li>➤ Recalculated emissions in Energy Sector based on revised AD for entire time series (IEA/EUROSTAT questionnaire).</li> <li>➤ Improved documentation and archiving of the inventory, including work sheets</li> </ul>
Fugitive emissions from solid fuels and oil and natural gas (CRF 1.B)	<ul style="list-style-type: none"> <li>➤ For 1. B. 1. a. Coal Mining and Handling - an estimation of CH4 emission can be realized with the CORINAIR methodology (TIER 1), which is also provided in the 2006 IPCC GL. In the emission factor database relevant EF are provided.</li> <li>➤ For applying Tier 2 or even higher methodology, the relevant activity data and emission factor are not available at the present; this will be an issue for submission 2011 and/or 2012</li> <li>➤ For subcategory 1.B.1.b. Solid Fuel Transformation - the emissions can also be included in sector 1.A.1.c or 1.A.2.a, also to avoid double counting. The estimation of these emissions will be realized in submission 2011</li> <li>➤ For 1.B.2. Oil and Natural Gas - Method (TIER 1) is provided in 2006 IPCC GL (Chapter 4 FUGITIVE EMISSIONS), Default emission factor (TIER 1) is provided in 2006 IPCC GL (Chapter 4 FUGITIVE EMISSIONS)</li> </ul>	<p>High priority 31/07/2010</p> <p>2011 – 2012 submission</p> <p>2011 submission</p> <p>High priority 31/07/2010</p>	<ul style="list-style-type: none"> <li>➤ Contract with external consultants Denkstatt for supporting preparation of GHGs inventory and NIR for Sector Energy (excluding sub-sector Transport)</li> <li>➤ Recalculated emissions in Energy Sector based on revised AD for entire time series (IEA/EUROSTAT questionnaire).</li> </ul>

COMPLIANCE ACTION PLAN SUBMISSION BY BULGARIA TO THE COMPLIANCE COMMITTEE

Issue	Planned improvement for 2010 and next submissions	Priority high - medium -low	Status of implementation August 2010
<p><b>Industrial processes (CRF sector 2)</b> FCCC/ARR/2009/BGR: ARR §91 - 113</p>	<ul style="list-style-type: none"> <li>➤ Revising of the AD with ETS, EPRT, IPPC permits data</li> <li>➤ Revising of the EF. Investigation whether it would be possible to update country specific emission factors</li> <li>➤ Sector specific QA/QC procedures were implemented in 2010 submission. QA procedures have been performed by the Sector expert in the MoEW (Order № RD-218/05.03.2010 by the Minister of Environment and Water ).</li> <li>➤ Support of external auditors are envisaged for 2010 and next submissions</li> <li>➤ Comparison of emissions using alternative approaches.</li> <li>➤ Documentation and archiving of all information required in NIR, Background documentation and archive.</li> </ul>	<p>High priority 2010 - 2011 submission</p>	<ul style="list-style-type: none"> <li>➤ Recalculated emissions based on revised AD in accordance with plant specific data submitted under EPRT and ETS for productions of CRF 2.B.1 Ammonia, CRF 2.B.2, Nitric acid, CRF 2.A.1Cement, CRF 2.C.1 Iron and steel, 2.A.7 Glass and Bricks.</li> <li>➤ Sector specific QA/QC procedures were implemented in 2010 submission. QA procedures have been performed by the Sector expert in the MoEW (Order № RD-218/05.03.2010 by the Minister of Environment and Water).</li> <li>➤ Improved documentation and archiving of the inventory, including work sheets</li> </ul>
<p>Consumption of Halocarbons and SF6 (CRF 2.F) FCCC/ARR/2009/BGR: ARR §110</p>	<ul style="list-style-type: none"> <li>➤ A study on F-gases actual emissions is under way. The main findings and proposals for methodologies to be used are presented in NIR 2010, submitted to UNFCCC and EC on 27/05/2010. The final results of the study will be reported in the next submission of the inventory.</li> <li>➤ Support of consultants and external auditors are envisaged for 2010 and next submissions</li> </ul>	<p>High priority 31/072010</p>	<ul style="list-style-type: none"> <li>➤ For the NIR 2010 a complete new and changed estimation was carried out for CRF 2.F (F-gases) (complete time series).</li> <li>➤ Incorporated results from completed Project 4 “F-gases” (CRF tables and NIR)</li> <li>➤ Improved documentation and archiving of the inventory, including work sheets</li> <li>➤ Contract with external consultants Denkstatt</li> </ul>
<p><b>Solvent and other product use (CRF sector 3)</b></p>	<ul style="list-style-type: none"> <li>➤ Recalculation of all the estimates of the sector based on the updated CORINAIR methodology will be implemented during the processing of the next submission.</li> <li>➤ Sector specific QA/QC procedures were implemented in 2010 submission. QA procedures have been performed by the Sector expert in the MoEW (Order № RD-218/05.03.2010 by the Minister of Environment and Water ).</li> </ul>	<p>medium priority 2011 - 2012 submission</p>	<ul style="list-style-type: none"> <li>➤ Sector specific QA/QC procedures were implemented in 2010 submission. QA procedures have been performed by the Sector expert in the MoEW (Order № RD-218/05.03.2010 by the Minister of Environment and Water ).</li> </ul>

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Issue	Planned improvement for 2010 and next submissions	Priority high - medium -low	Status of implementation August 2010
	<ul style="list-style-type: none"> <li>➤ Support of consultants and external auditors are envisaged for 2010 and next submissions</li> <li>➤ Documentation and archiving of all information required in NIR, Background documentation and archive.</li> <li>➤</li> </ul>		
<p><b>Agriculture (CRF sector 4)</b> FCCC/ARR/2009/BGR: ARR §114 - 138</p>	<ul style="list-style-type: none"> <li>➤ Collection of data for implementation higher TIER method.</li> <li>➤ Revision of activity data and emission factor</li> <li>➤ Sector specific QA/QC procedures have to be intensified.</li> <li>➤ Comparison of emissions using alternative approaches.</li> <li>➤ Documentation for national statistics of agriculture and food provided by Ministry of Agriculture and Food</li> <li>➤ Food and Agriculture Organization of the United Nations (FAO)</li> <li>➤ Documentation and archiving of all information required in NIR, Background documentation and archive.</li> <li>➤ Support of consultants and external auditors are envisaged for 2010 and next submissions</li> </ul>	<p>High priority 2010 - 2011 submission</p>	<ul style="list-style-type: none"> <li>➤ Recalculated emissions in Agriculture Sector based on revised AD for entire time series in accordance with data provided by national agro statistic (MAF)</li> <li>➤ Implementation of higher tier method for key categories like cattle</li> <li>➤ Improving QA/QC</li> <li>➤ Improved documentation and archiving of the inventory, including work sheets</li> </ul>



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<b>Issue</b>	<b>Planned improvement for 2010 and next submissions</b>	<b>Priority high - medium -low</b>	<b>Status of implementation August 2010</b>
<p><b>LAND-USE, LAND-USE CHANGES AND FORESTRY (CRF sector 5)</b>                      FCCC/ARR/2009/BGR:                      ARR §139 - 153</p>	<ul style="list-style-type: none"> <li>➤ ARR § 153 Bulgaria has successfully completed Project 1 – “Development of methodology for calculation of emissions and removals for LULUCF sector according to requirements of UNFCCC and Kyoto Protocol”. The results of this project have already been incorporated into the 2010 submission. The methodology for calculation of emissions and removals for LULUCF sector according to requirements of UNFCCC and Kyoto Protocol has already been prepared under the contract between ExEA and University of Forest.</li> <li>➤ For 2011 an improvement of the inventory of the areas of the cropland as well as estimations of the organic carbon stock in cropland and grassland by soil groups is planned.</li> <li>➤ In 2011 estimations of the organic carbon stock in forest soil, by soil groups (WRB, 2006) is planed.</li> <li>➤ Support of consultants and external auditors are envisaged for 2010 and next submissions</li> <li>➤ Bulgaria will carry out an assessment of the most important factors contributing to the results of the LULUCF sectors together with their uncertainties and needs to improve them as well as the available resources for improvements. On basis of this assessment a prioritization and a plan of improvement will be made.</li> </ul>	<p>High priority 2010 submission</p> <p>2011 submission</p> <p>2011 submission</p>	<ul style="list-style-type: none"> <li>➤ For the NIR2010 a complete new and changed estimate was carried out for the whole LULUCF-sector of Bulgaria (complete time series).</li> <li>➤ Incorporated results from completed Projects 1 “LULUCF” (CRF tables and NIR)</li> <li>➤ Improved documentation and archiving of the inventory, including work sheets</li> </ul> <p>➤ Internal Review of the national system by EEA/EC (JRC) in July 2009</p>

## COMPLIANCE ACTION PLAN SUBMISSION BY BULGARIA TO THE COMPLIANCE COMMITTEE

Issue	Planned improvement for 2010 and next submissions	Priority high - medium -low	Status of implementation August 2010
<b>Waste (CRF sector 6)</b> FCCC/ARR/2009/BGR: ARR §154 - 170	<ul style="list-style-type: none"> <li>➤ Incorporation of the FOD model provided by the 2006 IPCC Guidelines</li> <li>➤ Revision of activity data and emission factor - Waste statistics and DOC value and other related parameters</li> <li>➤ Sector specific QA/QC procedures were implemented in 2010 submission. QA procedures have been performed by the Sector expert in the ExEA and MoEW (Order № RD-218/05.03.2010 by the Minister of Environment and Water).</li> <li>➤ Collaboration with external auditors are envisaged for 2010 and next submissions</li> <li>➤ Documentation and archiving of all information required in NIR, Background documentation and archive.</li> <li>➤ Recalculations and time-series consistency</li> <li>➤ To account for the methane capture and separation of waste during and after collection, and to use specific degradable organic carbon (DOC) for every year after year 2000 as these data are available.</li> </ul>	High priority 2010 – submissions        2011 submission	<ul style="list-style-type: none"> <li>➤ The complete new and changed estimation was carried out for the sub-sector CRF 6 A Solid waste Disposal on Land (complete time series).</li> <li>➤ The complete new estimation was carried out for the sub-sector CRF 6 C Waste Incineration 2004 – 2008</li> <li>➤ Recalculation of the emissions in sub-sector CRF 6 C Waste Incineration, based on revised AD for entire time series (IPA questionnaire)</li> <li>➤ Documentation and archiving of all information required in NIR, Background documentation and archive.</li> </ul>

Figure 1: ExEA capacity for ensuring the function of BGNIS

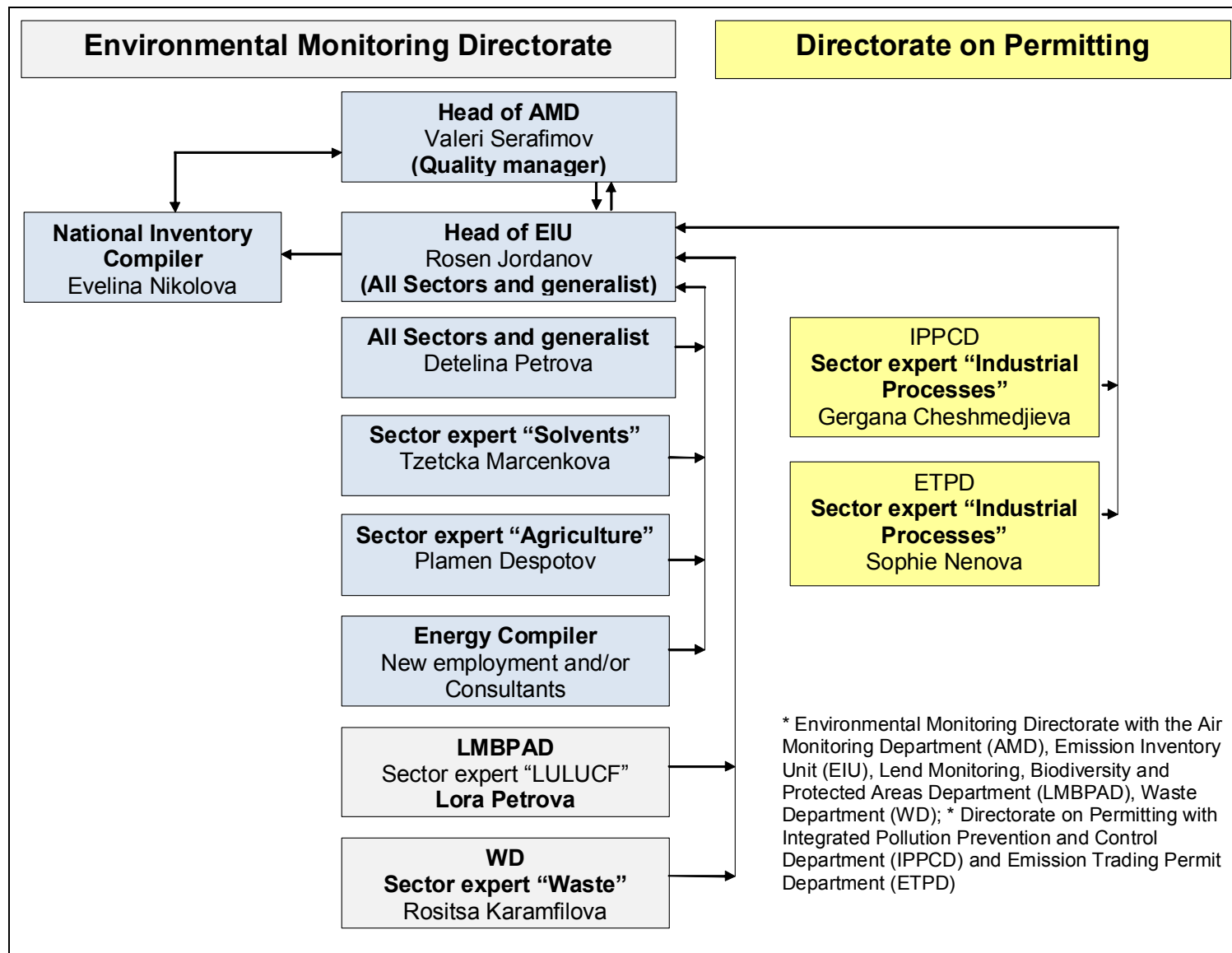


Figure 2: Documentation and archiving in ExEA

