

Annex 26: Training on GHG emission inventory project
BG/07/IB/EN/07/work plan



TWINNING WORKPLAN

**Further Development of EEA's Calibration lab as a National Reference Laboratory and
Optimization of the National Quality Assurance and Quality Control System for
Ambient Air Quality Measurements**

BG/07/IB/EN /07

The Administration of Bulgaria (hereinafter referred to as the BC) represented by the Executive Environment Agency, with BC Project Leader Ioana Hristova, Head of the International Co-operation Unit,

of the one part,

And the Administration of Austria (hereinafter referred to as the Member State, MS) represented by the Austrian Environment Agency, with MS project Leader Johannes Mayer, Head of the International Relations Unit,

of the other part

HAVE AGREED THE FOLLOWING WORK PLAN WHICH THEY UNDERTAKE TO IMPLEMENT JOINTLY:

Component 3: Air Emission Inventories and Data Management/Reporting

With essential capacity-building requirements for Air Emission Inventories (which in addition to provision of air quality data is a key task of the Air Monitoring Department of the Executive Environment Agency) and capacity-building needs for other data management tasks of the Executive Environment Agency will be dealt in this component.

- Activity 3.1: Greenhouse Gas Emission Inventories including Quality Assurance/Quality Control
- Activity 3.2: Other Air Pollutant Inventories (Convention on Long-Range Transboundary Air Pollution and National Emission Ceilings)
- Activity 3.3: First Bulgarian reporting to the European Pollutant Release and Transfer Register (ePRTR) in 2009
- Activity 3.4: Other data management and reporting issues with capacity-building requirements

Activity 3.1***Greenhouse Gas Emission Inventories including Quality Assurance/Quality Control*****Method**

Following the UNFCCC Review of the Bulgarian Greenhouse Gas Emission Inventory, and the recent transfer of the compilation of the inventory to the Air Department of the Executive Environment Agency, the expert team responsible for the Austrian Greenhouse Gas Emission Inventory will provide to the Bulgarian colleagues advice as required on all technical, organisational and quality assurance aspects of Greenhouse Gas Emission Inventories.

During expert missions and one study tour of the Bulgarian emission inventory co-ordinator and a second expert to Vienna the Austrian expert team will dispose of all required first-hand background information from the last UNFCCC in-depth review of the Bulgarian GHG inventory.

Resources

	Expert	MS	BC	Task	Missions	Days total
Act. 3.1	RTA & Assistant	X		Organisation, Participation, Interpretation		
	3 ExEA experts (Emission Inventories)		X	Participation		
	Austrian Env. Agency class 2 experts (Ritter et al.)	X		STE advice, On-the-job-training	3	9
	Expenses	X		Per diems of 2 BC Experts, Incidental costs	2	
	Expenses		X	International travel 2 BC Experts	2	

Benchmarks: Quality of Bulgarian Inventory for GHG Emissions improved

Know-how of Bulgarian experts on data collection and data quality assurance for GHG emission inventory improved through training and study visit. Study visit report available

Activity 3.2***Other Air Pollutant Inventories (Convention on Long-Range Transboundary Air Pollution and National Emission Ceilings)*****Method**

Expert support will be provided for all aspects of the inventories of air pollutants for CLRTAP and the corresponding EU reporting obligation on National Emission Ceilings. Since the Executive Environment Agency is already since several years responsible for these inventories, relatively less capacity-building requirements are expected, but very efficient organisation and hands-on support might be needed due to the shortage of personnel.

Resources

	Expert	MS	BC	Task	Missions	Days total
Act. 3.2	RTA & Assistant	X		Organisation, Participation, Interpretation		
	3 ExEA experts (Emission Inventories)		X	Participation		
	Austrian Env. Agency class 2 experts (Ritter et al.)	X		STE advice, On-the-job-training	2	6

Benchmarks: Know-how of Bulgarian experts on data collection and data quality assurance for Air Pollutant Inventories improved

Activity 3.3

Bulgarian reporting to the European Pollutant Release and Transfer Register (ePRTR) in 2009/2010

Method

As all EU Member States, Bulgaria is expected to deliver the first national ePRTR reporting in 2009. The national time-table is fixed by Ministerial order 377 of 8 June 2007, according which all e-PRTR-operators report to the Regional Inspectorates until 31 March 2009. RIEWs have then 2 months time for plausibility checks until 31 May 2009, ExEA until 15 June 2009 for transmission to MoEW/European Integration which will transmit to EC until 30 June 2009.

Until the end of 2008, a web-based electronic reporting system will be developed from a contractor to the ExEA to allow appropriate interaction of reporting operators, regional and national Authorities. The terms of Reference for tendering the programming of the system have been developed as part of the current Twinning Light Project (ending 15 March 2008)

The MS expert team will accompany the final phase of software development, and then provide advice for the further steps of the reporting process until delivery to EC. Two workshops outside Sofia will be organised for training industry representatives and experts of the Regional Inspectorates of Environment and Water regarding the PRTR reporting obligations.

Resources

	Expert	MS	BC	Task	Missions	Days total
Act. 3.3	RTA & Assistant	X		Organisation, Participation, Interpretation		
	RTA Brigitte Bichler	X		Activity Lead and STE advice		
	5 ExEA experts (Emissions, IPPC)		X	Participation		
	Austrian Env. Agency class 2 experts	X		STE advice, On-the-job-training, workshop participation	2	6

	RIEWs, Industry		X	Participation in workshops		
	Expenses	X		Local travel, per diems and hotel costs for workshop venues outside Sofia (STE, RTA, RTA-A, interpreters)		
	Expenses	X		Translation of documents, interpretation at workshops, printing of documents		
	Expenses		X	Workshop venues, coffee breaks, travel & subsistence of RIEW experts		

Benchmarks: Support delivered in Software development for E-PRTR reporting
 Know-how of Bulgarian experts on data collection and data quality assurance for E-PRTR reporting improved
 Experts of RIEW trained on E-PRTR reporting obligations
 Relevant industry trained on E-PRTR reporting obligations

Activity 3.4

Other data management and reporting issues with capacity-building requirements

Method

Within this activity ad-hoc expert support will be provided by the Twinning Partner to meet capacity-building requirements for other data management and reporting issues which will arise during project implementation.

Special attention will be paid to meet Priority Data Flow Reporting obligations to the European Environment Agency and to assure full Bulgarian participation in the European activities for establishing the Shared Environmental Information System (SEIS), on which the European Commission is about to issue a Communication.

Resources

	Expert	MS	BC	Task	Missions	Days total
Act. 3.4	RTA & Assistant	X		Organisation, Participation, Interpretation		
	MS PL Johannes Mayer	X		Activity Lead and STE advice	1	3
	10 ExEA experts (Priority Data Flow Thematic Areas)		X	Participation		
	Austrian Env. Agency class 2 experts	X		STE advice, On-the-job-training	1	3

Benchmarks: Know-how of Bulgarian experts on data management and EU reporting issues

Annex 27: Contract for project 1 (LULUCF)

Annex 28: Contract for project 2 (Recalculations)

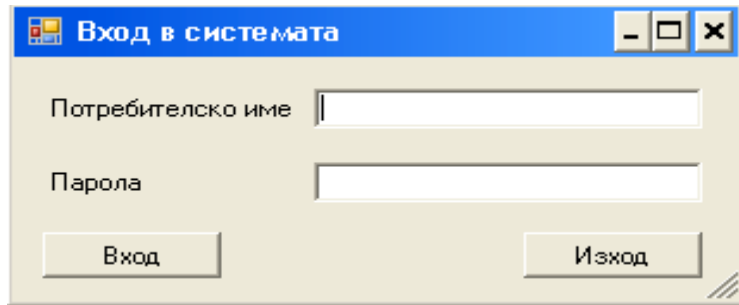
Annex 29a: Contract for project 3 (Software)

received in Cyrillic

Annex 29b: Print screens from the software (project 3)

Описание
CEPR
(calculation emissions of pollutants and their reporting)

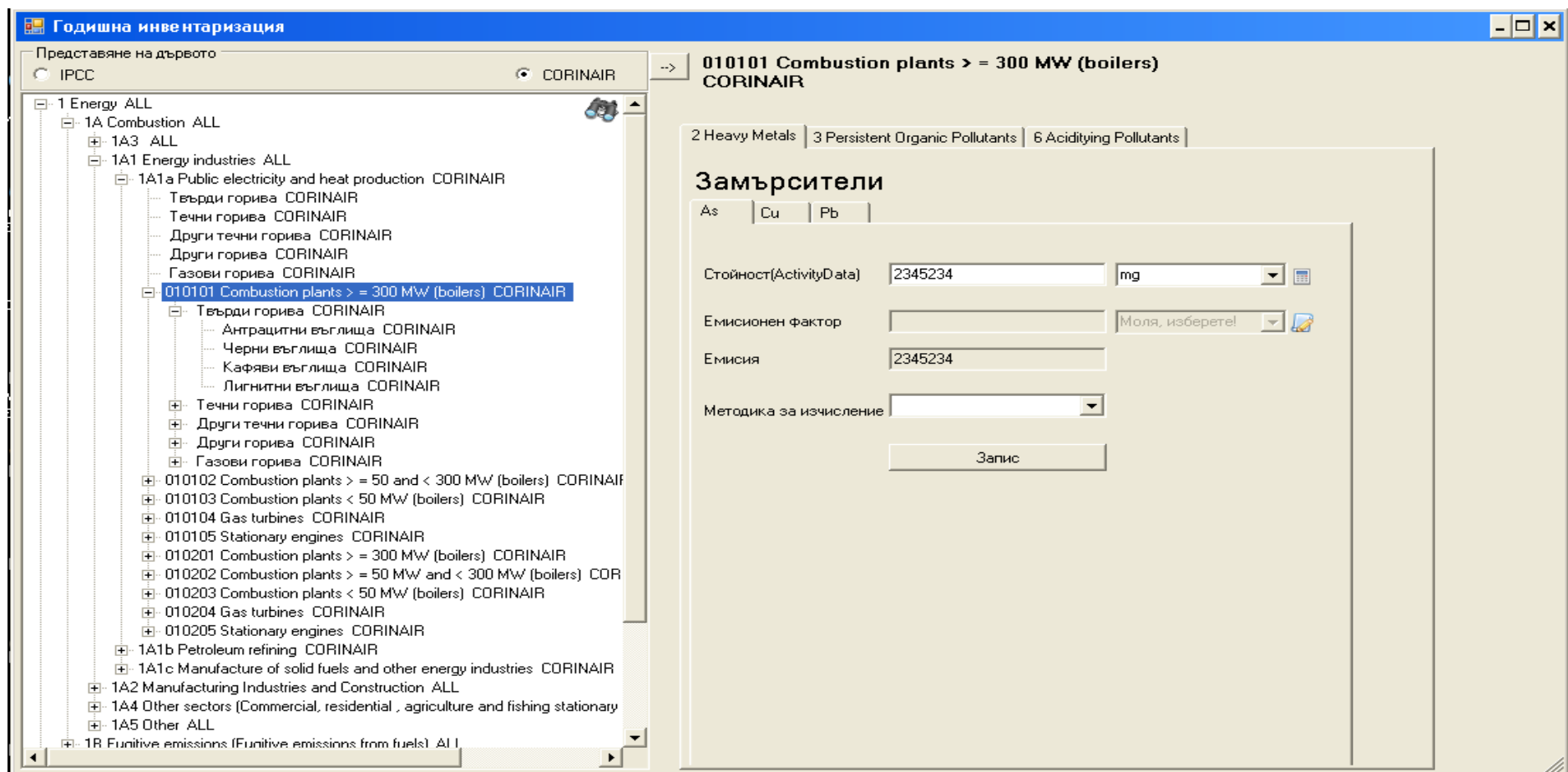
Вход в системата



Основни менюта



Подменю „Инвентаризация” – въвеждане на емисионен фактор и активити дейта по клонове от дървото за дадените замърсители, разделени по групи (5 групи но се виждат само групите чиито замърсители участват в замърсителите на дадения клон)



Бърз достъп за въвеждане на емисионен фактор за даден замърсител от клон в дървото  и конвертор на мерни единици .

Дървото по IPCC

Годишна инвентаризация

Представяне на дървото

IPCC CORINAIR

1.AA.1.A Public Electricity and Heat Production

5 GHGs | 6 Acidifying Pollutants | 7 Tropospheric Ozone Precursors

Замърсители

CH4 | CO2 | N2O

Стойност(ActivityData) Моля, изберете!

Емисионен фактор Моля, изберете!

Емисия

Методика за изчисление

Запис

Търсене в дървото

Годишна инвентаризация

Представяне на дървото
 IPCC CORINAIR

Търсене
Снап код: Тип:

Име
(Английски)

1A1 Energy industries ALL

2 Heavy Metals | 3 Persistent Organic Pollutants | 6 Acidifying Pollutants

Замърсители

As | Cu | Pb

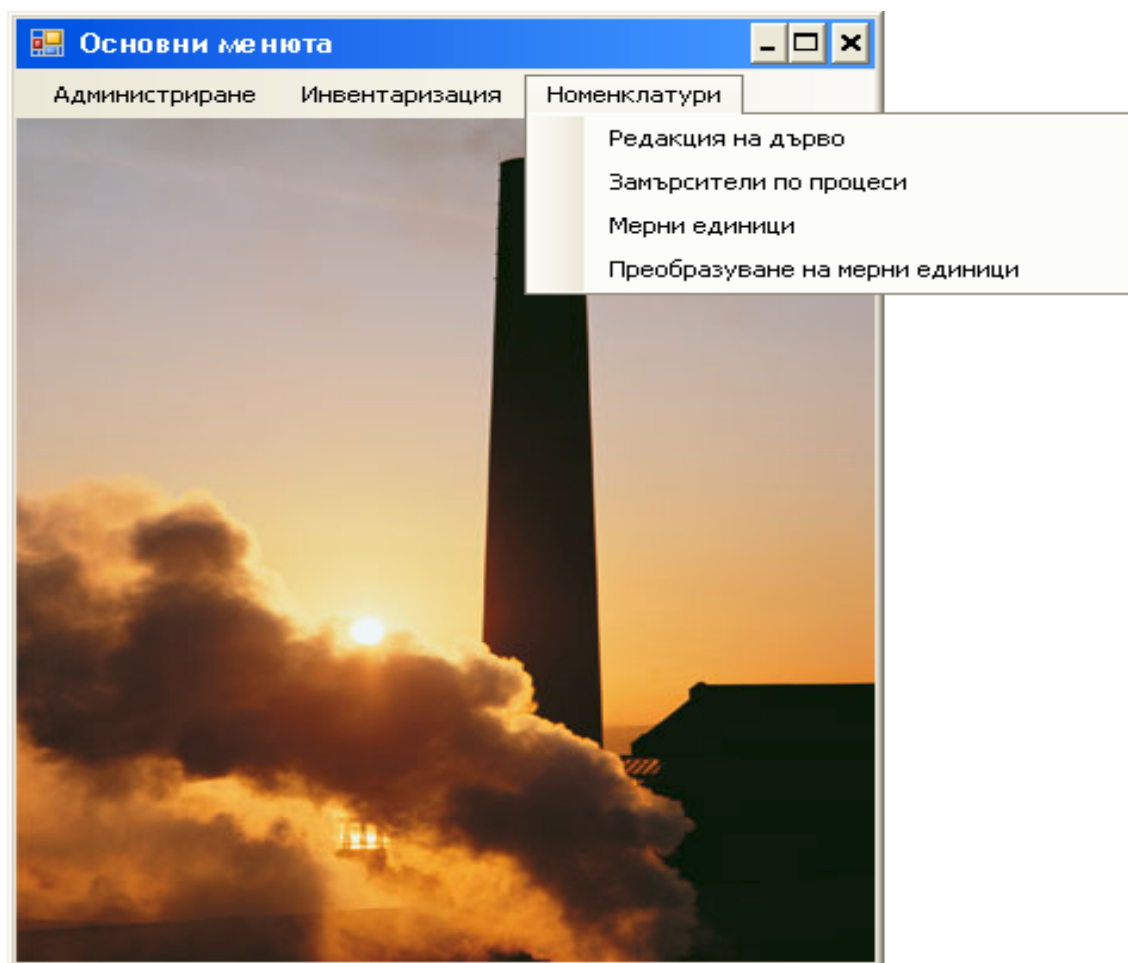
Стойност(ActivityData) Моля, изберете!

Емисионен фактор Моля, изберете!

Емисия

Методика за изчисление

Меню „Номенклатури“



Подменю редакция на дървото – тук можем да настройваме дървото да включваме нови клонове да местим на горе на долу вече съществуващи да редактираме и т.н

Редакция на дървото за инвентаризация

- ⊕ 1 Energy ALL
- ⊖ 2 Industrial Processes ALL
 - ⊖ 2A Mineral products ALL
 - ⊖ 2A1 Cement production CORINAIR
 - 040612 Cement (decarbonizing) CORINAIR
 - ⊖ 2A2 Lime production CORINAIR
 - 040614 Lime (decarbonizing) CORINAIR
 - ⊕ 2A3 Limestone and dolomite production CORINAIR
 - ⊕ 2A4 Soda ash production and sodium zeolite production CORINAIR
 - ⊕ 2A5 Asphalt roofing materials CORINAIR
 - ⊕ 2A6 Road paving with asphalt CORINAIR
 - ⊕ 2A7 Other including non fuel products CORINAIR
 - ⊕ 2B Chemical industry ALL
 - ⊕ 2C Metal production CORINAIR
 - ⊕ 2D Other productions ALL
 - ⊕ 2E Production of POPs CORINAIR
 - ⊕ 2F Consumption of POPs and heavy metals CORINAIR
 - ⊕ 2G Other production, consumption, storage, transportation or handling of bulk products (please specify) CORINAIR
- ⊕ 3 Solvent and other product use ALL
- ⊕ 4 Agriculture ALL
- ⊕ 5 LULUCF ALL
- ⊕ 6 Waste ALL
- ⊕ 7 Other CORINAIR

Нов Клон	Ctrl+N
Редакция	Ctrl+C
Изтриване	Shift+Del
Отрежи	Ctrl+C
Постави	Ctrl+V
Премести надолу	Ctrl+Z
Премести нагоре	Ctrl+A

„Замърсители по процедури” – въвеждане и редакция на замърсители по клон от дървото и въвеждане на емисионния фактор за тях.

Инвентаризирани замърсители

1 Energy ALL

- 1A Combustion ALL
 - 1A3 ALL
 - 1A1 Energy industries ALL
 - 1A1a Public electricity and heat production CORINAIR
 - Твърди горива CORINAIR
 - Течни горива CORINAIR
 - Други течни горива CORINAIR
 - Други горива CORINAIR
 - Газови горива CORINAIR
 - 010101 Combustion plants > = 300 MW (boilers) CORINAIR
 - Твърди горива CORINAIR
 - Антрацитни въглища CORINAIR**
 - Черни въглища CORINAIR
 - Кафяви въглища CORINAIR
 - Лигнитни въглища CORINAIR
 - Течни горива CORINAIR
 - Други течни горива CORINAIR
 - Други горива CORINAIR
 - Газови горива CORINAIR
 - 010102 Combustion plants > = 50 and < 300 MW (boilers) CORINAIR
 - 010103 Combustion plants < 50 MW (boilers) CORINAIR
 - 010104 Gas turbines CORINAIR
 - 010105 Stationary engines CORINAIR
 - 010201 Combustion plants > = 300 MW (boilers) CORINAIR
 - 010202 Combustion plants > = 50 MW and < 300 MW (boilers) CORINAIR
 - 010203 Combustion plants < 50 MW (boilers) CORINAIR
 - 010204 Gas turbines CORINAIR
 - 010205 Stationary engines CORINAIR
 - 1A1b Petroleum refining CORINAIR
 - 1A1c Manufacture of solid fuels and other energy industries CORINAIR
 - 1A2 Manufacturing Industries and Construction ALL
 - 1A2a Stationary combustion in manuf. ind. and construction: iron and...

Антрацитни въглища CORINAIR

Замърсители по дейности

Група: Heavy Metals

Замърсители:

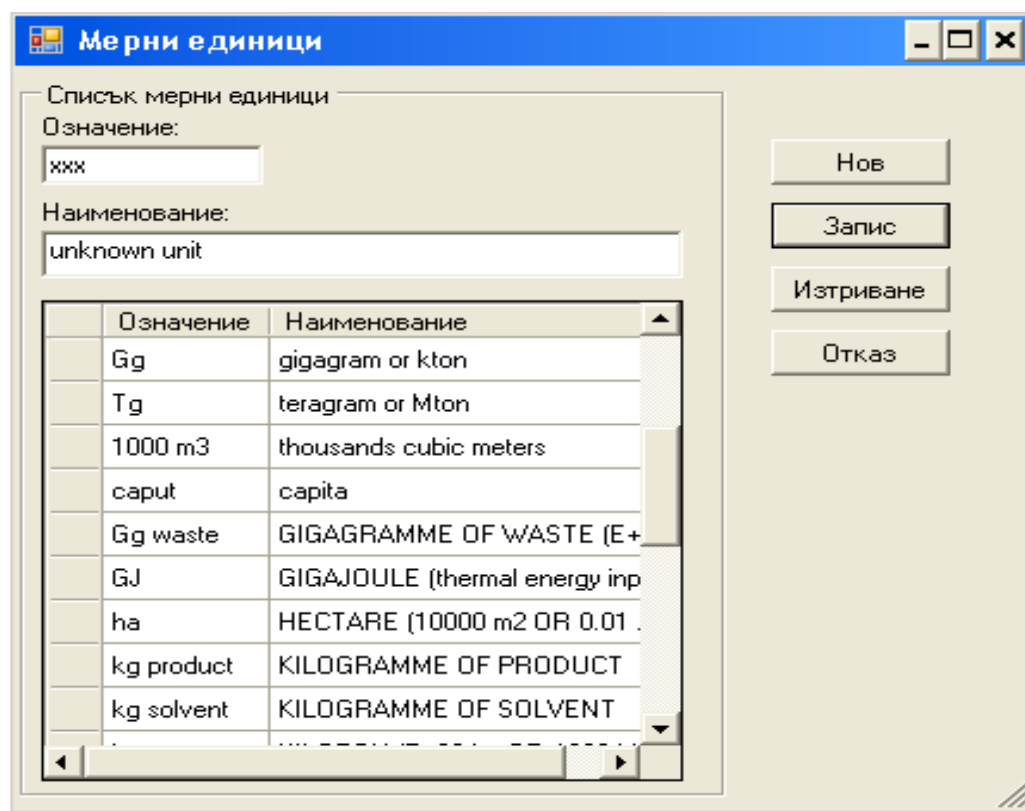
<input checked="" type="checkbox"/>	As
<input type="checkbox"/>	Cd
<input type="checkbox"/>	Cr
<input checked="" type="checkbox"/>	Cu
<input type="checkbox"/>	Hg
<input type="checkbox"/>	Ni
<input checked="" type="checkbox"/>	Pb
<input type="checkbox"/>	Se
<input type="checkbox"/>	Zn


Емисионен фактор

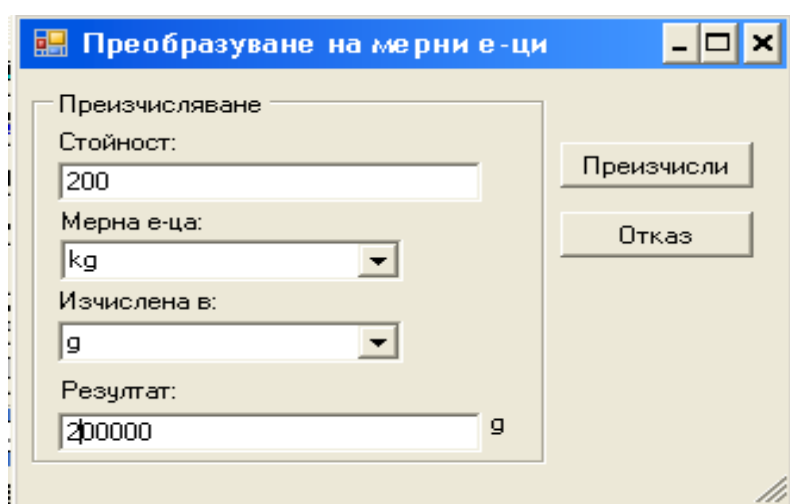
Стойност: Мерна е-ца:

Запис
Изчисти
Отказ

„Мерни единици” – въвеждане и редакция на мерни единици.



„Преобразуване на мерни единици” – калкулатор за преобразуване на мерни единици. До него има бърз достъп от формите  като прихваща стойностите от полетата за които се извиква както и зададената мерна единица, като предлага възможност да се преобразува в друга мерна единица и да се върне като стойност на полето за което се извиква.



Annex 30: Contract for project 4 (F-gases)

Annex 31: Contract with Energy Institute

received in Cyrillic

Annex 31a: Company information



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E- mail: office@eninbg.com



COMPANY INFORMATION

BACKGROUND

Energy Institute is a joint-stock company dedicated to providing science and technology-based solutions in the field of energy, environmental protection and climate change. To carry out its mission, the **Institute** implements a wide program for scientific research, technology development, designing and consulting services.

The founders of the Institute - experts with unique background and rich experience in the research and engineering activities decided in 2001 to establish a new company oriented mainly to providing scientific, designing and consulting services in the field of energy and environment.

PERSONNEL

The educational background of the company officers is mainly in electrical, thermal and mechanical engineering, and environmental-related disciplines. Most of the officers have scientific degrees and honors, and during the last decades have worked as senior research associates and heads of departments in research and design organizations of the Bulgaria Energy Sector.

Energy Institute's staff is working practically in all fields of the energy and power sector, such as energy and power planning, nuclear power, thermal power and co-generation, electricity, heat and natural gas transmission and distribution networks, energy efficiency, development of renewable energy, protection of the environment and climate change.

The founders and the personnel of the **Institute** have vast experience in research, survey and design activities gained in the restructuring, privatization and rehabilitation of the Bulgarian energy sector that have taken place in the last decades. They have worked on many programs and projects supported or financed by various foreign institutions such as EU PHARE program, US Trade and Development Program, WANO; banks like The World Bank, EBRD, and the US Exim Bank. Various multilateral activities and tasks are completed in collaboration with world wide-known companies like Westinghouse, BELGATOM, EdF, ENEL, Tractabel, Siemens, Entergy - US, Fichtner – Germany, Risk Audit – Germany, GFA-terra systems – Germany, DHV – The Netherlands, Bechtel - US, AEA Technology - UK, POWERGEN – UK, Serco Assurance - UK, IVO and ENPRIMA – Finland, CEEC – Japan, NIRAS – Denmark, .

ACTIVITIES OF THE COMPANY

Within 7 years since its establishment the company has developed more than 200 projects in the field of energy planning, energy efficiency, the nuclear and thermal energy, co-generation, power transmission and distribution, district heating, energy chemistry, protection of the environment and climate change.

The specific activities offered by the **Institute's** divisions are listed below.

Energy Systems

The division is specialized in consulting and engineering services in the areas of transmission and distribution systems. The division carries out energy and power systems analyses and planning, preliminary studies, feasibility studies and conceptual and detailed designing of substations, power plant switch yards and auxiliaries, overhead transmission lines, urban networks, automation, control and remote control, as well as development of tender documentation and assessment of tenders, equipment selection and work supervision of projects in Bulgaria and abroad.

The energy efficiency, renewable energy sources, co-generation and environmental policy analysis, energy system environmental impact assessment, climate change, greenhouse gas emissions inventories, greenhouse gas mitigation policy and measures and emissions projections and approximation of Bulgaria energy and environmental legislation to the EC legislation complement the Division profile.

Basic and construction design of the Wind Energy Parks, environmental and construction permitting for the wind parks and independent construction and design consulting services and supervision of wind energy projects are among the activities of the Division.

A unit within this division has been established to carry out research, analysis and consultancy in the environmental and **climate change** related matters. This unit has been entirely responsible for the preparation of the First, Second, Third and Fourth National Communications on Climate Change, as well as for compiling and submitting of the National Greenhouse Gases (GHG) Inventories for the years 1988 – 2005. In addition, the unit advises the Governmental officials on national policies and measures for reducing GHG emissions in compliance with the international treaties; and has developed the First National Action Plan on Climate Change approved by the Bulgarian Government in 2000. The Second National Climate Change Action Plan was developed in 2003-2004 and was approved by the Government. Two sections of the National Environmental Strategy with Action Plan - Energy and Climate Change were developed in 2003-2004 by Energy Institute experts. The criteria for assessing JI projects in Bulgaria were also developed with the help from the Institute's experts. Large number of in-depth reviews of other countries' National Communications and GHG Inventories were carried out by experts of the Institute.

Conventional Energy, Fossil Fuels and Renewables

The main areas of its activities have been studies and design work for conventional and renewable energy, thermal power projects (electric and co-generation thermal power plants, centralized and district heating systems, and boiler plants). Activities cover feasibility studies, technical and detailed design, consultancy, assistance and expert support, project management and general construction services, planning, technical and economic evaluations and budget estimation, organization of operations and maintenance, equipment qualification analysis, assessment of rest lifetime, quality assurance, on-site supervision and commissioning, acceptance testing and start-up.

Nuclear Energy

It carries out study and design of nuclear power plants and research nuclear reactors, conducts different research studies; provides the Bulgarian Nuclear Regulatory Authority with technical support, and delivers technical support for the modernization program of Kozloduy NPP. The main activities and functions are:

- Feasibility studies.
- Development of concepts and strategies for the nuclear energy sector.
- Development and implementation of nuclear facilities modernization program.
- Technical assistance to the Bulgarian Nuclear Regulatory Agency.
- Regulations and standards development.
- Implementation of programs for modernization of NPP "Kozlodouy".
- Design of equipment and systems for NPP.
- Project management and delivery of consultancy and expert advice.
- Research and analysis in the field of NPP safety.
- Implementation of thermo-hydraulic and emergency analyses.

Hydro Energy

At present the Hydro Energy Division efforts are directed at promoting utilization of the country hydro potential through construction of small and micro hydro power plants. The Hydro Energy Division's main priority is to consult engineers specializing in all aspects of water resources development. The division carried out technical and economic studies, master plans, feasibility reports, preparation of designs and contract documents, supervision of construction, erection and commissioning on site for schemes for mini and micro hydro plants.

High-tech Services

The relevant activities of the division cover:

- Development of hardware and software projects for technological process control.
- Implementation of digital control systems.

- Service of digital control systems (in operation).
- Implementation of optimization procedures and regimes for equipment and facilities in energy sector.
- Before and after repairing tests of energy facilities (units, boilers, turbines).
- Development and implementation of water chemistry regimes in power plants.

QUALITY MANAGEMENT SYSTEM

There is a quality management system (QMS) implemented in the Institute, which is part of the general management strategy of the company. The system is developed in accordance with the requirements of the Bulgarian State Standard (BDS) EN ISO 9001:2001 – an approved Bulgarian standard based on ISO 9001:2000 (pertaining to the requirements for membership of the Bulgarian State in the European Committee for Standardization). The QMS in the Institute has been awarded an internationally-recognized certificate for compliance with ISO 9001:2000 issued by UKAS QM, UK; DAR, Germany and RvA, Netherlands and recertified in 2009 by Bureau Veritas Certification.

Contacts: Dr. Christo Christov, Executive Director
Energy Institute, 20 Joliot – Curie Str., Sofia 1113, Bulgaria
Phone: (359 2) 866 91 20, Fax (359 2) 963 40 38, GSM (359) 888 28 38 89
E-mail: christov@eninbg.com; office@eninbg.com

Annex 31b to h: CVs - Christo Christov, Gergana Cheshmedjieva, Sophia Nenova, Irina Atanasova-Stoycheva, Rositsa Karamfilova, Vania Grigorova, Teodor Dimitrov Ivanov

CURRICULUM VITAE

- 1 **Family name:** Christov
 2 **First names:** Christo Konstantinov
 3 **Date of birth:** 15 September 1948
 4 **Nationality:** Bulgarian
 5 **Civil status:** Married

6 Education:

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained:
Moscow Institute of Power Engineering (Russian Federation) (September 1973 - December 1976)	Ph. D. in Power Systems and Control
Moscow Institute of Power Engineering (Russian Federation) (September 1967 - December 1973)	M.Sc. in Power Systems Cybernetics
Academy of Economics (Svishtov, Bulgaria) (September 2006 - January 2008)	M.Sc. in Industrial Administration and Management

Language	Reading	Speaking	Writing
English	1	1	1
Russian	1	1	1

7 Language skills: (indicate competence on a scale of 1 to 5 (1 = excellent; 5 = basic))

8 Membership of professional bodies:

- Union of scientists of Bulgaria
- National Coordination Centre for Global Change

9 Other skills: (e.g. computer literacy, etc.)

- Windows Office (Word, Excel and others) and computer modelling of energy and power systems

10 Present position: Executive director, Energy Institute

11 Years within the firm: 8

12 Key qualifications:

- energy and power systems planning and control,
- energy and environmental policy analysis,
- restructuring and deregulation of the energy sector,
- energy efficiency,
- climate change,
- greenhouse gas mitigation policy and measures and emissions projections,
- greenhouse gas emissions inventories development and official reviews,
- EU Emissions Trading System, monitoring and verification of emissions,
- JI and CDM projects development,

- energy system and power plants environmental impact assessment,
- IPPC permitting and monitoring, legislation, methods and implementation
- analysis of inter system tie-lines operation,
- power system transients and steady-state stability,
- start-up of nuclear power units and intersystem lines,

The major projects, studies and researches:

- Approximation of Bulgaria energy and environmental legislation to the EC legislation - 2002;
- Restructuring of the Bulgaria energy sector - 2000;
- Parallel operation of Bulgaria and UCTE Power systems - 1996;
- Medium and long-term projections of fuel and energy demand in Bulgaria - 1995;
- Strategic planning of Bulgaria energy system development - 2005;
- National Energy Balance - Projection of the development of the energy sector in Bulgaria until the year 2025 - 2006;
- Inventory of GHG emissions for the period 1988 – 2005 in Bulgaria - `1996 - 2007;
- First, Second, Third, Forth and Fifth National Communications of Bulgaria to the UN Framework Convention on Climate Change 1998 - 2009;
- Initial Report of Republic of Bulgaria to the UN Framework Convention on Climate Change – 2007;
- Demonstrable Progress Report of Bulgaria to the UN Framework Convention on Climate Change - 2006;
- Country study to address climate change – GHG inventory, mitigation policies and measures and GHG emission projections 1993 - 1998;
- Feasibility Study on the Utilization of Waste Wood for Centralized Heat Supply to Buildings in Bulgaria, 2004;
- Feasibility studies for Joint Implementation projects in fuel switch, co-generation and heat transmission and distribution in Sofia, Plovdiv, Rousse, Pernik and Gabrovo heating companies 2000 - 2006;
- National Strategy for the Environment and Action Plan, 2004;
- First and Second National Climate Change Action Plan, 1999, 2004.
- Program for Implementation of Directive 2001/80/EC for Large Combustion Plants, 2002;
- HV Power transmission system expansion planning - 2008;
- Intersystem lines and electricity export to Turkey, Greece, Macedonia, Yugoslavia, etc. 1980 - 2000
- Rehabilitation of power plants, lines and substations – 1992 -1994;
- Emergency control and automation of electric power system- 1986 ;
- Start up tests of inter system tie-lines and analysis of inter system tie-lines operation 1986;
- Start-up of the nuclear power units 1978 - 1992;
- Development of applications for TPP Varna, TPP Marica East 3 and TPP Kazanlak IPPC complex permits - 2004;

13 Specific experience in the region:

Country Bulgaria	Date from - Date to
Joint ventures and collaboration with foreign companies	
<ul style="list-style-type: none"> • Energy Research Institute, Moscow, Russia; 	1980 – 1987
<ul style="list-style-type: none"> • Joint venture with Belgatom (Belgium) and IVO (Finland) consortium for improvement of technical records and emergency procedures in NPP Kozloduy – WANO 6-months program; 	1991 – 1992
<ul style="list-style-type: none"> • Study on high voltage transmission network; collaborator to FICHTNER – Germany. The project is financed by PHARE; 	1994 -1996
<ul style="list-style-type: none"> • Remote control in electricity distribution networks - collaborator to SCHLUMBERGER (France); 	1995
<ul style="list-style-type: none"> • Kozloduy NPP primary frequency control – collaborator to EdF (France). The project is financed by PHARE; 	1996
<ul style="list-style-type: none"> • Joint venture with EdF CLI (France) – Electricity study for NPP Bourge (France) 	1995
<ul style="list-style-type: none"> • Organizational and Technical measures for monitoring and control of electric energy losses in the electricity transmission and distribution systems – collaborator to CESI and ENEL (Italy) and TRACTEBEL (Belgium). The project is financed by PHARE; 	1997
<ul style="list-style-type: none"> • Approximation of Environmental Legislation in Bulgaria with EU Pollution Control Requirements – collaborator to Carl Bro International and Dk-TEKNIK (Denmark); 	1998
<ul style="list-style-type: none"> • National Climate Change Study for Bulgaria – US DOE and US EPA US Country Study Programme to Address Climate Change 	1993 – 1998
<ul style="list-style-type: none"> • Second National Climate Change Action Plan, – collaborator to Dutch consortium – DHV Environment and Infrastructure, ENC and CAP-SD; 	2004
<ul style="list-style-type: none"> • National Allocation Plan for participation of Bulgaria in the EU ETS – collaborator to DHV Environment and Infrastructure; 	2005 -2006
<ul style="list-style-type: none"> • Bulgaria: Nikopol Biomass Project - Technical Due Diligence, subcontractor to ENPRIMA, Finland 	2009
<ul style="list-style-type: none"> • Studies and projects for the World Bank, EBRD, UNDP, IAEA, US DoE, US EPA, and leading power companies (E-ON, Montedison, Entergy, AES Horizons, etc.) 	1992 - 2009

14. Profession Experience Record:

Date:	2002 now
Location	Sofia, Bulgaria
Company	Energy Institute
Position	Executive Director
Description	Operational and scientific management of the Company
Date:	1999 2002
Location	Sofia, Bulgaria
Company	Energoproekt
Position	Head of Complex Information Services and System Analysis Department
Description	Operational and scientific management of the department, Study, Researches and Forecasts on Climate Change, Energy System Expansion, Fuel and Energy Balances, Energy Efficiency and other system aspects

Date:	1996 1999
Location	Sofia, Bulgaria
Company	Energoproekt
Position	Head of Power Systems Research Division
Description	Operational and scientific management of the Division
Date:	1999 2001
Location	Sofia, Bulgaria
Company	Energoproekt
Position	Chief scientific investigator of the IAEA Coordinated Research Project “Role of Nuclear Energy in Meeting International Goals on GHG Emission Reduction”
Description	Management of the project
Date:	1996 1997
Location	Sofia, Bulgaria
Company	National Electric Company
Position	Vice Chairman of the Board of Directors
Description	Strategic management of the Company
Date:	1993 1999
Location	Sofia, Bulgaria
Company	Energoproekt
Position	Co-ordinator and manager of the Bulgaria Study to Address Climate Change and the project on National Climate Change Action Plan under the US Countries Studies Program (CSP) to Address Climate Change.
Description	Scientific co-ordination and management
Date:	1990 1999
Location	Sofia, Bulgaria
Company	Energoproekt
Position	Head of System Analysis Department
Description	Operational management of the department, Study, Researches and Forecasts on Climate Change, Energy System Expansion, Fuel and Energy Balances, Energy Efficiency and other system aspects

Date:	1986 1990
Location	Sofia, Bulgaria
Company	Energoproekt
Position	Senior research associate
Description	Power system control and automation
Date:	1979 1986
Location	Sofia, Bulgaria
Company	Energoproekt
Position	Research associate
Description	Power system control and automation
Date:	1976 1979
Location	Sofia, Bulgaria
Company	Energoproekt
Position	Research Associate
Description	Power Systems and Networks
Date:	1973 1976
Location	Sofia, Bulgaria
Company	Direct current motors enterprise
Position	Automation engineer
Description	Production processes automation improvement

15. Others:

Reports at workshops and conferences, and country reviews in Argentina, Austria, Belgium, Canada, Czech Republic, China, Finland, France, Germany, Greece, Hungary, Indonesia, Ireland, Italy, the Netherlands, Poland, Slovakia, Slovenia, Switzerland, Romania, Russia, USA

16. Publications:

Publications: Author and co-author of more than 90 articles published in Bulgaria, the former USSR, Poland, Belgium, Hungary, Austria, etc on specific energy and environmental problems.

Certification:

I, the undersigned, certify that to the best of my knowledge, these data correctly describe me, my qualifications and my experience.



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Gergana Cheshmedjieva**

Address(es) 136 "Tsar Boris III" Blvd., 1618 Sofia, Bulgaria

Telephone(s) +359 2 940 64 26 Mobile:

Fax(es) +359 2 955 90 15

E-mail cheshmedjieva@nfp-bg.eionet.eu.int

Nationality Bulgarian

Date of birth 22.02.1974

Work experience

Dates	2005 and current
Occupation or position held	Head of "Integrated Pollution Prevention and Control (IPPC) Permits" Department
Main activities and responsibilities	<ul style="list-style-type: none">- IPPC permitting (issuing, reconsideration and updating of IPPC permits), including implementation of Best Available Techniques (BAT);- Annual reporting on IPPC permits implementation, including public register of the permits' monitoring results;- Reporting according to Regulation 166/2006 on European Pollutant Release and Transfer Register (E-PRTR), including electronic reporting register;- Development of national legislation and transposition of EU legislation;- Development of guidance documents and training of experts connected with the permitting and reporting procedures.
Name and address of employer	Executive Environment Agency, 136 "Tsar Boris III" Blvd, 1618 Sofia, Bulgaria
Type of business or sector	Government
Dates	2004 - 2005
Occupation or position held	Senior expert, "IPPC Permits" Department
Main activities and responsibilities	<ul style="list-style-type: none">- IPPC permitting, including IPPC applications revision, site visits, preparation of draft permits and technical assessment document, implementation of BAT, preparation of permits decisions;- Annual reporting on IPPC permits implementation;- Participation in the development of guidance documents and legislation connected with IPPC permitting;- Participation in trainings connected with the permitting and reporting procedures.
Name and address of employer	Executive Environment Agency, 136 "Tsar Boris III" Blvd, 1618 Sofia, Bulgaria
Type of business or sector	Government
Dates	2002 - 2004

Occupation or position held Junior expert, "IPPC Permits" Department

Main activities and responsibilities - IPPC permitting, including IPPC applications revision, site visits, preparation of draft permits and technical assessment document, implementation of BAT, preparation of permits decisions;
- Annual reporting on IPPC permits implementation.

Name and address of employer Executive Environment Agency,
136 "Tsar Boris III" Blvd, 1618 Sofia, Bulgaria

Type of business or sector Government

Education and training

Dates 2004

Title of qualification awarded PhD in Fine organic and biochemical synthesis technology

Principal subjects/occupational skills covered Fine organic and biochemical synthesis technology, Synthesis and investigation of the properties and application of luminophores

Name and type of organisation providing education and training University of Chemical Technology and Metallurgy, Sofia, Bulgaria

Dates 2002

Title of qualification awarded MSc in Environmental protection and Sustainable development

Principal subjects/occupational skills covered Environmental protection and Sustainable development

Name and type of organisation providing education and training University of Chemical Technology and Metallurgy, Sofia, Bulgaria, The Free University Brussels (Belgium), The International Centre for Technical Research (London, UK), The Queen's University of Belfast (UK), The "D. Tsenov" Economic University (Svishtov, Bulgaria)

Dates 1998

Title of qualification awarded MSc in Chemical technology

Principal subjects/occupational skills covered Chemical engineering, Organic synthesis technology

Name and type of organisation providing education and training University of Chemical Technology and Metallurgy, Sofia, Bulgaria

Dates 1992

Name and type of organisation providing education and training 125 Foreign languages high school, Mladost, Sofia

Personal skills and competences

Mother tongue(s) **Bulgarian**

Other language(s) **English, Russian**

Self-assessment

European level ()*

English

Russian

Understanding		Speaking		Writing	
Listening	Reading	Spoken interaction	Spoken production		
C1	C1	B2	B2	C1	
C1	C1	B2	B2	B2	

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences	Team work experience.
Organisational skills and competences	Organisational experience, currently leading the "IPPC Permits" Department, Executive Environment Agency, consisting of 11 experts.
Technical skills and competences	-
Computer skills and competences	Microsoft Office (Word, Excel and PowerPoint)
Artistic skills and competences	-
Other skills and competences	-
Driving licence	Yes, B Category
Additional information	-
Annexes	-



Europass Curriculum Vitae

Insert photograph. Remove heading if not relevant (see instructions)

Personal information

First name(s) / Surname(s)

Sophia Nenova

Address(es)

Serdika 23,entr.D, floor.4, app.107, Sofia

Telephone(s)

Fax(es)

E-mail

sooffii@abv.bg
snenova@nfp-bg.eionet.eu.int

Nationality

Bulgarian

Date of birth

20.03.1975

Gender

female

Desired employment / Occupational field

Registry administrator

Work experience

Dates

November 2006 onwards

Occupation or position held

Expert in the Emission trading permit department

Main activities and responsibilities

Administrator of National registry

Name and address of employer

Executive Environment Agency
Blvd.Tzar Boris III №138

Type of business or sector

State Administration

Dates

10.02.2006-20.11.2006

Occupation or position held

Office -coordinator

Main activities and responsibilities

Translation and legislation of documents

Name and address of employer

Arte.doc, Blvd.Vassil Levski

Type of business or sector

Translation services

Education and training

Dates

1999-2004

Title of qualification awarded

Bachelor

Principal subjects/occupational skills covered

Organic Chemical Technology

Name and type of organisation providing education and training

University of Chemistry, Chemical Technologies and Metallurgy

Personal skills and competences

Mother tongue(s) **Bulgarian**
 Other language(s) **French, English**

Self-assessment
European level ()*

French
English

Understanding		Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production	
	C1		C1		C1		C1
	B1		B1		B1		B1

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences Team work, Motivation, Communication
 Organisational skills and competences
 Technical skills and competences
 Computer skills and competences Internet, Microsoft office programmes, E-mail, HTML
 Artistic skills and competences
 Other skills and competences
 Driving licence Yes, Category B, clean

Additional information

Annexes

IRINA ATANASOVA – STOYCHEVA

Place of Birth: Sofia

Contact Phone: 0888 821 928

Date of Birth: 5 August 1976

E-mail: iratanasova@abv.bg

SUMMARY OF QUALIFICATIONS AND SKILLS:

EDUCATION & TRAINING

- MSc. in Mass Communications / Public Relations
(*Sofia University, Journalism and Mass Communications Faculty*)
- Small- and Mid-Scale Business Administration and Management
(*Vocational qualification at The College of North-West London*)
- Applied Psychology
(*The Bulgarian Society of Young Psychologists*)

FOREIGN LANGUAGE COMMAND

- English
(*The College of North-West London*)
- German
(*The Foreign Trade Personnel Training Centre at the Ministry of Economy / CECIOS (European Council of Management), The German-Bulgarian Chamber of Industry and Commerce*)
- Russian

OTHER COMMANDS & SKILLS

- Practical Word Processing - First Class Certificate
(*Pitman Examinations Institute - London*)
- MS Excel
(*The Training Centre at the Bulgarian Chamber of Commerce*)
- MS Power Point
(*The Training Centre of the Bulgarian Chamber of Commerce*)
- MS Access
(*The Training Centre at the Bulgarian Chamber of Commerce*)

- MS Office, Internet-Based Applications
(RAN 2001 Training Centre)

CAREER PATH

- Feb. 2006 - July 2009* **Vetroresina Balcan Ltd.**
Subsidiary of **(MITSUI POWER PROJECTS LLC Sub-Contractor, Vetroresina Enginia Group)**
Communications Coordinator for Maritsa East-1 (BG), Maritsa East-2 (BG), Megalopolis (GR), Maasvlakte-Rotterdam (NL) TPP Rehabilitation Projects
- Oct 2002 - April 2005* **Sofiyska Voda AD, Communications Department**
Group) **(Sofia Water Company, Subsidiary of United Utilities Group)**
Assistant Manager in External Communications
Assistant Manager in Media Relations
- Oct. 2001 - Sept. 2002* **“Robert Koch” Medical Centre, Head Office**
Technologies - GWT) **(Subsidiary of the German Society for Science and Technologies - GWT)**
Public Relations Executive
- June 1999 - Sept. 2001* **Balkan Audio Centre**
Media and External Communications Officer
- 1998 **Bulgarian National Committee of UNICEF**
Project Assistance (Communications Analyses – Bulgarian Media and the Convention on the Rights of the Child)
- 1996-1997 **Bulgarian Association for Political Marketing and Communications**
Project Assistance (Communications Analyses – Team for Express Analyses within the Presidential Pre-Election and Election Campaigns)



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Rositsa Karamfilova**
Address 136 "Tsar Boris III" Blvd., 1618 Sofia (Bulgaria)
Telephone(s) +35929406415 **Mobile** | +359878201135
Fax(es) +35929559015
E-mail(s) rkaramfilova@nfp-bg.eionet.eu.int
Nationality Bulgarian
Date of birth 20/02/1977
Gender Female

Desired employment / Occupational field

Waste Management

Work experience

Dates 21/02/2005 - 27/04/2010
Occupation or position held expert-Waste department
Main activities and responsibilities Waste management and processing and analysis of information on waste in the country.
Name and address of employer Executive Environmental Agency
 136, "Tsar Boris III" Blvd., 1618 Sofia (Bulgaria)
Type of business or sector Administrative And Support Service Activities

Education and training

Dates 01/03/2002 - 01/03/2005
Title of qualification awarded PhD
Principal subjects / occupational skills covered Environment, sustainable waste management, renewable energy sources
Name and type of organisation providing education and training University of Chemical technology and Metallurgy (University)
 8 St. Kliment Ohridski blvd, 1756 Sofia (Bulgaria)

Personal skills and competences

Mother tongue(s) **Bulgarian**

Other language(s)

Self-assessment
European level ()*

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	

English	C1	Proficient user	C1	Proficient user	B2	Independent user	B2	Independent user	B2	Independent user
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(*) [Common European Framework of Reference \(CEF\) level](#)

Social skills and competences	Good ability to adapt to company environments; Good communication skills at work and leisure activities;
Organisational skills and competences	Sense of organization; Experience in project, e.g;
Computer skills and competences	Good command of Microsoft Office; Ansys; PhotoShop, e.g;
Other skills and competences	Communication, responsibility and accuracy in performing the tasks.
Driving licence(s)	B
Additional information	Participation in projects at the University and work. Issued separate articles and in collaboration with other scientists. I currently stand in the Graduate Business Administration degree.



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Vania Grigorova**

Nationality Bulgarian

Date of birth 09.08.1955

Gender Female

Work experience

Dates **January 2010– on going**

Occupation or position held Executive Director

Name and address of employer Executive Environment Agency at the Ministry of Environment and Water

Type of business or sector Public Administration

Dates **January 2009 – January 2010**

Occupation or position held Executive Director

Name and address of employer Bulgarian Mining and Geology Chamber

Type of business or sector Non profit organisation

Dates **January 2000 – December 2008**

Occupation or position held Director of Directorate "Preventive activities"

Main activities and responsibilities

- Legal drafting, incl. transposition of the environmental [acquis communautaire](#) of the EU regarding tools for prevention of pollution (Environmental Impact Assessment, Strategic Environmental Assessment, Integrated permitting, Environmental Liability), voluntary arrangements for environmental performance (Environmental Management and Audit Schemes, Ecolabelling).
- Public administration – organizing and chairing decision making bodies like Senior Environmental Expert Counsel to the Ministry of Environment and Water; preparing proposals for institutional strengthening and management improvement; elaborating statements on environmental problems for decision making at the highest political level; implementation of the environmental legislation.
- Providing consultations to the business (developers, operators of industrial installations, representatives from professional organizations and NGO) concerning administrative procedures and regimes required by the environmental legislation.
- Project coordination: EU Commission projects – PHARE Programme, Twinning Programme; World Bank projects – Environment and Privatization Support Adjustment Loan (Subject – liability of the State for past environmental damages caused prior privatization).

Main activities and responsibilities	Specific experience in other countries: October 2000: Environmental Performance Review of Romania – Review Mission October 2001: Environmental Performance Review of Albania – Review Mission February 2002: Environmental Performance Review of Macedonia – Review Mission November 2003: Environmental Performance Review of Bosnia&Herzegovina – Review Mission September 2004: Environmental Performance Review of Belarus –Second Review Mission February-March 2007: Twinning Project: Institutional strengthening of the EPA in Malta May 2008: Environmental Performance Review of Kyrgyzstan –Second Review Mission October-November 2008: Twinning Light project: Development, strengthening and harmonisation of environmental legislation and it's enforcement in Jordan
Name and address of employer	Ministry of Environment and Water
Type of business or sector	Public Administration
Dates	July 1995 – January 2000
Occupation or position held	Head of Department “Environmental Impact Assessment and Environmental Auditing”
Main activities and responsibilities	September 1999: Environmental Performance Review of Armenia – Review Mission May 1999: Environmental Performance Review of Ukraine – Assessment Mission
Name and address of employer	Ministry of Environment and Water
Type of business or sector	Public Administration
Dates	December 1990 – July 1995
Occupation or position held	Senior Specialist, Coordinator of Environmental Impact Assessment Procedures
Main activities and responsibilities	
Name and address of employer	Ministry of Environment
Type of business or sector	Public Administration
Dates	December 1998 – December 2008
Occupation or position held	Member of the Ad hoc Expert Group on Environmental Performance Reviews to the Committee of Environmental Policy
Main activities and responsibilities	
Name and address of employer	Economic Commission for Europe of the United Nations (UNECE)
Type of business or sector	International organisation
Dates	June 2004 – May 2008
Occupation or position held	Chair of the Working Group of the UN/ECE Convention on Environmental Impact Assessment in a transboundary context
Main activities and responsibilities	
Name and address of employer	UNECE
Type of business or sector	International organisation
Dates	May 1998 – February 2001
Occupation or position held	President of the Bureau of the UN/ECE Convention on Environmental Impact Assessment in a transboundary context
Main activities and responsibilities	
Name and address of employer	UNECE
Type of business or sector	International organisation

Education and training

Dates **July 1996 – October 1999**
 Title of qualification awarded PhD in Ecology and Protection of the Ecosystems
 Name and type of organisation providing education and training Forestry University – Sofia

Dates **September 1994 - July 1996**
 Title of qualification awarded Post graduate on Environmental Impact Assessment
 Name and type of organisation providing education and training Forestry University – Sofia

Dates **September 1976 - April 1980**
 Title of qualification awarded MSc, Ecology and Protection of Ecosystems
 Name and type of organisation providing education and training Forestry University – Sofia

Dates **November 1995**
 Title of qualification awarded Specialization
 Principal subjects/occupational skills covered Environmental Management Seminars
 Name and type of organisation providing education and training UNDP, Nairobi, Kenya

Dates **July - August 1994**
 Title of qualification awarded Internship - Environmental Assessments
 Name and type of organisation providing education and training University of Minnesota, Minneapolis, USA

Dates **November – December 1992**
 Title of qualification awarded Special Training Course for Environmental Management
 Name and type of organisation providing education and training Japan International Cooperation Agency - Tokio, Sapporo

Personal skills and competences

Mother tongue(s) **Bulgarian**

Other language(s)

Self-assessment

European level ()*

English

German

Russian

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2		C1		B2		B2		B2	
B2		C1		B2		B2		B2	
B2		C1		B2		B2		B2	

(*) *Common European Framework of Reference for Languages*

Annexes

Publications

1. Grigorova V., "EIA - an Early Warning System and an On-going Review Process, "Automatica & Informatics, J. N 5-6, 1994
2. Grigorova V., "EIA Process in Bulgaria, Environmental Impact Assessment, ETP Project for Central and Eastern Europe, 1995
3. Grigorova V., Legal Framework in Bulgaria -Public Participation Information Initiative: Manual of Techniques, EBRD, 1995

4. Grigorova V., Organisation and management of the EIA process, EIA Training Manual, Technical University - Varna, National Centre for distance training, 1997
5. Grigorova V., Methods and Techniques to Improve the EIA, Bulgarian Chemistry and Industry, vol.1-2, 1998
6. Grigorova V., J.Kalchev, Application of Expert Method in Assessing Environmental Impact Statement, Journal of Balkan Ecology, vol.2, No 1, 1999
7. Grigorova V., Chapter 1: "Legal instruments and institutional arrangements for environmental protection", Environmental Performance Review of Armenia, UN/ECE, 2000
8. Grigorova V., Chapter 1: "Legal framework, institutional arrangements and environmental regulations, Environmental Performance Review of Romania, UN/ECE, 2001
9. Grigorova V. and others, Research on the Convention on Environmental Impact Assessment in a Transboundary Context, Hellenic-Bulgarian Cooperation, Center for European Constitutional Law, Athens, Jan.2002
10. Grigorova V., Chapter 1: Policy framework, legal instruments and institutional arrangements, Environmental Performance Review of Albania, UN/ECE, 2002
11. Grigorova V., Chapter 1:Policy and legal framework and regulatory instruments; Chapter 2: Institutional arrangements, Environmental Performance Review of FYROM, UN/ECE, 2002
12. Grigorova V., Chapter 1:Policy, legal and institutional framework, Environmental Performance Review of B&H, UN/ECE, 2004
13. Grigorova V., Chapter 1: The decision making framework and implementation of policies, strategies, plans and legislation, Environmental Performance Review of Belarus - Second Review, 2005
14. Grigorova V., Chapter 2: Mechanisms for compliance and enforcement, Environmental Performance Review of Kyrgyzstan - Second Review, under approval

CURRICULUM VITAE

Name: Teodor Dimitrov Ivanov
Sex: male
Nationality: Bulgarian
Home address: 1124, Sofia, 36 "Hkan Omurtag" Str.;
M. phone + 359 898 880 864

Date and place of birth: 8 July 1945, Sofia
Marital status: married

Education: Higher Politechnical Institute - Sofia, completed year 1972
Qualification Obtained: Dipl. mechanical engineer

Organisation belong: MINISTRY OF ENVIRONMENT AND WATER
Directorate "Climate change policy"

Position: State expert,
National IPCC Focal Point, since year 1995.

Career history: /Years attended, Organisations, positions/

From 1987 up to now - MINISTRY OF ENVIRONMENT AND WATER
expert, senior expert, state expert, chief of department

From 1983 to 1987 - MINISTRY OF MACHINEBUILDING -
technical documentation editor

From 1972 to 1983 - "Beer Production Factory" - Chief of
technical department, Director

Work experience Profile: Development and management of air protection strategy and policy; identification of atmosphere pollution gases and its inventory; application of environmental control technology; energy efficiency improving; preparation of different sort of formal (legislative) documents as; environmental lows, guidance, regulations, instructions, standards, etc.

Some key qualifications:

1992 - Completed "Training course on Environmental Conservation", organised by JICA Tokyo, Japan;

1993 - Training course on "Industrial Contamination of Environment" - "KARL DUISBERG INSTITUTE", Germany;

1993 - Training on "Energy Sector and Ecology in Eastern Europe" - "Economy Institute for Development" - Word Bank;

1996 - Training course "Emission inventory and Permissions Issuing" and "Observation and Executing of Legislative Acts" - USEPA, USA;

2000 – Completed course “Climate Change and Development” – USAID, IIE;

2002 – Qualification course “State Administration Capacity Improving for Optimisation to put in use of the EC Pre-accession Funds” – New Bulgarian University.

Criminal record: none

Language

and other skills: English - good
Russian - good
German - poor
Bulgarian - mother tongue
Computer literacy

I hereby declare that the statement given above is true and correct.

May, 2010

Signature:

A handwritten signature in black ink, consisting of a stylized first letter followed by a series of connected loops and a final flourish.