SECTOR FICHE – IPA National programmes / Component I

1. **IDENTIFICATION**

Title	Environment and Climate Change
MIPD Sector Code	6. Environment and Climate Change
Sequence no.	8
ELARG Statistical code	Measure 1: 03-27
	Measure 2: 03-27
	Measure 3: 03-27
	Measure 4: 03-27
	Measure 5: 03-27
DAC Sector code	41010
Total cost	2012: EUR 2,910,000
	2013: EUR 2,300,000
	TOTAL: EUR 5,210,526
EU contribution	2012: EUR 2,610,000
	2013: EUR 2,185,000
	TOTAL: EUR 4,795,000
Management mode	Decentralised
Decentralised mngmt:	The Central Financing and Contracting Department
Responsible Unit or National	(CFCD) will be the implementing agency and will be
Authority/Implementing Agency(ies)	responsible for all procedural aspects of the tendering
	process, contracting matters and financial management
	including payment of project activities. The Head of CFCD
	will act as the Programme Authorising Officer (PAO) of the
	project.
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Implementation	Ministry of Environment and Physical Planning (MoEPP),
management	Unit for Instrument for Pre-accession Assistance (IPA)
B	
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Implementing modality	Projects
Zone benefiting from the	Nationwide
action(s)	

2. RATIONALE

2.1 LINKS WITH NATIONAL SECTOR OBJECTIVE(S) AND MIPD SECTOR OBJECTIVE(S)

As stipulated in the MIPD 2011-2013, the environment protection and nature conservation are recognised as fundamental constitutional values and everyone bears the responsibility for their protection and improvement. In addition, the MIPD 2011-2013 recognizes that climate change presents considerable challenge for the country, but also the opportunity to pursue a low-carbon development path, which in turn will help realize sustainable development in the country. The situation in the former Yugoslav Republic of Macedonia is similar to almost all other countries in the region, facing the environmental liabilities from the past. The former 1

Yugoslav Republic of Macedonia is a signatory of the Energy Community Treaty. The MoEPP is participating in Environmental Task Force under the Energy Community. At a first stage, the Environmental Task Force should focus on the implementation of the acquis related to emission reduction (sulphur in fuels and Large Combustion Plants Directive).

The most challenging areas related to implementation of legislation are: water and waste management, nature protection, energy, mitigation and adaptation to climate change. Furthermore, the administrative capacities, both at central and at local level, are likewise insufficient, particularly in terms of qualifications to implement and enforce the EU legislation on environment, energy and climate change.

This is addressed as a medium term priority in the National Programme for the Adoption of *Acquis* (NPAA), in its Part 3-Ability to Assume the Obligations for Membership, Chapter 27 Environment (3.27), where it is stated that further legal development and harmonisation with the *Acquis* and strengthening of the administrative capacity of the Ministry of Environment and Physical Planning is needed. Additionally, further strengthening of the capacities of the inspectorates in charge for the water sector, sector for nature protection, waste management, climate change is also needed, in order to strengthen the supervision of the environmental sector is also stated in the NPAA.

The following key strategies and action plans in the sector underpin the planned activities in this sector identification fiche:

- National Strategy for Sustainable Development 2010-2030;
- Second National communication on Climate Change;
- National Strategy for Waste Management 2008-2020;
- National Waste Management Plan 2009 2015;
- National Set of Environmental Indicators;

- Plan for Institutional Development of the National and Local Environmental Management Capacity 2009-2014;

- Strategy on Improvement of Energy Efficiency until 2020;
- Strategic plan for MoEPP 2011- 2013;
- National Strategy for Environmental Approximation;
- National Environmental Investment Strategy 2009-2013;
- Strategy for Development and Promotion of Hydro meteorological Service 2009 2011.

2.2 SECTOR ASSESSMENT – POLICIES AND CHALLENGES

(1) *National sector policy, strategy and context*

EU membership is considered as the overall strategic objective for current development policies in the country. In that direction, the priorities set in the strategic documents, such as the second National Environmental Action Plan, aim towards meeting the requirements in the EU *acquis* and harmonisation of environmental policies.

The National Plan on Adoption of the Acquis Communautaire (NPAA) is a key document for the EU integration process. Adopted for the first time in 2001 by the Government, it goes under revision each year. In December 2011, the fifth revision of the National Programme for Adoption of the Acquis Communautaire (NPAA 2012) was adopted. It defines the dynamic of the adoption of the Acquis Communautaire (EU legislation), strategic guidelines, policies, reforms, structures, resources and deadlines to be realized /implemented, areas of intervention and the results that are foreseen to be achieved by the former Yugoslav Republic of Macedonia in order to fulfil the requirements for European Union membership. It also presents a tool used for identification of priority areas of intervention.

Several important policy strategic documents in various environmental sectors have been adopted, clearly defining the Government's environmental policy, including:

- National Environmental Investment Strategy 2009-2013;

- Plan for Institutional Development of the National and Local Environmental Management Capacity 2009-2014;

- National Strategy for Environmental Approximation;
- National Strategy for Sustainable Development 2010-2030;
- Second National communication on Climate Change;
- National Strategy for Clean Development Mechanism;
- National Strategy for adaptation of health sector to climate change;
- National Strategy for Waste Management 2008-2020;
- National Waste Management Plan 2009 2015;
- National Set of Environmental Indicators;
- National Strategy for complex Energy Development until 2030
- Strategy on Improvement of Energy Efficiency until 2020;
- National Strategy for renewable energy sources
- Strategic plan for MoEPP 2011- 2013;
- Strategy for Development and Promotion of Hydro meteorological Service 2009-2011.
- National Environmental Action Plan 2006

The National Environmental Investment Strategy for the period 2009-2013 is based on priorities identified in the above-mentioned national strategic documents and is founded on three pillars: the first is to ensure the necessary funds from national and international sources; the second pillar refers to the allocation of the obtained funds according to clearly defined and agreed priorities; and the third refers to the institutional strategy suggests establishing an inter-ministerial task force to address the current lack of coordination and to streamlines investment activities. This task force has not been established up till now, while coordination for investment planning and implementation among line ministries needs to be strengthened and the required capacity within the responsible departments of the Ministry of Environment and Physical Planning (MoEPP), including for monitoring and evaluation of the planned investments, is lacking.

Plan for Institutional Development of the National and Local Environmental Management Capacity for the Period 2009-2014

The Plan for Institutional Development of the National and Local Environmental Management Capacity for the Period 2009-2014 aims to determine the relevant functions and to suggest mid-term institutional development plan for central administrative bodies and bodies of the local self-government having competences in the area of environment.

The Plan sets differentiation and grouping of specific activities into general framework of functions in competence of certain central or local body, so this body could later on envisage the necessary administrative capacity to carry out individual activity, or based on the workload, to confer the activity to the existing administrative capacity. It has objective to set a plan for efficient national environmental management system and to strengthen the central administration, ensuring practical implementation of the harmonised legislation and the strategic plans and Programmes. The Plan identifies priorities and measures aiming to facilitating the process of transfer of competences from central to local level, to increase the implementation capacity of the local self- government, as well as to influence on the development of solid connection between central government and local self- government in the area of environment

National Strategy for Environmental Approximation (NSEA)

National Strategy for Environmental Approximation aims to develop a road map for the country in regards to the approximation of the EU environmental *acquis* and likewise to contribute to a sustainable development of

the country. The main objective of the NSEA is to derive the most acceptable approach for the Government in order to response to the extensive obligations of the arising from the EU environmental *acquis*, additionally contributing to the sustainable development of the country.

National Strategy for Sustainable Development

In January 2010, the Government adopted the National Strategy for Sustainable Development for the period 2010-2030, which aims at setting a vision, mission and objectives for economically, socially and environmentally balanced development for the period by 2030.

The National Strategy for Sustainable Development analyses the main constraints for making the former Yugoslav Republic of Macedonia sustainable which are mainly identified in:

- Weak capacity for the cross-cutting and integrated working approach that is implied by the sustainable development.

Not fully developed sustainable development supporting legal and regulatory framework.

- Not ready available domestic and foreign funds and investments for Sustainable Development projects and activities and a weak banking sector in terms of processing SD based projects.

(2) <u>Sector and donor coordination</u>

The responsibilities in the area of international environmental cooperation are mostly concentrated within the MoEPP. Among these responsibilities are development and implementation of the environmental policy and coordination of activities under the NPAA for Chapter 27 – Environment. The Department for Projects Cooperation and Coordination within the MoEPP has overall responsibility for international cooperation and has two divisions: the Division for Bilateral and Multilateral Cooperation and the Division for Pre-Accession Assistance (IPA funds). The IPA Unit in parallel has overall coordination within environmental Sector in terms of planning implementation and monitoring of the IPA TAIB projects. The Unit as well is responsible for implementation of the Regional Development Component under IPA and it coordinates all priority activities agreed in Operational Programme for Regional Development 2007-2011, as part of the Operating Structure for Regional Development Component of IPA, including planning, technical implementation and monitoring. Priority Axis 3 of the OPRD remains to be focused on improvement of environmental protection through investments in environmental infrastructure, and creating conditions for environment friendly sustainable development.

Donor coordination is of great importance in the preparation of programmes assistance. Recent proposals by the international community call on the Government to establish the management capacity to coordinate donor activities. To respond to the increased needs arising from the EU integration process, the Secretariat for European Affairs (SEA) was established as a separate expert service of the Government in 2005, which provides support and coordination to the government institutions with regard to EU integration. Among its tasks are the coordination of foreign aid from the EU and its Member States (IPA funds) and other foreign aid assistance. The Secretariat is a leading institution with regards to the overall donor coordination. The introduction of the 'Programme-Based Approach' (PBA) has been instrumental to strengthen donor coordination, as well as leadership and ownership of the country's development agenda. This is particularly important as environment has been identified as one of the seven priority areas by senior level working groups consisting of Government representatives and the international partners. In the upcoming period it is envisaged that the working group will prepare detailed action plans that will guide the implementation process for the specific areas. These PBA implementation plans will be consistent with the national development priorities and the EU accession agenda of the country by establishing a single results framework.

In view of the above mentioned, it is vital that the MoEPP together with other ministries, departments and stakeholders in the environment sector continue improving their coordination efforts to ensure a smooth mechanism for international environmental and climate cooperation. Furthermore, requests for foreign aid from international and bilateral donors can be additionally improved on the basis of improved cooperation among the departments within the MOEPP in order to avoid submission of similar requests to different donors.

The strategic planning of IPA is laid down in the MIPD 2011-2013. This document is based on the priorities identified in the Progress Reports and the Accession Partnership, and takes into account past and on-going EU

assistance, as well as the national planning documents. Projects are being proposed by the IPA Unit within the MoEPP in cooperation with the other Departments of the MoEPP and the local administration. The staff of the IPA Division has received relevant IPA training to develop, prepare, implement, monitor and evaluate projects and to ensure appropriate analysis and reporting on the projects.

IPA-funded projects are generally in line with the national priorities defined in the National Environmental Investment Strategy and are mainly targeted at strengthening administration and environmental infrastructure investments, in particular waste water collection and treatment, drinking water supply, tackling air pollution and waste management.

(3) <u>Sector budget and medium term perspective</u>

MoEPP within the regular annual process of planning and execution of the national budget foresees activities and financial resources for the areas covered with this sector fiche. The financial projections are with the relevance for the forthcoming year and mid-term projects for other 2 years.

In that respect, the overall financial allocations defined in the national budget are as follows:

- For the sector water management, approximately EUR 6,400,000 for 2012 and EUR 8,500,000 for 2013 are projected;

- For sector nature approximately EUR 200,000 for 2012 and EUR 500,000 for 2013 are projected.
- For sector Air Quality EUR 150,000 for 2012 and EUR 150,000 for 2013 are projected ;
- For Waste sector, EUR 65,000 for 2012 and EUR 100,000 for 2013 are projected;
- For Climate change, EUR 276,000 for 2012 and EUR 300,000 for 2013 are projected

It is difficult to identify the total budget in the field of climate change, because there were several activities implemented by different responsible institutions, like Ministry of Agriculture, Forestry and Water economy, Ministry of Health, Ministry of Economy.

(4) <u>Sector monitoring system</u>

MoEPP monitors the implementation of its sectorial strategies and the Strategic Plan of the Ministry, which is annually updated.

Aside from the afore noted monitoring elements and mechanisms, the sectorial monitoring system is comprised of a number of other elements, such as (i) the regular monitoring and annual review of the NPAA, which covers the legal harmonization and implementation in the environment sector; the monitoring of the fulfilment of the Strategic plan of the Ministry; the monitoring of the implementation of the Working Programme of the Government, which entails activities on environment and climate change. In addition, the sectorial activities which have been supported through IPA assistance are being monitored both at project level (line institution, CFCD), but also on a programme level in the framework of the IPA TAIB, Sectorial committee for the regional development component and the overall joint IPA Monitoring Committee. The implementation of obligations under the SAA is being followed in the framework of the Stabilization and Association Committee and the respective Sub-Committee on Transport, environment, energy and regional development

(5) Institutional setting

The Ministry of Environment and Physical Planning performs environmental tasks related to the legal harmonization process; the preparation of national strategies and action plans; inspection and enforcement including intervention if needed against the bigger polluters; and nationwide monitoring, information systems and cadastres.

The Ministry of Environment and Physical Planning (MoEPP) is responsible for the chapter 27 - Environment. MoEPP mobilize all resources necessary to achieve compliance with the requirements of a coming EU membership, including compliance of the national legislation with the EU *Acquis* and ensure its implementation. The responsibility of MoEPP for the process is coordinated by the Sector for EU and consisted of four main functions:

- establish structure and perform the accession negotiation with EU on Chapter 27- Environment and

climate change;

transpose the EU legislation in domestic legislation,

- introduce institutional framework and capacity adequate for enforcement of the environmental and climate change legislation, and

- ensure financial capacity required for the implementation of the adopted legislation and enforcement of the acting principles established at the EU level.

At present, MoEPP is organized in nine departments or sectors further organized in units as well as three bodies within MoEPP as constituent parts, i.e. State Environmental Inspectorate, the Administration for Environment and Office for Spatial Information System. These bodies operate as separate entities within and under surveillance of the Ministry of Environment and Physical Planning, and operate in accordance with legal regulations and other legal acts governing issues in the area of environment. In performing its duties, the Minister is further assisted by a Deputy Minister, by a State Secretary and by thematic State Advisors.

The Administration of Environment performs professional activities in the area of nature protection, in waste, water, air, soil, noise protection and in other environmental areas. It will also regulate the environmental impact assessment (EIA) procedure for projects and the procedure concerning integrated environmental permitting and compliance permitting. It will manage the Cadastre of Environment and the Register of Pollutants and Polluters, including their characteristics. The Administration of Environment will be responsible for the environmental monitoring performance, as well as for permitting procedures and other activities stipulated by law.

Department for European Union provides support to the other departments which are part of this SF in drafting legislation, compliance check of EU legislation with domestic one and in policy development.

(6) <u>Macro-economic context and Public Financial Management</u>

The national economy grew steadily after 2002. A strong annual average gross domestic product (GDP) growth of 4.5 per cent continued until the 2008. During the same period the GDP Per Capita grew 74 per cent. The openness and small size of the economy makes it dependant of the world economic development and vulnerable to external economic shocks. The international banking crisis in 2008 made the country's GDP to shrink in 2009 and it is not know yet if the country returned to the growth path in 2010.

In the wake of the crisis, the country experienced decreasing FDI, reduced credit, and a slump of export growth when EU, the country's main export market, was hit by the recession. The general slump of exports was worsened by the fall in metal prices causing the income from the nickel, one of country's main exports, to weaken. The official unemployment was 32.2 per cent in 2009, but the severity and the consequences of the unemployment to the economy might be overstated because the country has large grey market, estimated to be more than 20 per cent of the GDP, which is not captured by official statistics and indicators.

(7) <u>Sector assessment</u>

According to the latest Progress report 2011 for Chapter 27, it was stated that "...in the field of environment...some progress can be reported in transposing the EU acquis into national legislation and in ratifying multilateral environmental agreements". However, it was also said that"...limited progress was achieved in alignment with climate change acquis..." and that"...significant efforts are needed in order to implement the national legislation, especially in the areas of water management, industrial pollution control and climate change." These assessments pinpoint the need for strengthening the support activities in the environment sector, as well as corresponding actions for building administrative capacity and further alignment of the Acquis. This is especially needed in the climate change, waste and water sectors, according to the latest remarks from the Progress report.

In the area of climate change, the former Yugoslav Republic of Macedonia undertakes activities at several levels: international, regional, bilateral and national. A set of institutional and legislative measures need to be undertaken in order to gradually prepare country's capacities to move towards EU ETS. Currently, the country shares obligations as non-Annex I country under the UNFCCC, so the system of preparation of national reports and theirs submission and monitor is only in accordance with UNFCCC roles for non-Annex I country.

3. DESCRIPTION

3.1 OVERALL OBJECTIVE OF THE IPA SECTOR SUPPORT

The project purpose is to further approximate and implement the environmental *acquis*, through strengthening the administrative capacities for environmental management on central and local level in the fields of water management, waste management, nature protection and air management.

3.2 SPECIFIC OBJECTIVE(S) OF THE IPA SECTOR SUPPORT

Waste Management - The objective of this project will be: Strengthening the administrative capacity and measures for implementation of WFD and WEEED through further development of implementing legislation, provision of training etc.

Water management - The objective of this project will be: Strengthening the administrative capacity for implementation of the water *acquis*, with a focus on: Water Framework Directive and in particular development of program of measures, financial and economic analysis, and public and cross border consultation of the Vardar River Basin Management Plan.

Nature protection – The objective of the project will be: Strengthening the administrative capacity for implementation of the nature protection acquis, through further development of implementing legislation, provision of training etc. and implementation of Nature Protection legislation.

Air management - The specific objective of this measure is to improve air quality by supporting the implementation of the air quality related legislation including Directive 2008/50/EC on ambient air quality and cleaner air for Europe and Directive 2004/107/EC relating to arsenic, cadmium, mercury, nickel and polycyclic hydrocarbons in ambient air. Implementation of emission related legislation including, for example, Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants will be supported, Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plans.

3.3 RESULTS

Results for Measure 1: Waste management:

- The administrative capacity for implementation of Waste Framework Directive through further development of implementing legislation strengthened, trainings provided.
- The administrative capacity strengthened and measures for implementation of legislation for separate waste streams (Waste from electrical and electronic equipment, packaging, batteries and accumulators etc.)undertaken.

Indicators:

- Number of implementing legislation acts prepared;
- Number of trainings delivered for increasing the capacity for implementation of the Waste Framework Directive;
- Number of staff trained;
- Number of trainings delivered for increasing the capacity for implementation of legislation for separate waste streams (Waste from electrical and electronic equipment, packaging, batteries and accumulators etc.);
- Number of staff trained.

Results for Measure 2: Water management:

- The administrative capacity for implementation of the water acquis, with a focus on Water Framework Directive strengthened.

- The program including measures, financial and economic analysis, public and cross border consultation of the Vardar River Basin Management Plan developed.

- Draft Vardar River Basin Management Plan done according to the requirements of the Water Framework Directive;

- Stakeholders and Cross border consultation on draft Vardar River Basin Management Plan initiated.

Indicators:

- Number of trainings delivered

- Number of staff trained;

- Strengthen institutional capacities, enabling the future development of economic analyses and program of measures for preparing of River basin management plan;

- Draft Vardar River Basin Management Plan approved by the Ministry of environment and physical planning;

- Number of public consultations conducted;
- Number of cross border consultations conducted.

Results for Measure 3: Nature protection:

- Studies for valorisation of nature values for two selected Pilot protected areas (potential and future NATURA 2000) prepared;
- Pilot management plans for 2 protected areas conservation which are of community interest for conservation (potential and future NATURA 2000) prepared;
- Developed National biodiversity monitoring methodology and program for national monitoring;
- Administrative capacity for implementation of Nature Protection legislation strengthened and trainings conducted;
- Stakeholders' involvement plan prepared.

Indicators:

- Number of Studies for valorisation of nature values
- Number of pilot management plans;
- Biodiversity monitoring methodology and program;
- Number of trainings conducted;
- Number of staff trained;
- Stakeholders' involvement plan prepared.

Results for Measure 4: Air management:

- The capacities of the central environmental laboratory in the field of air quality measurements, emission measurements and chemical analyses related to air pollution strengthened;

- The capacities of the Ministry of Environment and Physical Planning to perform emission inventories and dispersion modelling strengthened;

- The air quality data management and reporting of air quality related information and use of air quality information to support environmental policy and planning and implementation of Clean Air Action Plans strengthened;

- Capacities for health impact assessment of air pollution to human health strengthened.

Indicators:

- Number of trained staff in emission measurements and chemical analysis related to air quality;
- Improved and functional quality system for calibration laboratory;
- Number of trained staff in dispersion modelling and emission inventory modules;
- Number of trained staff in air quality data management and reporting;
- Air Quality data reported according to the relevant EU legislation;
- Number of developed Clean Air Action Plans;

Number of trained staff in assessment of health impacts of air pollution to human health.

Results for Measure 5 – Supply contract

- Appropriate priority equipment to exchange and manage information and monitoring for water, waste, air management, nature and climate change as well as for performing activities for implementation of the relevant legislation supplied.

Indicators:

- Information and monitoring system in the areas of water, waste, air management, nature and climate change improved based on the timely, nationally validated and quality assured data provided through the supplied prioritized equipment.

3.4 MEASURES/OPERATIONS TO ACHIEVE RESULTS

Measure 1: WASTE management

- Strengthening the administrative capacity for implementation of Waste Framework Directive through further development of implementing legislation, provision of training etc;

- Strengthening the administrative capacity and measures for implementation of legislation for separate waste streams (Waste from electrical and electronic equipment, packaging, batteries and accumulators etc.).

Measure 2: WATER management

- Strengthening the administrative capacity for implementation of Water Framework Directive through further development of implementing legislation, provision of training etc;

- Continuation of the work on the draft Vardar River basin management plan - list of the environmental objectives, economic analysis of water use, programmes of measures, etc. actions up to the finalisation of the draft Vardar River basin management plan;

- Stakeholders involvement, public consultation and cross border consultations;

Measure 3: NATURE protection

- Strengthening the administrative capacity for implementation of Birds and Habitat directives through

further development of implementing legislation;

- Establishment of 2 Expert Working Groups (EWG) for preparation of Studies for valorisation of

nature values and Management plans of identified pilot areas;

- Organizing workshops and seminars for key target groups (institutions, local communities,

managers, NGO-s, private sector);

- Preparation of 2 Studies for valorisation of nature values and 2 draft Management plans for pilot protected areas;
- Training for implementation of prepared Management plans for 2 pilot areas;
- Preparation of Stakeholders' involvement plan;
- Development of National biodiversity monitoring methodology and program for national monitoring.

Measure 4: Air management

- Strengthening the capacities for air quality, emission measurements and chemical analysis; - Improving the quality assurance, control documents and procedures for calibration laboratory;

- Strengthening the capacities for use of dispersion modelling and emission inventory modules of the air quality data management system;

- Strengthening the capacities for customisation of the emission database and emission data reporting;
- Strengthening the capacities on air quality data management and reporting;

- Strengthening the capacities for development of Clean Air Action Plans;
- Strengthening the capacities for assessment of health impacts of air pollution to the human health.

Measure 5: Supply contract

Delivery of specific equipment for exchange and manage information and monitoring for water, waste, air management, nature and climate change as well as for performing activities for implementation of the relevant legislation.

3.5 OVERVIEW OF PAST OR ON-GOING ASSISTANCE, LESSONS LEARNED, MECHANISMS FOR DONOR COORDINATION/SECTOR WORKING GROUP AND/OR POLICY DIALOGUE

Donor coordination between the Government and the donor community has improved steadily and it reflects national development priorities and increased national ownership over the development agenda.

Technical and financial assistance to the environment sector has been provided by many bilateral and multilateral donors. As the EU accession process is gaining momentum and regional stability has increased, the aid structure has undergone substantial changes: some donors are reducing their activities or changing the area of focus, while EU assistance through IPA has become a predominant source of development assistance over the next coming years.

As a response to the changing structure of donor assistance and the need for increasing aid effectiveness, strengthening national ownership and leadership in the process of programming and coordinating development assistance, a process has been initiated in 2008 to introduce the Programme Based Approach (PBA). "Environment" has been selected as one of the five PBA priority areas. Within the environment sector, there still remain challenges to fully implement/ making operational the PBA concept, specifically to draw on international assistance in the most efficient way, and to ensure consistency and synergy among projects being developed.

Substantial EU assistance has been provided in this sector to the country since 2001 for institution building and legislative alignment, ex. the first National Waste Management Plan (2006–2012). However, the implementation of the Operational Programme under IPA component III started only in late 2009, once the Financing Agreement was signed and the management powers were conferred.

IPA Component I assisted the central and local level government to strengthen the administrative capacities for environmental management, through drafting of laws and implementing regulations aligned with the EU Environmental Directives. Additional assistance is being provided under Component 1 of IPA:

- TAIB 2008 Strengthening the central and local level administrative capacities for implementation and enforcement of environmental management (waste and air sector);
- TAIB 2009 Strengthening the institutional capacities for approximation and implementation of environmental legislation in the areas of water management and nature protection;
- TAIB 2010 Strengthening the administrative capacities for implementation and enforcement of the environmental *acquis*; the project will be strengthening the administrative capacities for enforcement of environmental legislation and strengthening the administrative capacities for implementation of the environmental *acquis*, at municipal level.
- TAIB 2011 Strengthening the Central and Local Administrative Capacity for Transposition and Implementation of new Industrial Emissions Directive 2010/75/EU and Implementation of Nature 2000.

Aside from the IPA assistance, the MoEPP is a beneficiary of a relevant project financed by bilateral donor support. The WB, SIDA and UNDP/GEF are very active in the fields of protected areas and renewable energy sources. The Netherlands provide valuable support to the field of environment through its G2G programme.

3.6 SUSTAINABILITY

The main contribution of this project will be the strengthening of the administrative capacities in the prioritised sectors on central and local level, thereby contributing to the improvement of environmental management and implementation of legislation, in addition to improving capacity for mitigation of and adaptation to climate

change. Some project/sectors will be continuation of previous TAIB projects. Improved capacities for enforcement of environmental and climate legislation and introduction of environmental standards will positively impact the overall sustainability of development in the country, while the improved capacities to develop EU compliant legislation and regulations will have a positive impact on the EU accession process.

It is expected that strengthening the public administration on local level will improve the capacity to solve local problems and disputes on local level instead of approaching central administration.

Improved capacities to draft and implement environmental and climate legislation and introduce environmental standards will increase transparency and reduce discretionary decision-making, which will on other hand enhance the confidence and interest of the business community to invest in environmental measures.

Strong commitment from senior management and various final beneficiaries remains crucial for the overall sustainability of the project activities.

3.7 ASSUMPTIONS AND PRECONDITIONS

Assumptions

During the implementation of the proposed measures, the risks that might occur could be related with lack of integral approach during the implementation of the project, defined activities; inadequate coordination in providing resources for the support of the implementation of the objectives; lack or insufficient information, consultation and involvement of stakeholders, communities and groups; no system or insufficient capacities for program and project management; and no system or insufficient capacities for monitoring and evaluation of implemented measures, as well as luck of coordination and support by all beneficiaries of the projects. Completion of the tasks, according to the time schedule and the budget could be another risk that might occur during the implementation of the project.

The assumptions related with this sector fiche are related with:

- Good cooperation between institutions, in particular in relation to the dissemination of information and data;
- Commitments from responsible persons in key institutions;
- Sufficient number of relevant data gathered and their availability;

Preconditions

- The trainings under the individual activities will be carried out in the national training premises (for ex. EU/IPA Training and Support Facility);
- In areas where there is evident expertise with the final beneficiary, the trainings will delivered by the civil servants, as part of their job description, without any compensation and/or with the assistance of key/short term experts;
- All the necessary data and information, which is necessary for the planning purposes for the Measure 4 Nature protection is preliminary collected and available before the projects start;
- Appropriate number of competent staff in each of the target sectors should be available prior to the start of the projects.

4. IMPLEMENTATION ISSUES

Central Financing and Contracting Department – will be the Contracting Authority. The Head of the Contracting Authority is at the same time the Head of the Operating Structure (HOS) for Regional Development. Therefore, besides the responsibilities of CFCD in launching tenders, organizing evaluations, preparing/signing contracts, CFCD also supports HOS in performing its supervisory role over the Operating Structure for Regional Development. The Contractor will report to CFCD and the Contractor's Team Leader will have to perform regular communication with the Contracting Authority and coordinate the Contract activities in close consultation with HOS.

Ministry of Environment and Physical Planning through the SPO/IPA Unit as part of the operating structure is a body within the OS which have tasks mainly related to technical implementation and

monitoring, as defined in Article 6 of the Operational Agreements signed between the PAO and the SPO. Furthermore, the SPO has to ensure that the Consultant is provided with all necessary information needed for preparation of Project.

Project Steering Committee (PSC) at the highest level will be established. Project Steering Committee (PSC) will be set up before the project start for the purpose of the overall management and coordination. The Delegation of the European Union will be invited as observer, as well SEA. The SC will provide guidance for the project implementation.

4.1 INDICATIVE BUDGET

MEASURE	PROGRAMI NG YEAR	SECTOR	TYPE OF SERVICES	IPA FUNDS (EUR)	NATIONAL COFINANCING (EUR)	TOTAL BUDGET (EUR)
Measure 1	2012	Waste Management	Twinning	960,000	50,526.3	1,010,526.3
Measure 4	2012	Air management	Twinning	1,050,000	50,000	1,100,000
Measure 5	2012	FOR ALL SECTORS	Supply contract	600,000	200,000	800,000
Measure 2	2013	Water management	Twinning	1,140,000	60,000	1,200,000
Measure 3	2013	Nature protection	Twinning	1,045,000	55,000	1,100,000

					SOURCES OF FUNDING								
SECTOR TITLE			TOTAL EXPENDITU RE	TOTAL PUBLIC EXPENDITU RE	IPA CONTRIBUTION		N	NATIONAL PUBLIC CONTRIBUTION				PRIV CONTRI	
	IB (1)	INV (1)	EUR (a)=(b)+(e)	EUR (b)=(c)+(d)	EUR (c)	% (2)	Total EUR (d)=(x)+(y) +(z)	% (2)	Central EUR (x)	Regional/Local EUR (y)	IFIs EUR (z)	EUR (e)	% (3)
Measure 1 Waste Management	x		1,010,526	1,010,526	960,000	95	50,526	5	50,526	/	/	/	/
Measure 4 Air management	x		1,100,000	1,100,000	1,050,000	95	50,000	5	50,000	/	/	/	/
Measure 5 Supply of equipment		Х	800,000	800,000	600,000	75	200,000	25	200,000	/	/	/	/
TOTAL	IB		2,110.526	2,110,526	2.010.000	95	100.526	5	100.526				
TOTAL	INV		800,000	800,000	600,000	75	200,000	25	200,000				
TOTAL SE SUPPO		R	2,910,526	2,910,526	2.610.000	90%	300.526	10%	300.526	1	/	/	

Indicative budget 2012 (amounts in EUR)

					SOURCES OF FUNDING								
SECTOR TITLE			TOTAL EXPENDITU RE	TOTAL PUBLIC EXPENDITU RE	IPA CONTRIBUTION		NATIONAL PUBLIC CONTRIBUTION			NTRIBUTION		PRIV Contrii	
	IB (1)	INV (1)	EUR (a)=(b)+(e)	EUR (b)=(c)+(d)	EUR (c)	% (2)	Total EUR (d)=(x)+(y) +(z)	% (2)	Central EUR (x)	Regional/Local EUR (y)	IFIs EUR (z)	EUR (e)	% (3)
Measure 2 Water management	x		1,200,000	1,200,000	1,140,000	95	60,000	5	60,000	/	/	/	/
Measure 3 Nature protection	х		1,100,000	1,100,000	1,045,000	95	55,000	5	55,000	/	/	/	/
TOTAL	IB		2,300,000	2,300,000	2,185,000	95	115,000	5	115,000				
TOTAL	INV		/	/	/		/		/	/	/	/	/
TOTAL SE SUPPO		R	2,300,000	2,300,000	2,185,000	95%	115,000	5%	115,000	1	/	/	

Operations	StartofTendering/Call(s)Call(s)forproposals	Signature of contract(s)	Activity Completion
Waste Management - Twinning	Q4 2015	Q2 2016	Q4 2017
Water management- Twinning	Q2 2016	Q3 2016	Q4 2017
Nature protection- Twinning	Q2 2016	Q4 2016	Q1 2018
Air management- Twinning	Q2 2014	Q1 2015	Q1 2017
Supply contract	Q1 2016	Q3 2016	Q3 2017

4.2 INDICATIVE IMPLEMENTATION SCHEDULE (PERIODS BROKEN DOWN PER QUARTER)

MoEPP will prepare Twining Fiches and Terms of Reference for all projects (twinning and service), except technical specification for equipment (supply service).

4.3 CROSS CUTTING ISSUES

4.3.1 Equal Opportunities and non-discrimination

The project implementation will ensure the observance of the principles of equal opportunities and nondiscrimination. Equal gender opportunities will be fully respected in the composition of the Steering Committee and where necessary. The training activities may include a specific component to train municipal and ministerial staff in the implementation of the Government Gender Strategy, while reference will be made to the EC Programme of Action for the mainstreaming of gender equality in community development cooperation (2001-06). An output of this training component will be to assist the beneficiary to implement an 'internal gender assessment' to identify areas where it could improve its internal performance vis-à-vis gender.

4.3.2 Environment and climate change

The main contribution of the contracts related to Environment will be the strengthening of the administrative capacities in the prioritised sectors on central and local level, thereby contributing to the improvement of environmental management and implementation of legislation. Improved capacities for implementation of environmental legislation and introduction of environmental standards will positively impact the overall sustainability of development in the country, while the improved capacities to develop EU compliant legislation and regulations will have a positive impact on the EU accession process. It is expected that strengthening the public administration on local level will improve the capacity to solve local problems and disputes on local level instead of approaching central administration.

4.3.3 Minorities and vulnerable groups

N/A

4.3.4 Civil Society/Stakeholders involvement

The consultation and communication processes will constitute important aspects of the experience and knowledge exchange established with the EU MS as a result of the project. The generated experience will further the inclusiveness of the national consultation platform, and will improve the transparency and clarity of the national communication strategy with regards to the negotiation process (both with regards to the participating institutions and structures and the general public). Since a segment of this project will aim to assist the municipalities in preparing for the implementation of the environmental legislation, there will be a process of raising public awareness, increasing transparency and a comprehensive dissemination of results.

4.4 SECTOR MONITORING, EVALUATION AND AUDIT

Sectoral Monitoring Committee for the IPA Component I - Transition Assistance and Institution Building ("TAIB Committee"), is established in accordance with Article 59 of the IPA Implementing Regulation, and

Article 37 of the Framework Agreement concluded between the European Commission and the Government of the former Yugoslav Republic of Macedonia.

An overall management structure that will be established so as to oversee the overall implementation of the project and to ensure appropriate coordination between the different activities supported by the project, the Sector Steering Committee (SSC), will monitor the progress of the program, two times per year, every 6 months. The overall coordination of the activities within all sectors falls under the nominated project manager per sector, SPO and IPA unit.

The SPO manage the IPA structure within its Line Ministry/ Beneficiary Institution in efficient manner. The SPO timely inform the relevant Minister/ Head of Beneficiary Institution on the need for ensuring adequate staff in terms of number and skills according to the results of the Workload

Analysis. SPO shall perform the functions of Risk Manager and Irregularity Officer within the Line

Ministry/ Beneficiary Institution, having the responsibilities as described in the Manual of Procedures for SPO for TAIB.

The audit will be conducted by the Audit Authority for audit of the instrument for pre-accession assistance (IPA).

Audit Authority is a functionally independent audit body from all actors in the management and control systems designated within the general platform of the State Audit Office and responsible to audit the Instrument for pre-accession assistance, in order to verify: the effective functioning of the management and control systems and the reliability of accounting information provided to the Commission.

ANNEXES Documents to be annexed to the Sector fiche

1. Log frame - ANNEX 1

2. Description of Institutional Framework and Political, legal and institutional framework- ANNEX 2

- 3. Details per EU funded operation ANNEX 3
- 4. Possible visibility activities ANNEX 4

LOG FRAME PLANNING MATRIX FOR Sector Fiche	Sector support name "Sector support Environment and Climate Change"			
	Contracting period ex	pires Q4 2016	Execution pe expires Q4 201	eriod 8
	Total budget	5,210,526 EUR		
	IPA budget:	4,795,000 EUR		

ANNEX 1: Logical framework matrix f	for sector support in standard format
-------------------------------------	---------------------------------------

National sector or sub sector objective	Objectively verifiab	le Sources of verification	Wha
	indicators (OVI)		expe
			cont
			func
The objective is to further approximate and implement			
the environmental acquis, through strengthening the			
administrative capacities for environmental			
management on central and local level in the fields of			
water management, waste management, nature			
protection and air management.			
Sector support objective within the MIPD sector	Objectively verifiab	le Sources of Verification	Ass
	indicators (OVI)		
Environment and climate change	- number of staff trained		
-	- number of issue	ed	
	approvals and documen	ts	
	related to Waste, Nature, A	ir	
	management		
	- established procedures		
Results of the sector support	Objectively verifiab	le Sources of Verification	Ass

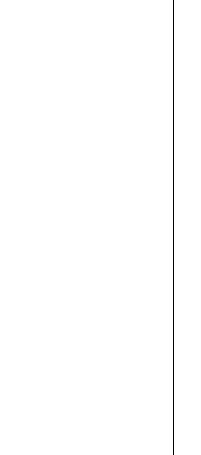
What is the percentage proportion or xpected quantitative or qualitative ontribution of the sector support unded by IPA to this OVI?

ssumptions

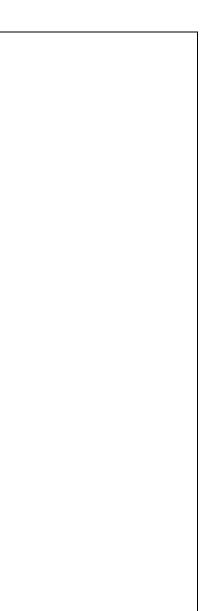
ssumptions

	indicators (OVI)		
Result 1: WASTE management The administrative capacity for implementation of Waste Framework Directive through further development of implementing legislation strengthened, trainings provided. The administrative capacity strengthened and measures for implementation of legislation for separate waste streams (Waste from electrical and electronic equipment, packaging, batteries and accumulators etc.) undertaken.	delivered for increasing the capacity for implementation of the Waste Framework	 Number of documents approvals Number of workshops and trainings Training for trainers Number of officials trained	-

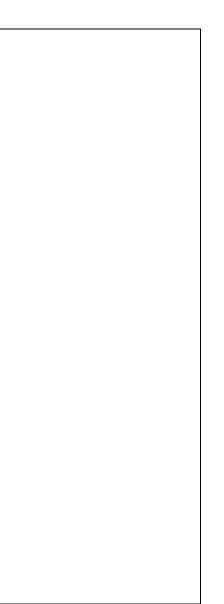
- Good cooperation between institutions, in particular in relation to the dissemination of
- relation to the dissemination of information and data; Commitments from responsible persons in key institutions; Sufficient number of relevant data gathered and their availability.



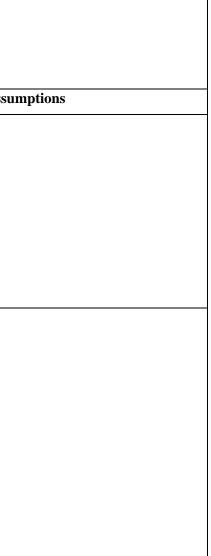
	ture values
	- Number of pilot m anagement plans;
Result 3: NATURE protection Studies for valorisation of nature values for two select	- Biodiversity monito ring methodology a
ed Pilot protected areas (potential and future NATURA 2000) prepared;	nd program; - Number of trainings conducted;
Pilot management plans for 2 protected areas conservation which are of community interest for conservation (potential and future NATURA 2000) pr	 Number of staff trai ned;
epared; Developed National biodiversity monitoring methodology	- Stakeholders' involv ement plan prepared.
and program for national monitoring;	AIR management
Administrative capacity for implementation of Nature Protection legislation strengthened and trainings conducted;	- Number of trained staff in emission measurements and
Stakeholders' involvement plan prepared.	chemical analysis related to air quality
	- Improved and functional quality
Result 4: AIR management	system for calibration
The capacities of the central environmental laboratory in the field of air quality measurements, emission measurements and chemical analyses related to air pollution strengthened;	laboratory; - Number of trained staff in dispersion modeling and
The capacities of the Ministry of Environment and Physical Planning to perform emission inventories and	emission inventory modules; - - Number of trained



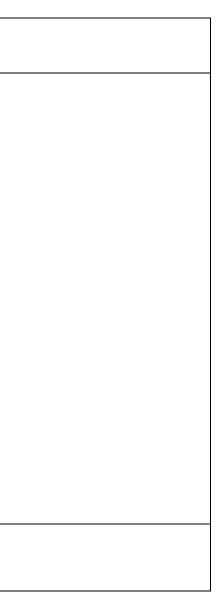
dispersion modelling strengthened; staff in air quali	
pollution to human health strengthened developed Clean A Action Plans; - Number of trained staff in assessme of health impacts air pollution human health; Supply contract - Delivered number appropriate equipment	g f r i t
Result 5: Supply contract	
The MoEPP is endowed with appropriate equipment to exchange and manage information and monitoring for water, waste, air management, nature and climate change as well as for performing activities for implementation of the relevant legislation.	



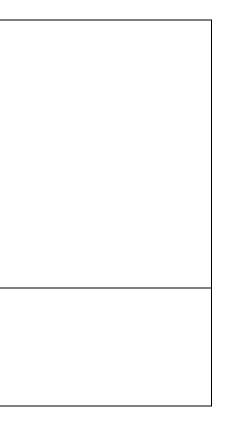
	1	
Means / operations	Costs	Assu
Twinning contract	1,010,526	
Twinning contract	1,200,000	
	Twinning contract	Twinning contract 1,010,526 Twinning contract 1,200,000



Measure 3: NATURE protection	Twinning contract	1,100,000
- Strengthening the administrative capacity for i mplementation of Birds and Habitat directives through		
further development of implementing legislation;		
- Establishment of 2 Expert Working Groups (E WG) for preparation of Studies for valorisation of		
nature values and Management plans of identified pilo t areas;		
- Organizing workshops and seminars for key t arget groups (institutions, local communities,		
managers, NGO-s, private sector);		
- Preparation of 2 Studies for valorisation of nat ure values and 2 draft Management plans for pilot		
protected areas;		
- Training for implementation of prepared Man agement plans for 2 pilot areas;		
- Preparation of Stakeholders' involvement plan;		
- Development of National biodiversity monitoring methodology and program for national monitoring.		
Measure 4: Air management	Twinning contract	1,100,000
- Strengthening the capacities for air quality, emission measurements and chemical analysis;		



- Improving the quality assurance, control documents and procedures for calibration laboratory;		
- Strengthening the capacities for use of dispersion modelling and emission inventory modules of the air quality data management system;		
- Strengthening the capacities for customisation of the emission database and emission data reporting;		
- Strengthening the capacities on air quality data management and reporting;		
- Strengthening the capacities for development of Clean Air Action Plans;		
- Strengthening the capacities for assessment of health impacts of air pollution to the human health.		
Measure 5 – Supply of equipment	800,000	
- Delivery of specific equipment for exchange and manage information and monitoring for water, waste, air management, nature and climate change as well as for performing activities for implementation of the relevant legislation.		



ANNEX 2 Description of Institutional Framework and Political, legal and institutional framework

The Ministry of Environment and Physical Planning (MoEPP) is responsible for the chapter 27 - Environment. MoEPP mobilize all resources necessary to achieve compliance with the requirements of a coming EU membership, including compliance of the national legislation with the EU *Acquis* and ensure its implementation. The responsibility of MoEPP for the process is coordinated by the Sector for EU and consisted of four main functions:

- establish structure and perform the accession negotiation with EU on Chapter 27 Environment and climate change;

- transpose the EU legislation in domestic legislation,

- introduce institutional framework and capacity adequate for enforcement of the environmental and climate change legislation, and

- ensure financial capacity required for the implementation of the adopted legislation and enforcement of the acting principles established at the EU level.

At present, MoEPP is organized in nine departments or sectors further organized in units as well as three bodies within MoEPP as constituent parts, i.e. State Environmental Inspectorate, the Administration for Environment and Office for Spatial Information System. These bodies operate as separate entities within and under surveillance of the Ministry of Environment and Physical Planning, and operate in accordance with legal regulations and other legal acts governing issues in the area of environment. In performing its duties, the Minister is further assisted by a Deputy Minister, by a State Secretary and by thematic State Advisors.

The Administration of Environment performs professional activities in the area of nature protection, in waste, water, air, soil, noise protection and in other environmental areas. It will also regulate the environmental impact assessment (EIA) procedure for projects and the procedure concerning integrated environmental permitting and compliance permitting. It will manage the Cadastre of Environment and the Register of Pollutants and Polluters, including their characteristics. The Administration of Environment will be responsible for the environmental monitoring performance, as well as for permitting procedures and other activities stipulated by law.

Foreign assistance support

- TAIB 2008 - Strengthening the central and local level administrative capacities for implementation and enforcement of environmental management (waste and air sector);

- TAIB 2009 - Strengthening the institutional capacities for approximation and implementation of environmental legislation in the areas of water management and nature protection;

- TAIB 2010 - Strengthening the administrative capacities for implementation and enforcement of the environmental acquis; the project will be strengthening the administrative capacities for enforcement of environmental legislation and strengthening the administrative capacities for implementation of the environmental acquis, at municipal level.

- TAIB 2011 - Strengthening the Central and Local Administrative Capacity for Transposition and Implementation of new Industrial Emissions Directive 2010/75/EU and Implementation of Nature 2000.

WASTE

Ministry of Environment and Physical Planning is responsible for waste management planning and policy development, registration, issuing permits and licensing, organizing an effective management system for all waste streams, monitoring, data collection/handling, inspection. The general waste management policy with intention to overcome the current situation and to establish a sustainable waste management system is established the Law on Environment and in particular in the Law on Waste Management, This Law has important links to other Laws related to tasks and responsibilities regarding administrative, organisational and operational issues in waste management, in particular to the Law on the Environment, which includes basic stipulations on environmental permitting, EIA procedure and greenhouse gas emissions.

The main challenges in relation to waste management are relate to: policy implementation and further legislative alignment; organisation of institutions and human resources on central and local level especially in

establishing the regional waste management approach in relation to cost recovery and financing of services and investments, stakeholder awareness and communications, all phases of technical management from collection to final disposal of waste, existence/remediation of environmental burdens, impact on public health and living/natural environment with the potential impact on the economy.

In order to meet EU requirements in Waste management the Government transposed relevant EU Directives in separate law, as they are:

1. Law on packaging and packaging waste which transposes the Council Directive 94/62/EC on packaging and packaging waste amended by DIRECTIVE 2004/12/EC and Directive 2005/20/EC.

2. Law on batteries and accumulators and waste batteries and accumulators which transpose the Council Directive2006/66/EC on batteries and accumulators and waste batteries and accumulators.

3. Law on electrical and electronic equipment and waste from electrical and electronic equipment which transpose the Directive 2002/96/EC of the European Parliament and of the Council on waste electrical and electronic equipment and Directive 2002/95/EC of the European Parliament and of the on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

WATER

In order to meet the requirements of the EU Water Framework Directive, which targets the realization of preferable status of all the state bodies dealing with the issue of water until 2015, the Government adopted the new Law on waters in July 2008. In 2008, the Law on Waters was adopted (Official Gazette No.87/2008) and it regulates issues concerning surface waters (watercourses, lakes, accumulations and springs) and underground waters within an integrated policy and represents legislative framework for future management of water resources. Water Framework Directive (WFD) 2000/60/EC, Bathing Water Quality Directive 76/160/EC, Nitrates Directive 91/676/EC, Drinking Water Directive 98/83/EC, Urban Waste Water Directive 91/271/EC, Dangerous Substances Directive 76/464/EC and Surface Water Abstraction Directive 75/440/EC have been transposed in the Law. Furthermore, adopted bylaws refer to establishment of a methodology for drafting, reviewing and updating of the master plan, the manner of preparation of river basin management plans, the content and the manner of preparation of the programme of measures, preparation of information and cartographic overviews of activities for waters monitoring, as well as methodology of river basins assessment. The Water Department within the Administration of Environment at the moment has 14 employees and for the next two years employment of new 15 people is foreseen. According to the new and approved organizational structure, the Water Department is composed of six (6) Units: Unit for Water Planning and Development, Unit for concessions and inter-ministerial cooperation, Unit for Water Rights, Unit for Vardar River Basin management, Unit for Crni Drim River Basin management and Unit for Strumica River Basin management. The concept for establishing of departments for management of river basins is a requirement of the Law on Water (Official Gazette no. 87/08, 6 / 09, 161/09, 83/10 and 51/11) which fully transposed the requirements for integrated water management under the Water Framework Directive. Unit for Vardar River Basin management, according to the new systematization is comprised of 13 positions, where the principle for management under sub-river basins is preserved.

CLIMATE CHANGE

Climate change activities in the country are coordinated by the MoEPP (which is UNFCCC focal Point). Related climate change activities (like green growth and low carbon strategy are coordinated through the cabinet of the vice-prime minister. Inter-ministerial cooperation is providing by the work in Working group(s) and the National Council(s). A new unit for climate within the Department for Sustainable Development and Investments has been established. The capacities of the MoEPP in CC area will be straighten with the employment of three juniors with relevant technical background.

Responsible persons for CC related issues in the Ministry of Health and the Ministry of Agriculture are appointed.

It is planned to have three new employments in the unit are foreseen for the period 2015-2017. In this regard, one person has been transferred from other Departments within the MoEPP to the Unit for climate change. Currently, a state advisor on climate change is appointed. His activities are supported by project units and external expert on project level on implementation of the requirements.

NATURE

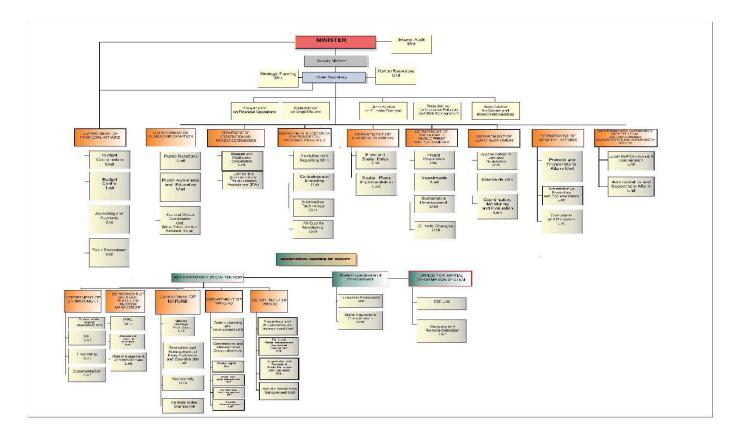
The Nature Department within the Administration of Environment has the competence to deal with the issues related to nature protection. In consistency with its priorities, reflected in the strategic documents, it is of the essence for the Ministry to establish efficient national biodiversity monitoring system and to further approximate its legislation to the *acquis* by development of secondary legislation. This should be done for the purpose of the implementation of the obligations from the Birds (2009/147/EC) and Habitats (92/43/EEC) Directives. Activities for the protection of nature in terms of preparing policies for nature protection, protection of biological and landscape diversity and protection of natural heritage management and landscape biological diversity and natural heritage, are conducted by Department of Nature composed of 4 Units: Natural Heritage Protection Unit, Protection and Management of protected areas and geo-diversity Unit, Biodiversity Unit and GMO Unit. Inspections in the area of nature are performed by the state inspectors for nature protection on a basis of supervision on the implementation of the related measures.

AIR MANAGEMENT

The *Macedonian Environmental Information Centre* (MEIC) of the Ministry of Environment and Physical Planning (MoEPP) is currently operating a State Automatic Monitoring System for Air Quality consisting of 17 stations for ambient air quality in 10 cities and locations. The designing of the network started with the establishment of 4 automatic air quality monitoring stations in 1998 in Skopje. In 2002, three additional monitoring stations were installed in Kocani, Kumanovo and Kicevo. In 2004, the monitoring system was accomplished with 6 monitoring stations, which are located in Tetovo, Bitola (2 stations), Veles (2 stations) and Lazaropole. The traffic station in Skopje and mobile station in Kavadarci were put into operation in 2005. In 2008 two monitoring stations from Skopje were dislocated to Ilinden, in the vicinity of refinery Okta. In September 2011, two additional monitoring stations were supplied and located in Skopje. The Central Environmental Laboratory of the MoEPP performs analysis of air-quality samples. The MoEPP Mobile Emission Monitoring Laboratory assists the MoEPP Environment Inspectorate in measuring emissions.

Further strengthening of the national capacities (under TAIB 2012-2013) in order to harmonise legislation with the Environmental and climate change Directives and their implementation, and to strengthen the central and local level administrative capacities is needed in particularly in prioritised areas of environmental management and climate changes , while contributing to an appropriate working environment is needed. In view of the above, it is vital that the MoEPP together with other ministries, departments and stakeholders in the environment and climate sector continue improving their coordination efforts to ensure a smooth mechanism for international environmental and climate cooperation.

Organisation chart of the Ministry of Environment and Physical Planning is included below:



ANNEX 3: Details per EU funded operation (*) where applicable:

MEASURE	PROGRAMI NG YEAR	SECTOR	TYPE OF SERVICES	IPA FUNDS (EUR)	NATIONAL COFINANCING (EUR)	TOTAL BUDGET (EUR)
Measure 1	2012	Waste Management	Twinning	960,000	50,526.3	1,010,526.3
Measure 4	2012	Air management	Twinning	1,050,000	50,000	1,100,000
Measure 5	2012	FOR ALL SECTORS	Supply contract	600,000	200,000	800,000
Measure 2	2013	Water management	Twinning	1,140,000	60,000	1,200,000
Measure 3	2013	Nature protection	Twinning	1,045,000	55,000	1,100,000

Indicative list of items/Cost estimate of needed supplies

Description	Quantity	Expected price		
IT AND OTHER EQUIPMENT				
Blade servers	4	14,000		
Network storage server - NAS	1	7,000		
HPC Rack Server with virtualization software	1	12,000		
Server UPS	4	11,200		
Personal computer	50	42,500		
Laptop computer	20	17,200		
Multi-Functional Device (Copier/Printer/Scanner)	5	3,500		
Copy machine A3 format	1	1,110		
Development of software applications for various environmental sectors	5	74,000		
Vehicles	3	30,000		
GIS software	5 licenses	15,000		
CLIMATE CHANGE				
Thermal camera	2	7,400		
System Analyzer Airflow Kit	2	1,480		
CO2 Sensor	1	1,480		

Data Logger	2		740	
AIR	1		T	
Air quality Monitoring station	1		125,800	
Mobile Air quality Monitoring station	1		14,800	
Mobile calibration and maintenance unit	1		74,000	
Analisators for various pollutants for existing AQ monitoring stations			236,800	
WATER				
Hydrological instrument acoustic doppler current profiler with pocket PC	1		20,000	
Inductively coupled plasma mass spectrometry (ICP/MS)	1		160,000	
Gas Chromatograph/MS		1		130,000
Portable full water quality screening Algae / cyan bacteria, Chlorophyll A Conductivity, Temperature		1		24,000
Stereo zoom microscope with digita software	l camera and measuring	1		4,000
Stereo inverted microscope with dig	ital camera	1		9,000
Ruttner Water Sampler		1		2,000
Surber Sampler		1		400
Portable multi parameter for running	g waters	1		4,000
WASTE				
Terrain vehicles		1		15,000
GPS		1		370
Camera		3		400
Video recorder		2		592
Shredder		2		200
NATURE		•		
UAV with digital & thermal cameras				10,000
Observation spotting scope + Camera + Adaptor				3,000
Digital Trail Camera		10		3,000
Forestry Suppliers - Laser Rangefinder		5		3,000
TOTAL				1,078,972

Justification

WASTE

Equipment will support Sector of Waste in MoEPP for daily monitoring and implementation of the Law of Waste, other waste laws and Waste directives in to the Regional waste management plans.

WATER

Selected equipment will be collecting information from measure points in the river Vardar. Equipment will be measured biological, chemical and quantitative status for surface and ground water. MoEPP and River water management body will be operate with data's, and they will be used for preparation of River basin management plan, for reporting according Law of water and WFD to EC, and other relevant international agreement's and convention.

CLIMATE

Mobile equipment will be used MoEPP for sampling greenhouse gasses from various places in the country. Also equipment will be used for measure energy efficiency for buildings, and calculation and modelling of greenhouse gasses emission. MoEPP will be operating with data's and they will be used for reporting according EU directives. More extensive support for the Climate change area is foreseen in the frame of IPA II support for this sector.

AIR

The technical explanation for this is based on the Preliminary air quality assessment for the former Yugoslav Republic of Macedonia, within the ongoing EU funded twinning project "Strengthening the central and local level capacities for environmental management in the area of air quality. In this report it was concluded that the current locations of the stations do not fulfil the requirements regarding the type of the stations set in CAFÉ Directive. Namely different environments (i.e. urban background areas near residential areas, rural residential areas, traffic influenced areas outside cities (along motorways), rural background areas) need to be covered with monitoring stations. Hence, the current station setup needs to be extended according to the following proposal:

 \Box Skopje agglomeration: the agglomeration needs three stations in suburban areas for ozone measurements;

Eastern zone needs one station located in suburban area for ozone measurements;

□ Western zone needs one urban background station for particulate matter and one for carbon monoxide.

It should be noted that with purchases of one monitoring station, and analyzers for various pollutants the requirements for the different type of station will be given fulfilled. Additionally getting new analyzers (for example for BTX needed for ozone precursors measurements and PM2.5) in future will provide enough data to classify zones for these pollutants.

Additionally in the report it was noted that more representative information on the air quality in our country in future can be established with:

□ Further improvement of quality of measurement data (correction and validation of data, field calibration, better data coverage);

Additional continuous measurement of PM2.5 (Since PM2.5 now is measured only on two stations and there are no rural stations where PM2.5 is measured);

use of mobile measurements and passive sampling for indicative and short term measurements campaigns. Indicative measurements represent a first basic tool in order to perform the preliminary air quality assessment. At this moment the plan prepared is fundamental especially for those pollutants (PM2.5, Benzene, H2S,) not yet monitored extensively in BC.

Quality of the monitoring data shall be further improved with the supply of the maintains and calibration unit.

Additionally in the report it was noted that more representative information on the air quality in our country in future can be established with:

At the end If the supply of the proposed equipment for air quality measurements is fully completed, this will lead to further fulfilment of the above requirements and would highly improve the possibilities of conducting air quality assessments and of defining and implementing proper measures for air quality protection.

NATURE

In the field investigation with selected equipment will collect information and data of biodiversity, according Law of Nature and Birds and Habitat directives.

Equipment will be support Sector of Nature in MoEPP for performing monitoring of the biodiversity in to the pilot-selected Protected areas.

Collected data's will be used for reporting to EC, and other relevant international agreements and convention

Intended beneficiary – the intended beneficiary of the whole equipment will be Ministry i.e. the sectors listed in the project proposal, such as: Sector for Climate change, Sector for Waste, Sector for Water, Sector for Nature and Sector for Air)

Indication on how detailed technical specifications will be prepared - The technical specifications for supply equipment will be prepared by the expert engaged through IPA PPF.

Provisions for maintenance + section to be filled in on assets' ownership current and after project <u>completion</u> - Concerning the purchased IT equipment, after the guarantee period is expired, the maintenance will be provided by MoEPP user of the equipment. MoEPP will cover cost from national budget for maintenance.</u>

SECTOR AIR_1 VEHICLE What and by whom the vehicles will be used for? The mobile calibration and maintenance unite (special purpose vehicle), which is part of the technical assistance of the project, is a terrain vehicle with special indoor characteristics (specially rearranged interior) suited for the safe transport of calibration units, calibration gas cylinders, instruments, spare parts and special maintenance and service tools and equipment. This calibration and maintenance unite is to be used for regular and irregular service, maintenance and calibration activities exclusively by the service and maintenance expert team from the Air quality monitoring division, part of the Macedonian Environmental Information Centre. Show the link between the purchases of vehicles The calibration and maintenance unite (special purpose vehicle), will enable regular maintenance and with the project activities calibration of the instruments in regular cycles and will provide safe transport of the equipment and especially of the service staff. This will increase the quality and improve the reliability of the air quality data from the measurements. Accurate and reliable air quality data are essential for the implementation of all planned components of the Twinning Project proposal. Higher data coverage is important to fulfill requirements for national and international data reporting toward European

Justifications for purchase of vehicles

	Environmental Agency and other international bodies (UNECE, JRC etc). Additionally increased data quality is essential for the preparation of precise plans and programs for air quality improvement and protection, as well as and implementation of the measures defined in these strategic documents. The Air quality calibration laboratory ensures the quality control and quality assurance of the measurement data by transferring the standards from the calibration laboratory to the field calibration in the measurement stations. These procedures are vital for the accreditation process of the calibration laboratory.
	The vehicle which is currently in use is frequently in malfunction (300000 km driven), interrupting the regular maintenance and service intervals of the instruments in the monitoring stations, therefore increasing the uncertainty of the obtained data and of the uncertainty budget of the entire State Automatic Ambient Air Quality Monitoring System. The new calibration and maintenance unite is needed in order to implement the planned activities and to enable prompt reaction in extreme situations which could arise at the monitoring stations throughout the country.
	The quality procedures for data management still require support in order to fulfill the requirements from directives for data quality and reporting.
	Directive 2008/50/EC on ambient air quality and cleaner air for Europe sets out the requirements for measurement and assessment of sulphur dioxide, nitrogen oxides, benzene, carbon monoxide, lead, PM10, PM2.5 and ozone.
	The Directive also outlines the quality and methodology requirements for the measurements. These directives have already been transposed in the national air legislation, meaning that with the implementation of the directive requirements the national legislation will also be implemented.
Explain why the vehicles cannot be bought through the state budget / the budget of the institution	Due to the budget restraints, which are even more severe in the last several years because of the economic crisis, the approved budget for the air quality monitoring partially covers the needs for the spare parts, calibration gas standards, new instruments, the costs for regular maintenance and service of the air quality equipment. Even though there is a clear need for a newcalibration and maintenance unite, knowing the limited approved budget, the possibility to purchase it through the state budget are quite limited. However the need for this calibration and maintenance unite is urgent since it is
	essential in ensuring the proper functioning of the monitoring equipment and the provision of reliable 34

	monitoring data which is essential for the implementation of the proposed project components.
SECTOR NATURE_1 VEHICLE	implementation of the proposed project components.
What and by whom the vehicles will be used for?	Vehicle will be used by experts in the Department of UZHS nature of the performance of project activities, and activities associated with implementation monitoring in nature and over the situation with biodiversity conservation
Show the link between the purchases of vehicles with the project activities	Vehicle is in direct correlation with the implementation of project activities without such equipment and off-road vehicle they cannot be realized. Vehicle will be used fairly and hospitality professionals from the Department UZHS nature of implementation of obligations to perform specialized monitoring of nature and biodiversity and production analysis, NATURA 2000, Preparation of draft Management plans, national and thematic reports to the EU and secretariats of international conventions and agreements to which RM a party
Explain why the vehicles cannot be bought through the state budget / the budget of the institution	In the past two decades (1991-2011) were not provided even minimal funds for procurement of equipment and off-road vehicle to perform professional inspection and monitoring in nature and biodiversity. Although requested, but funds for this purpose are not provided and no opportunities to provide in the medium term (2011-2015). This project is a unique real opportunity to effectively equip the Department UZHS nature of the necessary equipment
	and off-road vehicle to be able to smoothly carry out high quality, efficient and professional their obligation determined by the Law on Nature Protection
SECTOR WASTE _1 VEHICLE	
What and by whom the vehicles will be used for?	One of the activities during the procedure for issuing the licences for treatment, recovery and storage of waste is to go on site and check the if the situation on place is in accordance with the application for the waste licence.
Show the link between the purchases of vehicles with the project activities	Vehicle is in direct correlation with the implementation of project activities without such off- road vehicle they cannot be realized. Strengthening the administrative capacity and measures for implementation of Waste from electrical and electronic equipment Is directly connected with work with waste regions.
Explain why the vehicles cannot be bought through the state budget / the budget of the institution	Due to the budget restraints, which are even more severe in the last several years because of the economic crisis, the government doesn't allocate additional funds for Vehicle supply.

SECTOR WATER_1 VEHICLE	
What and by whom the vehicles will be used for?	The mobile calibration and maintenance unite (special purpose vehicle), which is part of the technical assistance of the project, is a terrain vehicle with special indoor characteristics (specially rearranged interior) suited for the safe transport of calibration units, calibration instruments, spare parts and specialmaintenance and service tools and equipment. This calibration and maintenance unite is to be used for regular and irregular service, maintenanceand calibration activities exclusively by the service and maintenance expert team from the Water division, part of the MoEPP.
Show the link between the purchases of vehicles with the project activities	Consultation process for the draft Vardar River basin management, economic analysis of water use, programmes of measures, Stakeholders involvement, public consultation and cross border consultations and design of the draft Vardar River basin management plan is connected with work in field. The quality procedures for data management still require support in order to fulfill the requirements from directives for data quality and reporting. Calibration of the equipment, maintenance of the monitoring water stations is connected with field work.
Explain why the vehicles cannot be bought through the state budget / the budget of the institution	Due to the budget restraints, which are even more severe in the last several years because of the economic crisis, the government doesn't allocate additional funds for Vehicle supply.

ANNEX 4

The Projects must be carried out in accordance to the Communications and Visibility Manual for EU External Action. The visibility issues must be respected all types of communications written correspondence and preparation of deliverables (brochures, posters, new letters pamphlets and other type of promotion material). All the deliverables to be published / issued required prior approval by the contracting authority on the concern of respect and companies with visibility guidelines.