



FINNISH METEOROLOGICAL INSTITUTE



МИНИСТЕРСТВО ЗА ЖИВОТНА СРЕДИНА
И ПРОСТОРНО ПЛАНИРАЊЕ

TWINNING INTERIM QUARTERLY REPORT number: 1



European Agency for Reconstruction

TWINNING PROJECT

INTERIM QUARTERLY REPORT

Project Title: Air Quality Improvement

**Partners: The Finnish Meteorological Institute and the
Ministry of Environment and Physical Planning**

Date: 8.12.2006

Agency Contract Number 05MAC01/13/102

Twinning Contract number: MK05/IB-EN-01

**Section 1: Project data**

Twinning Contract Number	MK05/IB-EN-01
Project Title:	Air Quality Improvement
Twinning Partners (MS and BC)	The Finnish Meteorological Institute and the Ministry of Environment and Physical Planning
Report Number:	1
Period covered by the report:	1.9.-30.11.2006
Duration of the project:	1.9.2006-29.2.2008
Rapporteur:	<ul style="list-style-type: none">• Harri Pietarila, Member State Project Leader (MS PL)• Svetlana Gjorgjeva, Beneficiary Country Project Leader (BC PL)• Tiina Harju, Resident Twinning Advisor (RTA)

15.12.2006

Harri Pietarila, MS Project Leader

Svetlana Gjorgjeva, BC Project Leader

Air Quality Improvement
An EU-funded project managed by the European Agency for Reconstruction

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Section 2: Content

This section describes the activities of the project. It is divided in five sections.

2A – BACKGROUND

2B – ACHIEVEMENT OF MANDATORY RESULTS

2C – ACTIVITIES IN THE REPORTING PERIOD

2D – TIMING AND DELAYS

2E – ASSESSMENT

Section 3: Expenditures





2A - BACKGROUND

Policy Developments

The government changed in August 2006.

During the reporting period covered by the Quarterly Report, several activities related to further development of the legislation through transposition of Directives relevant to air, have been carried out in the Ministry of Environment and Physical Planning:

1. Under the CARDS 2004 Project –Environmental management:
 - a. Component M3 - Development of Preliminary Assessment of the Air Quality and establishment of air quality zones and agglomerations on the territory of the Republic of Macedonia. Thus, in accordance with the Framework Air Directive 96/62/EC, draft "Proposed Zones and Agglomerations in the Republic of Macedonia and Minimum Required Measuring Points" has been produced.
 - b. Under the same Component, in relation to secondary legislation development, the following legal acts have been drafted:
 - Rulebook on the introduction of CORINAIR methodology
 - Rulebook on preliminary air quality assessment and establishment of zones and agglomerations in the Republic of Macedonia.
2. Under the CARDS 2005 Project - "National Strategy for Environmental Approximation"

In the air component, implementation plans and costs analysis should be prepared in relation to 96/62/EC and 2003/87/EC Directives, implementation plans 2002/3/EC and 2001/81/EC Directives, and if sufficient resources remain available, tables of concordance and implementation plans will also be developed for other relevant Directives, such as 99/30/EC, 2000/69/EC, 99/94/EC, 99/32/EC, 98/70/EC.

- Tables of concordance have been developed for 96/62/EC, 2002/3/EC, 2001/81/EC and 2003/87/EC Directives, as well as the forms and the findings with regard to the status of transposition and gap analysis on 96/62/EC and 2001/81/EC Directives; lists of actions required for full transposition of 96/62/EC and 2001/81/EC have been developed, too.
- Under the project, presentation and training of the wider working group on air have been completed, focused on the methodology for financial estimate of costs required for full legal transposition of 96/62/EC and 2001/81/EC Directives.
- Draft versions of implementation plans for 96/62/EC and 2001/81/EC





Directives.

3. Amendment and Supplementing of the Law on Environment

The Law on Environment has entered a procedure for its amendment and supplementing. In this context, Articles regulating environmental monitoring and data reporting, Indicators based Report development and State of Environment Report, will be amended to be more detailed.

4. In the relevant period, several meetings among different projects implemented within the MEPP have been organized, in order to achieve mutual adjustments and avoid duplications and overlaps by different projects in the area of air, and thus to achieve the maximum cost-effectiveness possible.

According to the Twinning contract the project will assist in implementing the air quality framework directive, in preparing relevant secondary legislation and in upgrading skills required to operate a significantly developed automatic ambient air quality monitoring network with supporting laboratory services. The project has 5 components (guidelines and secondary laws, emission inventories, preliminary environmental assessment, air quality measurements and laboratory works, and dispersion modelling)."

First steps for the developments in legislation, emission inventories, preliminary air quality assessment, developing automatic ambient air quality monitoring network with supporting laboratory services and dispersion modelling have been taken in the twinning project.

Project Assumptions

It has been expressed in the article 2 of the working plan in the twinning contract that the twinning project Air Quality Improvements relates to article 103 of the SAA, which mentions that "the Parties shall develop and strengthen their cooperation in the vital task of combating environmental degradation, with the view to supporting environmental sustainability". It adds that "Cooperation should focus on several priorities", including "combating air pollution, environmental impact assessment and strategic environmental assessment, continuous approximation of laws and regulations to Community standards".

The twinning project has run only three months therefore none of assumptions of the project have not yet been fully fulfilled. The lack of human resource has been a significant problem from the beginning of October after a termination of





temporary contracts (see more details in 2E.ASSESSMENT Overall) of BC counterparts in the project. It is most evident that without those BC counterparts none of the assumptions can not be made to achieve. The assumptions given in the twinning contract are shown in the following table.

Table 1. ASSUMPTIONS from the Twinning contract

Component Number	Assumptions	Status
I	Cooperation and outputs of CARDS 2004 and CARDS 2005 projects	Partly fulfilled
	Translation of legislation and documents	Partly fulfilled
	Co-operation with the relevant stakeholders functional	Partly fulfilled
II	Results from CARDS 2003 Regional available	Partly fulfilled; not official yet, just a first draft
	Activity data is available and its quality meets the requirements	Partly fulfilled
	Software and hardware meets the requirement	Partly fulfilled
	Skilful personnel available and enough personnel resources	Partly fulfilled
	Stakeholders available and willing to cooperate	Partly fulfilled
III	Cooperation and outputs of CARDS 2004	Partly fulfilled
	Emission data, other activity data and AQ measurement data available and its quality meets requirements	Partly fulfilled
	Dispersion model and GIS tools existing and meets requirements	-
	Enough personnel resources available	-
	Enough resources for producing and distributing	-





	promotion materials	
IV	Skilful personnel available	Partly fulfilled, mainly not
	Hardware and Software requirements met	Not fulfilled
	Enough resources for new spare parts and/or equipments	Partly fulfilled
	New detector and a sample injection system for GC procured in the Environmental Laboratory	Partly fulfilled (no need for a new detector)
	New equipments and spare parts for mobile emission laboratory procured	Not fulfilled
V	BC human resources and computer meets requirements	Partly fulfilled
	Resources for model procurement available	Partly fulfilled
	Co-operation with HMA	Partly fulfilled
	GIS, emission and meteorological data available	Partly fulfilled

2B - ACHIEVEMENT OF MANDATORY RESULTS

All the benchmarks which were achieved in the reporting period within each of the components are listed and indicated which of the mandatory results are completed or close to completion.

I COMPONENT – Guidelines and Secondary Legislation

Mandatory Results

- The EU air quality legislation based on the already harmonized air quality directive further aligned
 - GAP analysis – close to completion, further development in March 2007
 - Table of Concordance - close to completion, further development in March 2007





II COMPONENT – Emission Inventories

Mandatory Results

1. Institutional capacity and tools improved for maintaining emission data inventories and improved tools
 - Capacity of personnel and tools improved – close to completion
2. Report on compliance with EU based national emission system and priority list for improvement
 - Priority list – started

Mandatory Results

IV COMPONENT – Air Quality Measurements and Laboratory Work

1. Operation of the calibration laboratory improved and the staff is trained
 - Operation of the laboratory improved – partly completed
4. Plan for improvement and training for data management has been completed
 - Improvement plan – close to completion
 - Staff trained - started
5. Plan for improvement and training for GCs analysis for air samples has been completed
 - Improvement plan – completed
 - Staff trained – not done
6. The operation of a Mobile Emission Laboratory is improved and the staff received proper training for emissions measurements
 - Operation improved – started
 - Staff trained – not done
7. Specifications and priority list for investment (software, laboratory equipment and additional equipment for air quality monitoring stations and mobile emission laboratory)
 - Specifications and priority list – partly completed, not for software and monitoring stations

Mandatory Results

V COMPONENT – Dispersion Modelling

1. An air quality model has been supplied and implemented
2. Operational model for dispersion calculations and implemented at the MEIC – close to completion. Dispersion models for traffic emissions (line source model CAR-FMI and street canyon model OSPM) supplied and FMI will implement option to choose Macedonian coordinate system in CAR-FMI. During the next mission urban dispersion model UDM-FMI or equivalent software package will be supplied and implement. MS Expert





will provide a list of the necessary meteorological data that Ministry should officially ask to get from the Macedonian Meteorological institute as a part of an official co-operation between the Ministry and the Meteorological Institute for utilizing the installed dispersion models.

3. Methods to provide meteorological and emission dataset for dispersion modelling has been established
 - Meteorological and emission dataset available – started
4. The staff is trained in use and validation of the model results
 - Staff trained – started, also course material partly developed

2C. ACTIVITIES IN THE REPORTING PERIOD

A Workshop of the twinning project was organised 27 September 2006. All persons involved in the twinning project were invited to the workshop. After a short common meeting people were divided to groups so that they had a possibility to discuss about details in all five twinning components. The participant list in the workshop is shown below:

1. Harri Pietarila, MS PL, Finnish Meteorological Institute (FMI)
2. Kari Makela, Component 2 Leader, VTT
3. Alec Estlander, Component 1 Leader, Finnish Environment Institute, (SYKE)
4. Jari Walden, Component 4 Leader, FMI
5. Ari Karppinen, Component 5 Leader, FMI
6. Christian Nagl (replaces J. Scheiner, Austrian PL), Federal Environmental Agency, (FEA)
7. Tiina Harju, RTA, FMI
8. Martina Toceva, RTA Assistant
9. Svetlana Gjorgjeva, BC PL, MEPP
10. Aneta Stefanovska, BC Counterpart and Component 3 Leader, MEPP
11. Tanja Paunovska, Component 1 Leader, MEPP
12. Marijonka Vilarova, Component 2 Leader, MEPP
13. Aleksandra N. Krsteska, Component 4 Leader, MEPP
14. Vlado Vasilev, Component 5 Leader, MEPP
15. Liljana Todorova Talevska, Hydro-Meteorological Administration (HMA)
16. Mihail Kocubovski, Republic Institute for Health Protection (RIHP)
17. Ljupco Grozdanovski, MEPP
18. Igor Atanasov, MEPP
19. Dejan Poposki, MEPP
20. Borco Aleksov, MEPP
21. Maja Gramatikova, MEPP
22. Pece Ristevski, MEPP
23. Biljana Mileva, CARDS 2004 project





24. Zoran Zdravkovski, Professor at the Chemistry Faculty
25. Milena Manova, Cards 2005 project

One day after the workshop was the kick-off meeting of the twinning project. The results of the previous day workshop was presented in this kick-off meeting whose participants were

1. Harri Pietarila, MS PL, FMI
2. Kari Makela, Component 2 Leader, VTT
3. Alec Estlander, Component 1 Leader, SYKE
4. Jari Walden, Component 4 Leader, FMI
5. Ari Karppinen, Component 5 Leader, FMI
6. Christian Nagl (replaces J. Schneider, Austrian PL)
7. Tiina Harju, RTA, FMI
8. Martina Toceva, RTA Assistant
9. Svetlana Gjorgjeva, BC PL, MEPP
10. Gordana Kozuharova, MEPP
11. Aneta Stefanovska, RTA Counterpart and Component 3 Leader, MEPP
12. Tanja Paunovska, Component 1 Leader, MEPP
13. Aleksandra N. Krsteska, Component 4 Leader, MEPP
14. Vlado Vasilev, Component 5 Leader, MEPP
15. Liljana Todorova Talevska, Hydro-Meteorological Administration (HMA)
16. Pece Ristevski, Hydro-Meteorological Administration (HMA)
17. Ivan Borisavljevic, EAR
18. Dimitar Malinovski, EAR
19. Vera Mircevska, Translator

A first steering committee was held 29 September 2006 in the Ministry of Environment and Physical Planning. The following participants were involved in the steering committee:

1. Dejan Panovski, State Secretary, MEPP
2. Svetlana Gjorgjeva, BC PL, MEPP
3. Harri Pietarila, MS PL, Finnish Meteorological Institute (FMI)
4. Tiina Harju, RTA, FMI
5. Dimitar Malinovski, EAR
6. Liljana Todorova Talevska, Hydro-Meteorological Administration (HMA)
7. Jane Sapardanovski, Ministry of Economy
8. Zudi Biljali, Ministry of Health
9. Dejan Gjorsoski, EC Delegation
10. Mate Gjorgievski, Secretariat for European Affairs (SEA)
11. Meri Georgievska, Secretariat for European Affairs (SEA)
12. Martina Toceva, RTA Assistant, Secretary
13. Vera Mircevska, Translator





A co-operation between the twinning project and the CARDS 2004 and CARDS 2005 project has started. RTA Tiina Harju, Marijonka Vilarova and Aneta Stefanovska from the MEPP and also Aleksandra Nestorovska-Krsteska from the MEPP before her temporary contract was terminated are members of Air Quality Working Group which have had 4 meetings during the twinning project. In those meetings people from the twinning project have had an opportunity in addition to hear results of the CARDS 2005 project to meet experts from CARDS 2005 project and Macedonian experts from different institutes and private companies.

Activities during short-term expert's missions in the reporting period:

I COMPONENT – Guidelines and Secondary Legislation

Alec Estlander and Mika Seppala from 13.11.2006 to 17.11.2006

- Activity No 1.1.1: Review current secondary legislation, and preparation of Table of concordance for: 99/30/EC, 2004/107/EC and 2000/69/EC
 - Regulation on limit values,
 - Rulebook on air quality assessment
- Activity 1.1.2: Analysis of the needed sub legislation for further implementation of first, second and fourth Daughter Directives 99/30/EC, 2004/107/EC and 2000/69/EC

Marijonka Vilarova and Aneta Stefanovska from the Macedonian Environmental Information Centre (MEIC) in the Ministry of Environmental and Physical Planning (MEPP) and Tanja Paunovska from the Sector of Regulation and Standardisation in MEPP were involved in the activities. In addition to them there were a lot of persons involved in the activities taking part in discussions and meetings. Here is the list of the those persons Milena Manova, CARDS 2005 project, Thisvi Ekmetzoglou-Newson, CARDS2005 project, Dragana Cerepnalkovska from the Sector of Regulation and Standardisation in MEPP, project manager Christine Federlin from Progress Monitoring project managed Danish consultancy firm COWI (COWI project), Andreja Stojkovski from "COWI" project, Biljana Vukovic from CARDS 2004 project, international expert Zen Makuch from CARDS 2004 project, Mihail Kocubovski, RIHP, Liljana Todorovska Talevska, HMA, Martina Toceva RTA assistant and Tiina Harju RTA.

II COMPONENT – Emission Inventories

Santtu Mattila from 15.10.2006 to 20.10.2006

- Activity No. 2.1.1 Identify and appoint stakeholders
Marijonka Vilarova, MEIC in MEPP and partly Aneta Stefanovska,





- MEIC in MEPP were involved in the activity.
- Activity No. 2.1.2. Support to construct the database and its content for preparation of the reports to relevant international bodies
Aneta Stefanovska, MEIC in MEPP and Marijonka Vilarova were involved in the activity.
- Activity No. 2.2.1 Identify data gaps for compliance with EU-based national air emission system
Aneta Stefanovska, MEIC in MEPP was involved in the activity.

Kari Makela from 16.10.2006 to 20.10.2006

- Activity No. 2.1.1 Identify and appoint stakeholders
- Activity No. 2.3.2 Support to develop collection of activity data
Marijonka Vilarova, MEIC in MEPP and partly Aneta Stefanovska, MEIC in MEPP were involved in the activities. In addition to them there were a lot of persons involved in the activities taking part in discussions and meetings. Here is the list of the those persons Fatmir Ajruli, Ministry of Transport and Communication, Prof. Mile Dimitrovski and junior assistant Dame Dimitrovski from Faculty of Mechanical Engineering, Martina Toceva, RTA assistant and Tiina Harju RTA.

Kari Makela from 20.11.2006 to 24.11.2006

- Activity No. 2.3.1 Support to developing national emission factors and inventory methods
- Activity No. 2.3.2 Support to develop collection of activity data
 - Marijonka Vilarova, MEIC in MEPP and partly Aneta Stefanovska, MEIC in MEPP were involved in the activities. In addition to them there were a lot of persons involved in the activities taking part in discussions and meetings. Here is the list of the those persons Dame Dimitrovski, Faculty of Mechanical Engineering, Vlado Karovski from the Sector of Regulation and Standardisation in MEPP, Cvetko Micevski and Fatmir Ajruli, Ministry of Transport and Communication, Mile Manevski, Ministry of Internal Affairs, Lefterija Kalevska, Mira Todorova, Lence Nedanoska, Ljubica Damceska and Janaki Megovski, State Statistical Office, Nikola Krstanoski, Bitola University, Martina Toceva RTA assistant and Tiina Harju RTA

III COMPONENT - Preliminary Air Quality Assessment

No missions has been done under the Component 3 but the Preliminary air quality assessment has been started by meeting international experts from CARDS 2004 project and collecting data. The meeting with international expert Stern Stuart and junior advisor Biljana Mileva, CARDS 2004 project, Marijonka Vilarova and Aneta Stefanovska from MEPP, RTA Tiina Harju was





held in October. Stern Stuart and Biljana Mileva have given the data managed in the CARDS 2004 project to a use in the twinning project. The data and reports have forwarded to MS experts for future analysis. The first mission in component 3 has been organised (January 2007) at the same time of the international expert Stern Stuart from the CARDS 2004 project and the air quality expert Knud Erik Poulsen from the CARDS 2005 project.

IV COMPONENT – Air Quality Measurements and Laboratory Work

Jari Walden from 23.11.2006 to 27.11.2006

- Activity No. 4.1.1 Review of the present situation at the calibration laboratory
With the help of the German expert Mr Joachim Seewoester, the review of the calibration laboratory was completed as good as practicable under the circumstances.
- Activity No. 4.1.2 Preparing a Plan for improvement of calibration laboratory
This item was difficult to complete without the consultation with the personnel and also some possible misunderstanding at item 4.1.1. However the plan for improvements was conducted.
- Activity No. 4.7.1 Preparation a draft specification and priority list of investments (software, laboratory equipment and additional equipment for air quality monitoring stations and mobile emission laboratory). The list was prepared with the consultation of MS for items 4.1.1, 4.1.2, 4.4.1, 4.4.2, 4.4.3, 4.5.1, 4.5.2 and 4.6.1. The list of investments is delivered in a separate report in given below.

No Macedonian counterparts involved in the activities because Igor Atanasov's, MEIC in MEPP, and Ljupco Grozdanovski's, MEIC in MEPP, temporary contracts were terminated 6 October 2006.

The investment list:

1 Background

During the mission for 4.1.1 and 4.1.2 there was no BC staff at the calibration laboratory to consult with the investments. However the obvious needs were discovered examining the equipments at the laboratory. Similar difficulties were faced with the mobile laboratory during the mission for 4.6.1. The list of investments was prepared by the MS expert according to the findings during the visit. The investment list for the organic laboratory is prepared during the mission on 4.5.1 and 4.5.2. The list is based on the consultation of the MS expert with the laboratory personnel existed during the first mission at the chemical





laboratory. The investment for the software (items 4.4.1 – 4.4.3) is left out at this point due to the fact that the complete plan for the whole data management system is under planning by the CARDS 2004 project and it will be ready until the end of the year. The MS expert Timo Salmi has given in his mission report recommendations for modification of the data management system and its more efficient use. Detailed software specifications will be done later when the specifications from the CARDS 2004 project has been received and analysed.

It should be addressed that the list may not be complete for full operation but is the best estimate that can be made at the present circumstance.

2 Investments

Investment	Estimated cost (€)
2.1 Calibration laboratory	
1) The national ozone photometer for the calibration of the ozone analysers. The most suitable device is the TEI 49 iPS from Thermo Environmental Instrument.	11 000
2) Field calibrator for calibration of gas analyzers at the measurement station equipped with GPT-method	15 000
3) Certified reference gas standard (CRM) of CO at low concentration (appr. 40 ppm with uncertainty of 1 %). Suppliers are from the metrological laboratory (e.g. National Physical laboratory (NPL), UK or Nederlands Meetinstituut (NMI) The Netherlands). The CRM is used for the cross check of the performance characteristic of the static injection method.	3 000
4) Pressure regulators for the CRM (2 unit two-stage regulators)	2000
5) Gas flow measurement device. The calibration of the gas dilution device (mass flow controllers) at the laboratory and at the measurement station	





<p>must be made with the accurate gas flow meter. The most reliable is made by DHI from US based on the pressure difference caused by the gas flow through the laminar flow element (LFE). The need is one central unit and two LFE to cover the ranges of dilution and span gas flows of the gas dilutor (0 – 10 000 ml/min and 0 – 500 ml/min).</p>	(35 000)
<p>FOR NOTIFICATION! This costs EUR 35 000 is for this high quality device with the technical method. The more economy one could be bought by EUR 10 000.</p>	10 000
<p>6) Certified reference gas standard (CRM) of BTEX at high concentration (appr. 1 ppm with uncertainty of 1 %). Suppliers are from the metrological laboratory (e.g. National Physical laboratory (NPL), UK or Nederlands Meetinstituut (NMI) The Netherlands). The CRM is used for the calibration of the BTEX analyzers.</p>	3 000
<p>7) Consumables</p>	10 000
<p>Subtotal</p>	<p>54 000</p> <p>(79 000)</p>
<p>2.2 Chemical laboratory</p> <ul style="list-style-type: none"> - Equipment needed for PAH analysis - Soxhlet extractor *2, round-bottomed flask*2 á 150 € - Electric bath*2 á 600 € - GC-column, type HP-5MS, (5%)-difenyl-(95%)-dimethylpolysiloxane, length 30 m, inner diameter 0,25 mm, film thickness 0,25 µm, 600 € - Purification system for the carrier gas, 150 € - Reference material NIST1649a 600 € - Deuterated internal PAH standard 100 € - External PAH standard mixture 100 € - Sample vials 140 € - Filters for filtering the liquid sample 200 € - Disposable gloves 60 € - Solvent resistant gloves - Blunt tweezers*2 á 10 € 	





- UV lamp 40 €	
- Pasteur pipettes 20 €	
- Filters Teflon for sampling 600 €	
- Consumables 5000 €	
Subtotal	9130
2.3 Mobile emission laboratory	
1. New calibration gas cylinders for calibration of the emission analyzers at the site. The need is for	
- one cylinder containing suitable concentrations of O ₂ , CO, CO ₂ in nitrogen	1000
- other cylinder SO ₂ , NO _x in nitrogen	1000
- suitable pressure regulators for the both cylinders	2000
2. New control and condensation units for particulate emission measurement equipment.	14 000
3. Quartz fibre filters for particulate measurements	1 000
4. O ₂ - analyser based on electrochemical cell	3 000
5. Miscellaneous (hoses, tubes, valves, connectors)	3 000
Subtotal	25 000
2.4 Air quality stations	
1. Back up analyzer of PM10	20 000
2. Back up analyzer of ozone with UV-source	10 000
3. Back up analyzer of oxides of nitrogen with permeation source	10 000
Subtotal	40 000
Total	128 130





3 Remarks

It is addressed that the operation of the laboratories and the emission measurements needs experts of several years of training and practical work. In addition the funds for consumables should be good enough for maintenance, purchase of certified reference materials, calibration of the reference standards, tubes, fittings etc. The operation at each of the activities should be sized with the needs, costs and benefits.

Cost for calibration of the standards of the calibration laboratory (annual calibration of ozone photometer, flow meter, pressure and temperature meters) is approximately EUR 2 000.

Air quality measurements stations

Unfortunately limited knowledge was gained with the standard of equipments at the measurement station. According to the European air quality standards the automatic span and zero checks for continuous gas analyzers shall be made at least once every two week. However the recommendation is once a day. Also the site gas sources should check against the calibration standards at least twice a year. The calibration standards should be traceable to national standards and to SI-unit. Calibration of the instruments should be made at least once every three months, but is strongly site dependence (traffic station more frequent than urban background).

Keeping these facts in mind, the measurement stations should be equipped with:

- a proper zero air source and span source (permeation source integrated in the gas analyzers or independent gas dilutor).
- in case of ozone analyzer an UV-source is needed for span checks
- in case of carbon monoxide analyzer an external gas cylinder is needed.

For calibration of the analyzers at the field:

- the field calibrator (see the list of the reference laboratory) equipped with capability for gas phase titration method (GPT) for checking the efficiency of the Nitrogen dioxide converter at the oxides of nitrogen analyzers is needed. The field calibrator is used for calibration of the gas analyzers at every measurement stations (not the same as for zero/span checks). The field calibrator should be calibrated at the reference laboratory against the primary method e.g. static injection system and for





flow calibration (see the list at reference laboratory) prior and after each calibration tours to the field.

- the ozone calibrator (see the list of the reference laboratory) is used for calibration of the ozone analyzers at the field. The calibration of the ozone calibrator is made every one or two years against the Standard Reference Photometer (SRP) e.g. at some of the reference laboratories (Austria, Croatia, Czech).
- the flow meter (see the list of the reference laboratory) for calibration of the particulate sampling devices and also the mass flow controllers at the site.

The standard of equipments at the measurement stations shall vary depending on the classification of the station. Therefore a careful study of the necessary needs for standard equipments is needed e.g. at the traffic station no ozone measurements is needed. Due to the insufficient knowledge of the standard of equipments at the measurement station the minimum investments should be back up analyzers of continuous PM10, ozone equipped with UV-source and oxides of nitrogen equipped with integrated permeation source. Based on the pre-assessment study during this project the actual need for the analyzers can be concluded.

From the Macedonian side has given the following needs after the mission in October: a need to add 4 calibrator units to the priority list of investment, which are very important regarding the requirement of the EU directives. Also, 2 ozone analyzers should be added to the priority list of investment for 2 stations in Skopje

Timo Salmi from 16.10.2006 to 20.10.2006

- Activity No. 4.4.1 Review of present situation for data management system
- Activity No. 4.4.2 Identified needs for furthered development of the software
- Activity No. 4.4.3 Plan and specification for procurement of new data management software

Aneta Stefanovska, Macedonian Environmental Information Centre at the Ministry of Environment and Physical Planning (MEIC in MEPP) and Maja Gramatikova, MEIC in MEPP, were involved in the activities.

Vuokko Karlsson from 16.10.2006 to 20.10.2006

- Activity No. 4.5.1 Review of present situation in Central Environmental Laboratory on GCs analysis
- Activity No. 4.5.2. Preparing a plan for improvement of chemical laboratory





- Activity No. 4.7.1 Preparation a draft specification and priority list of investments.

No Macedonian counterpart was involved in the activities because Borco Aleksov's, Central Environmental Laboratory at the Ministry of Environment and Physical Planning, temporary contract was terminated 6 October 2006. RTA Tiina Harju went to the Central Environmental Laboratory together the expert to start the mission.

Hannele Hakola from 16.10.2006 to 20.10.2006

- Activity No. 4.5.1. Review of present situation in Central Environmental Laboratory on GCs analysis
- Activity No. 4.5.2. Preparing a plan for improvement of chemical laboratory
- Activity No. 4.7.1 Preparation a draft specification and priority list of investments.

No Macedonian counterpart was involved in the activities because Borco Aleksov's, Central Environmental Laboratory at the Ministry of Environment and Physical Planning, temporary contract was terminated 6 October 2006.

Johannes Roine from 23.11.2006 to 27.11.2006

- Activity No. 4.6.1. Check instruments of mobile emission laboratory and prepare plan for improvement
Stefan Hristev, Central Environmental Laboratory at the Ministry of Environment and Physical Planning, was partly involved in the activities. Dejan Popovski, Central Environmental Laboratory at the Ministry of Environment and Physical planning, was not involved in the activities because his temporary contract was terminated 6 October 2006. RTA Tiina Harju was involved in the activity taking Macedonian counterpart's role giving an input to MS expert Johannes Roine that he was able to start a review of the mobile laboratory.
- Activity No. 4.7.1 Preparation a draft specification and priority list of investments
MS experts Johannes Roine and Tuula Pellikka have prepared the draft investment list.

V COMPONENT – Dispersion modelling

Ari Karppinen from 6.11.2006 to 10.11.2006

- Activity No. 5.1.1. Specification and procurement of an appropriate system for AQ modelling
- Activity 5.2.1. Investigate available meteorological data from HMA and





Skopje airport and develop methods to provide meteorological data for dispersion modelling

- Activity 5.3.1. Training course on dispersion modeling and Demonstrate methods for validation of AQ models and for scenario making
- Activity 5.3.2. Develop course materials

Igor Paunovski, MEIC in MEPP, Aneta Stefanovska, MEIC in MEPP, and partly Marijonka Vilarova, MEIC in MEPP, Liljana Todorovska Talevska, Hydro-Meteorological Administration (HMA), Pece Ristevski (HMA), Mirjana Dimovska, Republic Institute for Health Protection (RIHP) and Biljana Mileva from the CARD2004 project “Environmental Management Strengthening” were involved in the activities no 5.1.1., 5.2.1. and 5.3.1. Also RTA assistant Martina Toceva and RTA Tiina Harju were involved in the previous activities. Igor Paunovski was nominated to the Twinning project instead of Vlado Vasilev, MEIC in MEPP, 30 October 2006.

2D. TIMING AND DELAYS

Adherence to time schedule


The time schedule for the activities taken from the working plan is shown in a following table. All the activities which have taken place from inception of the project until the end of the reporting period are marked with a cross and pink colour in the relevant box. There is only one activity, a study tour to Austria, which will be delayed by more than three months. The explanations of the delay for three activities have been given and also indicated when the activities will be taken place.





Table 2. A time schedule in the reporting period.

	September, Year 2006			October, Year 2006			November, Year 2006			
	I	II	III	I	II	III	I	II	III	
I COMPONENT - GUIDELINES AND SECONDARY LEGISLATION										
1.1.1 Review current secondary legislation, and preparation of Table of concordance for...				X	X	X	X	X	X	X
1.1.2. Analysis of the needed sub legislation for further implementation of first, second and fourth...				X	X	X	X	X	X	X
1.2.1. Drafting the sub legislation of monitoring and reporting for ambient air quality under the FWD...										
1.2.2. Drafting of sub legislation - 2004/224/EC and 96/62/EC...										
1.2.3. Drafted Guidelines on establishing agglomeration and non-agglomeration zones										
1.3.1. Draft instructors to assist the application of secondary legislation - ...										
1.3.2. Capacity building of stakeholders to use Manual										
II COMPONENT - EMISSION INVENTORIES										
2.1.1 Identify and appoint stakeholders	X	X	X	X	X	January 2007				
2.1.2. Support to construct the database and its content for preparation of the reports...	X	X	X	X	X	X	X	X	X	X
2.2.1. Identify data gaps for compliance with EU-based national air emission system...						X	X	X	X	January 2007
2.2.2. Preparing a Draft list of priorities for recommended improvements										
2.3.1. Support to develop a National Emission Factors and inventory methods										
2.3.2. Support to develop collection of activity data						X	X	X	X	X
2.3.3. Support to update the National Methodology for air emissions inventories...										
2.4.1. Improve capacities to Develop comprehensive training program...										
2.5.1. Support to EPER reporting in general										
III COMPONENT - PRELIMINARY ENVIRONMENTAL ASSESSMENT										
3.1.1. Analyses and review the outcome of CARDS 2004 projects										January, week 2, 2007
3.1.2. Improvement of methodology for preliminary assessment taking account...										
3.1.3. Integrate emission inventory data and dispersion modelling...										
3.2.1. Revision of agglomeration and non agglomeration zones										
3.3.1 Reporting and visualization of the assessment results										
3.4.1 Perform campaign to promote results for public										
IV COMPONENT - AIR QUALITY MEASUREMENTS AND LABORATORY WORK										
4.1.1. Review of the present situation at the calibration laboratory						X	X	X	X	X
4.1.2 Preparing a Plan for improvement of calibration laboratory						X	X	X	X	X
4.1.3. Sharing EU MS country's experience and training on air quality monitoring										
4.1.4 Training technical staff on calibration of instruments										
4.1.5. Calibrate and check instruments in cooperation with technical staff										
4.2.1. Training technical staff on repair maintenance										
4.2.2. Implement and assist in the preparation of SOP for maintenance and...										
4.3.1. Developing draft QA/QC plan										
4.3.2. Training on QA/QC plan										
4.4.1. Review of present situation for data management system						X	X	X	X	X
4.4.2. Identified needs for further development of the software						X	X	X	X	X
4.4.3 Plan and specification for procurement of new data management software						X	X	X	X	X
4.4.4. Training on validation, management, analysis and introducing methods for presentation...										
4.5.1. Review of present situation in Central Environmental Laboratory on GCs analysis...						X	X	X	X	X
4.5.2. Preparing a plan for improvement of chemical laboratory...						X	X	X	X	X
4.5.3. Arrange and perform training courses for staff concerning standard operation procedures...										
4.6.1. Check instruments of mobile emission laboratory and prepare plan for improvement...						X	X	X	X	X
4.6.2. Check the results of improvements										
4.6.3. Training course (part 1) on emission measurements; basic principles										
4.6.4. Training course (part 2) on emission measurements; advanced emission...										
4.7.1. Preparation a draft specification and priority list of investments...						X	X	X	X	X
V COMPONENT - DISPERSION MODELLING										
5.1.1. Specification and procurement of an appropriate system for AQ modelling...										X
5.2.1. Investigate available meteorological data from HMA and Skopje airport and...										
5.2.2. Preparation of emission and other input data for dispersion modelling										
5.3.1. Training course on dispersion modelling and demonstrate methods for										
5.3.2. Develop training course materials										
5.4.1. Use of dispersion modelling for air quality assessment in couple of real cases										

X Activities planned and done
 Activities planned

 Activities Delayed by more than 3 months
 Activities not planned but partly done





Recuperation of delays

A study tour to Austria decided to postpone at the beginning of the project from October 2006 to February/March 2007. The mission covering activities 2.1.1. and 2.2.1 was postponed from October 2006 to January 2007 due to expert's tight time schedule. She was anyhow able to get a lot of information and reports of emission inventories done in the former Yugoslav Republic of Macedonia when she met international experts in conferences and meetings during the autumn. The mission covering analysis and review of the outcome from the CARDS 2004 project will be in January, week no 3 of year 2007 instead of November 2006. The short-term expert Stuart Stern from the CARDS 2004 will be on his last mission in the former Yugoslav Republic of Macedonia in that week so it is the best opportunity to transfer the results of the CARDS 2004 project to the twinning project and avoid overlapping. A time schedule for the following reporting period (3 months) is shown in the next table.





Table 3. A time schedule for the following reporting period (next three months).

	December, Year 2006	January, Year 2007	February, Year 2007
	IV	V	VI
I COMPONENT - GUIDELINES AND SECONDARY LEGISLATION			
1.1.1 Review current secondary legislation, and preparation of Table of concordance for...			
1.1.2. Analysis of the needed sub legislation for further implementation of first, second and fourth...			
1.2.1. Drafting the sub legislation of monitoring and reporting for ambient air quality under the FWD...			
1.2.2. Drafting of sub legislation - 2004/224/EC and 96/62/EC...			
1.2.3. Drafted Guidelines on establishing agglomeration and non-agglomeration zones			
1.3.1. Draft instructors to assist the application of secondary legislation - ...			
1.3.2. Capacity building of stakeholders to use Manual			
II COMPONENT - EMISSION INVENTORIES			
2.1.1 Identify and appoint stakeholders			
2.1.2. Support to construct the database and its content for preparation of the reports...			
2.2.1. Identify data gaps for compliance with EU-based national air emission system...			
2.2.2. Preparing a Draft list of priorities for recommended improvements			
2.3.1. Support to develop a National Emission Factors and inventory methods			
2.3.2. Support to develop collection of activity data			
2.3.3. Support to update the National Methodology for air emissions inventories...			
2.4.1. Improve capacities to Develop comprehensive training program...			
2.5.1. Support to EPER reporting in general			
III COMPONENT - PRELIMINARY ENVIRONMENTAL ASSESSMENT			
3.1.1. Analyses and review the outcome of CARDS 2004 projects			
3.1.2. Improvement of methodology for preliminary assessment taking account...			
3.1.3. Integrate emission inventory data and dispersion modelling...			
3.2.1. Revision of agglomeration and non agglomeration zones			
3.3.1 Reporting and visualization of the assessment results			
3.4.1 Perform campaign to promote results for public			
IV COMPONENT - AIR QUALITY MEASUREMENTS AND LABORATORY WORK			
4.1.1. Review of the present situation at the calibration laboratory			
4.1.2 Preparing a Plan for improvement of calibration laboratory			
4.1.3. Sharing EU MS country's experience and training on air quality monitoring			
4.1.4 Training technical staff on calibration of instruments			
4.1.5. Calibrate and check instruments in cooperation with technical staff			
4.2.1. Training technical staff on repair maintenance			
4.2.2. Implement and assist in the preparation of SOP for maintenance and...			
4.3.1. Developing draft QA/QC plan			
4.3.2. Training on QA/QC plan			
4.4.1. Review of present situation for data management system			
4.4.2. Identified needs for further development of the software			
4.4.3 Plan and specification for procurement of new data management software			
4.4.4. Training on validation, management, analysis and introducing methods for presentation...			
4.5.1. Review of present situation in Central Environmental Laboratory on GCs analysis...			
4.5.2. Preparing a plan for improvement of chemical laboratory...			
4.5.3. Arrange and perform training courses for staff concerning standard operation procedures...			
4.6.1. Check instruments of mobile emission laboratory and prepare plan for improvement...			
4.6.2. Check the results of improvements			
4.6.3. Training course (part 1) on emission measurements; basic principles			
4.6.4. Training course (part 2) on emission measurements; advanced emission...			
4.7.1. Preparation a draft specification and priority list of investments...			
V COMPONENT - DISPERSION MODELLING			
5.1.1. Specification and procurement of an appropriate system for AQ modelling...			
5.2.1. Investigate available meteorological data from HMA and Skopje airport and...			
5.2.2. Preparation of emission and other input data for dispersion modelling			
5.3.1. Training course on dispersion modelling and demonstrate methods for			
5.3.2. Develop training course materials			
5.4.1. Use of dispersion modelling for air quality assessment in couple of real cases			

Activities postponed
Activities planned





2E. ASSESSMENT Overall

Assessment of progress

The co-operation between the beneficiary country and member state has been good. The starting COWI Progress Monitoring Project, financed by the EU Commission, may draw heavily on MEPP resources, which could hamper the Twinning project.

Issues

An important issue has been a termination of the temporary contracts of the employees in MEPP that were involved in the project. This happened on Friday 6 October 2006, together nine employees and seven of them directly from the twinning project and two of them partly involved in the twinning project. All these people are vitally important for the project and moreover also for the future development of the former Yugoslav Republic of Macedonia Air Quality management systems and its EU integration in the field. Resident Twinning Advisor (RTA) Tiina Harju was alerted to it on Thursday 5 October 2006. On Monday 9 October 2006 MS PL Harri Pietarila and RTA Tiina Harju sent a statement of the issue to the European Agency for Reconstruction (EAR), the EC delegation, the Secretariat for European Affairs (SEA), the Ministry of Foreign Affairs to Finland which is a National Twinning contact point in Finland and to the Finnish Ambassador to Balkan countries. The statement was sent also directly to the European Commission.

The termination of the temporary contracts had a huge impact on the project and caused an extra work load for both MS and BC sides. RTA Tiina Harju has had many meetings concerning this issue with the State Secretary Dejan Panovski and once with the Deputy Minister Sonja Lepitkova during last two months. RTA Tiina Harju had not had a possibility to meet the Minister of Environment and Physical Planning Imer Aliu and discuss about this issue with him. In addition to these meetings there have been many discussions between RTA Tiina Harju and Head of EU Integration Department Gordana Kozuharova, BC PL Svetlana Gjorgjeva, RTA Counterpart Aneta Stefanovska and the director of the Central Environmental Laboratory Katica Vasileva. The Central Environmental Laboratory is a part of the Ministry of Environment and Physical Planning responsible for environmental sampling and analysis, including Air Quality sampling and analysis, and consequently it produces data on environmental media quality, including the air quality, which is relevant for the purposes of environmental reporting and information in the former Yugoslav Republic of Macedonia.





One of the employees, Igor Atanasov, whose temporary contract was terminated and who is responsible for monitoring stations and calibration laboratory started again working in the ministry on Monday 30 October 2006. A new IT person, already working in the ministry, started in the twinning project in the component dispersion modelling. It was planned that one extra person would have been started in the same day but her education and work experience proved to be not suitable for the planned job.

Regarding the human resource issue one plan was to that the Secretariat for European Affairs (SEA) will employ 5 persons to work on the twinning project. Finally it was found out that the only legal manner was that persons will be directly employed by the Ministry of Environment and Physical Planning to the twinning project. There was a job announcement for six persons for the twinning project in one Macedonian and in one Albanian newspaper on Wednesday 29 November 2006. Those six employees should be selected and start working in the twinning project 12 December 2006 according to the meeting between the State Secretary Dejan Panovski and RTA Tiina Harju.

I COMPONENT – Guidelines and Secondary Legislation

No problems seen, rather good cooperation and synergy. The starting Progress Monitoring Project (COWI project) managed by Danish consultant firm COWI, financed by the EU Commission, may draw heavily on MEPP resources, which could hamper the Twinning project.

II COMPONENT – Emission Inventories

It has been a hard and time-consuming work to get needed transport data for emission inventories. One challenge to be solved is that there is no transport expert for the emission inventory in the Ministry of Environment Physical Planning.

IV COMPONENT – Air Quality Measurements and Laboratory Work

The cooperation with the project management has been good and fruitful.

It is addressed that the operation of the laboratories, field stations and the emission measurements needs experts of several years of training and practical work. To comply the duties of the reference laboratory set up by the framework directive (96/62/EU) is not possible without the experienced personnel.

The mobile laboratory has been used last time year 2002. After this there have been several dismantling of e.g wires, tubes, connectors etc. The reason





for this dismantling was not found out during the discussions. As an example, the control unit for particle measurement equipment was controlled by computer. However, the computer as well as its programs were lost. These are very complicated problems to be solved because the companies who delivered the devices do not exist anymore. In this kind of case it is impossible to prepare equipments.

V COMPONENT – Dispersion Modelling

Progress as planned in the schedule.

Recommendations

I COMPONENT – Guidelines and Secondary Legislation

Good continued cooperation with the Cards and COWI projects needs to be ensured and adequate resources by the MEPP for the Twinning and other projects.

II COMPONENT – Emission Inventories

Emission data

Option 1:

Appoint an expert in Macedonia for the technical issues of the emission data handling and continue the development process between the missions. The complete development crew would consist of an emission expert and a technical expert in Macedonia and a technical expert and an emission expert in Finland working all together over the Internet. Most of the actual work would be done in the Ministry of Environment in Macedonia.

Option 2:

Allocate financial resources to inventory development so a local consultant could be hired for the development, too. The crew in its minimum would then be the selected consultant and the emission experts in Macedonia and Finland supported by the Finnish technical expert when necessary. Most of the work would be done by the consultant in this case.

The option number one is recommended concerning all realities in the MEPP (financing etc.).

Emission Inventory – Transport

According to international practice the nomination of national institution in inventory process should be permanent. This is especially important to





guarantee continuous inventory work. Ministry of Environment and Physical Planning (MEPP) should supervise the national inventory process, guarantee sufficient financial resources to the national institution to manage the inventory work.

In the energy sector, the inventory of the road transport emissions needs special attention. Gathering, processing and analysis of the input data for the Copert model necessitate the use of local experts in vehicle technology and traffic. Best solution would be to engage a student from the Faculty of Mechanical Engineering with all the support from the faculty and cooperation with the Department for Traffic and Transport Engineering, University St. Kliment Ohridski having expertise in traffic technology.

The following things should be done by the next mission to be taken place in spring 2007:

- Funding for the Copert model work should be resolved
- Organisation and person(s) involved for the use of Copert model and gathering of the information needed for it should be chosen
- Analysis of the vehicle data and gathering of other input data for the Copert model should be ongoing.

IV COMPONENT – Air Quality Measurements and Laboratory Work

Calibration Laboratory

The former Yugoslav Republic of Macedonia should solve the problem for the lack of personnel at the reference laboratory and for the field measurements of air quality. It should be addressed the competence of the personnel when recruiting personnel. The responsibilities should address for the operation of the reference laboratory and for the operation of the field measurements and maintenance of the equipments. The most important thing is to keep in mind that the reference laboratory can fulfil the task appointed by the Directive 96/62/EC article 3 only, by having good and highly trained personnel and the facilities. The operation of the laboratory needs technical knowledge but also scientific knowledge in order to be able to follow the task of the reference laboratory, to understand the measurement methods, to build up the uncertainty budget and the traceability chain for the measurements. The operation of the field measurements needs more technical skills and to some goes with the maintenance of the equipments. Definitely the need for running the measurements and the laboratory needs three persons with clearly different responsibilities.

Considering that the Ministry of Environment is responsible for the legislative tasks it may take into consideration to have an independent institution to take





care of the responsibility for the practical task following from the legislation. The reorganization of the laboratories as an independent research institute or agency from the Ministry of the Environment would remove the possibility to face the conflict of interest between the legislative institution and the institution who shall collect the data from the environment and report the data. The finance of the new organisation should come for major part from the government.

Data Management System

With the preliminary conclusions and recommendations of the CARDS 2004 M6, concerning the development of the National Environmental Information System (NEIS), can in general outline be agreed as a long term objective. Because of the supposed limited short term resources in MEIC for developing the air quality management system, the plans to develop the air quality management are tried to base to the current systems as much as possible so that there could be achieved concrete improvements already during the twinning project.

The most urgent task is to build up the back up system for all primary and validated air quality monitoring data. According to the BC experts a centralized server based back up system should be ready in a few weeks but it is recommended to make regularly backups already earlier for example into a CD.

Because of the changes in legislation and air quality objectives in January 2007 there are very topical needs to develop the reporting software.

The validation procedure for automatic data monitoring should be developed. At least to linear correction of monitoring results between the manual (multipoint) calibrations should be enabled. The manual validation is recommend to perform in three phases: daily for the up to date information delivery, monthly for monthly reporting and the final validation after the manual multi point calibration (about 3 or 4 times per year).

Data from sampling based networks should in the future be collected in electrical forms like on Excel sheets. Specifications can be defined during the next mission.

Chemical Laboratory

The lack of personnel is a serious problem. The analysis of organic compounds is very demanding task and needs experienced and competent key persons. The permanent personnel are necessary to improve and





thereafter to ensure the continuation of the high quality of the laboratory. This is also one of the basic requirements in accreditation of the analytical methods.

Mobile Emission Laboratory

It is also important that the human resource situation (personnel) of the emission measurement activities at MEPP will be improved in the future. The mobile laboratory has to have person(s) who have fully responsibility of these activities as well as technical competence for the maintenance and service of the equipment later on! In addition to this new calibration gases with the proper regulators, a new control and condensation unit for particulate measurement equipment, missing connectors as installed and manuals for the analysers are needed.

V COMPONENT – Dispersion Modelling

During the mission two AQ-models, CAR-FMI and OSPM, were installed to MEPP computers. It would be extremely useful if at least one person would familiarize him/herself with these models and especially in the data requirements of these models before the next mission.

3 – EXPENDITURES





Twinning Contract number: MK05/IB-EN-01 – 05MAC01/13/102

Macedonia - 2006

Section 3: Expenditures

PROVIDE TOTAL FIGURES OF DISBURSEMENT IN THE REPORTING PERIOD FOR KEY GROUPS OF COSTS

Travels (23 Missions, first 3 months, including project preparation travel costs)

Expert fees	24 552,00 €
Twinning Management costs	36 828,00 €
Per diems	15 145,00 €
Air tickets	10 322,69 €
Taxi fares (22:00-7:00)	636,30 €
Total	87 483,99 €

RTA remuneration and allowances (first 3 months) Original budget (first 3 months)

Tiina Harju		
1. Salary + labour costs x 3 months	17 742,00 €	17 742,00 €
2. Resident Twinning Allowances	19 158,23 €	21 415,00 €
4. RTA Assistant salary	1 454,55 €	1 500,00 €
Total	38 354,78 €	40 657,00 €

TOTAL COSTS (travels and RTA) 125 838,77 €**TRAVELS: COSTS BY ACTIONS:**

Amount paid in Euro	Original budget, the whole project	Remain to the next periods or other actions
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3. RTA training

1 092,68 €	1323,00 €	230,32 €
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5. Project Preparation

13 741,56 €	16 668,00 €	2 926,44 €
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Project co-ordination (Kick off, final meeting)

15 983,52 €	54 382,00 €	38 398,48 €
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6. Project Activities**1.1.1. Review current secondary legislation, and preparation of Table of concordance**

5 919,65	6 620,00	700,35 €
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1.1.2. Analysis of the needed sub legislation for further implementation of daughter directives

5 505,00	5 560,00	55,00 €
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Amount paid in Euro	Original budget, the whole project	Remain to the next periods or other actions
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2.1.1. Identify and appoint stakeholders

3 783,95	7 070,00	3 286,05 €
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<u>2.1.2. Support to construct the database and its content for preparation of the reports</u>	6 948,05	9 228,00	2 279,95 €
<u>2.2.1. Identify data gaps for compliance with EU-based national air emission system and reporting requirements</u>	801,00	2 124,00	1 323,00 €
<u>2.3.2. Support to develop collection of activity data</u>	5 255,00	10 540,00	5 285,00 €
<u>4.1.1. Review of the present situation at the calibration laboratory</u>	2 009,90	2 294,00	284,10 €
<u>4.1.2. Preparing a Plan for Improvement of calibration laboratory</u>	2 403,00	2 436,00	33,00 €
<u>4.4.1. Review of present situation for data management system</u>	2 019,18	2 294,00	274,82 €
<u>4.4.2. Identified needs for furthered development of the software</u>	1 602,00	1 624,00	22,00 €
<u>4.4.3. Plan and specification for procurement of new data management software</u>	801,00	2 810,00	2 009,00 €
<u>4.5.1. Review of present situation in Central Environmental Laboratory on GCs analysis for air samples</u>	1 977,07	2 294,00	316,93 €
<u>4.5.2. Preparing a Plan for improvement of chemical laboratory</u>	5 180,51	7 166,00	1 985,49 €
<u>4.6.1. Check instruments and plan for improvement of mobile emission laboratory</u>	3 560,98	3 856,00	295,02 €
<u>4.7.1. Draft specification and priority list of investments</u>	4 505,00	6 996,00	2 491,00 €
<u>5.1.1. Specification and procurement of an appropriate system for AQ modelling on local scale</u>	1 991,94	4 730,00	2 738,06 €
<u>5.2.1. Investigate meteorological data and develop methods to provide it for dispersion modelling</u>	801,00	4 730,00	3 929,00 €
<u>5.3.1. Training course on dispersion modelling and methods for validation and for scenario making</u>	801,00	4 730,00	3 929,00 €
<u>5.3.2. Develop training course materials</u>	801,00	4 730,00	3 929,00 €





ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
 Twinning Contract number: MK05/IB-EN-01 - 05/MAC01/13/102 Macedonia -2006 -
 Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter /amendment	Amount charged to contingencies
xx	Resident Twinning Adviser (Tiina Harju)								3 months		
	Gross salary	30.9. 31.10.2006 and 30.11.2006	70018, 70020, 70022	30.9. 31.10.2006 and 30.11.2006	3 x [MONTHLY SALARY 3553,20]			10 659,60	10 659,60		
	Non wage labour costs	30.9. 31.10.2006 and 30.11.2006		30.11.2006	3 x 2025,80			6 077,40	6 077,40		
	% of sal + non wage		55386	30.11.2006	3 X 335,00			1 005,00	1 005,00		
	RTA 30 % allowances (RTA costs reports)		55386	30.11.2006	[NO OF DAYS] x 50% [PER DIEM]			RTA costs reports	17 742,00	17 742,00	
	Total								1 454,55	1 500,00	
xx	RTA Assistant Marina Toveva (acting on a freelance basis) salary costs	29.9.2006, 1.11.2006, 28.11.2006	7.11.06 21802, 30.11.06 29042	29.9.2006, 1.11.2006, 28.11.2006	29.9.2006 500,00 €; 1.11.2006 454,55 €, and 28.11.2006 500,00 €				1 454,55	1 500,00	
	Total								1 454,55	1 500,00	
xx	Activity no. [5. Project preparation]										
	Mission of expert [Tiina Harju]	14/03/2006-17/03/2006	22669	30.11.2006	ARRIVAL 14th March 2006 20:30 in Skopje AND DEPARTURE 17th March 2006 16:30 from Skopje						
	Fees	14/03/2006-17/03/2006	22669	30.11.2006	[3 X 350,00]			1 050,00			
	Flat rate compensation	14/03/2006-17/03/2006	22669, 55386	30.11.2006	1,5*1050,00			1 575,00			
	Per diem	14/03/2006-17/03/2006	22669	30.11.2006	[3] x 187,00			561,00			
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	14/03/2006 and 17/03/2006	22669	30.11.2006	[2. CLASS]			560,76			
	Local travel to location [Helsinki Airport - Home, Espoo]	18.3.2006	22669	30.11.2006	Taxi			38,15			
	Total								3814,91		
xx	Activity no. [5. Project preparation]										
	Mission of expert [Tiina Harju]	10/04/2006-12/04/2006	22669	30.11.2006	ARRIVAL 10th April 2006 13:00 in Skopje AND DEPARTURE 12th April 2006 15:00						
	Fees	10/04/2006-12/04/2006	22669	30.11.2006	[2 OF WORKING DAYS] X [350,00]			700,00			
	Flat rate compensation	10/04/2006-12/04/2006	22669, 55386	30.11.2006	1,5 x 700,00			1 050,00			
	Per diem	10/04/2006-12/04/2006	22669	30.11.2006	[2] x 187			374,00			
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	10/04/2006-12/04/2006	22669	30.11.2006	[2. CLASS]			462,23			
	Local travel to location [Helsinki Airport - Home, Espoo]	12.4.2006	22669	30.11.2006	Taxi			38,70			
	Total								2 624,97		
xx	Activity no. [3. RTA training]										
	Mission of expert [Tiina Harju]	21/06/2006-23/06/2006	22669	30.11.2006	ARRIVAL 21st June 2006 18:15 in Brussels AND DEPARTURE 24th June 2006 20:20 from Brussels						
	Fees										
	Flat rate compensation										
	Per diem	22/06/2006-23/06/2006	22669	30.11.2006	[3] x 201			603,00	603,00		
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Brussels]	21/06/2006-23/06/2006	22669	30.11.2006	[2. CLASS]			451,53	720,00		
	Local travel to location [Helsinki Airport - Home, Espoo]	25.6.2006	22669	30.11.2006	Taxi			38,15			
	Total								1092,68	1 323,00	

ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
 Twinning Contract number: MK05/IB-EN-01 - 05/MAC01/13/102 Macedonia -2006 -
 Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter /amendment	Amount charged to contingencies
xx	Activity no. [5. Project preparation]										
	Mission of expert [Tiina Harju]	23/08/2006-25/08/2006			ARRIVAL 23th August 2006 13:00 in Skopje AND DEPARTURE 25th August 2006 15:00 from Skopje						
	Fees	23/08/2006-25/08/2006	70020	31.10.2006	[2 X 250,00]			500,00			
	Flat rate compensation	23/08/2006-25/08/2006	55386	30.11.2006	1,5*500,00			750,00			
	Per diem	23/08/2006-25/08/2006	29030, 19955	12.10.2006, 25.9.2006	[2] x 187,00			374,00			
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	23/08/2006-25/08/2006	35002	29.9.2006	[2. CLASS]			450,27			
	Local travel to location				Taxi						
	Total								2 074,27		
xx	Activity no. [5. Project preparation]										
	Mission of expert Harri Pietarila	14/03/2006-17/03/2006			ARRIVAL 14th March 2006 20:30 in Skopje AND DEPARTURE 17th March						
	Fees	14/03/2006-17/03/2006	70020	31.10.2006	[3 X 250,00]			750,00			
	Flat rate compensation	14/03/2006-17/03/2006	55386	30.11.2006	1,5*750,00			1 125,00			
	Per diem	14/03/2006 and 17/03/2006	55389, 29027	30.11.2006, 9.10.2006	[3] x 187,00			561,00			
	Helsinki - Skopje Air ticket	14/03/2006 and 17/03/2006	13116	30.3.2006	[2. CLASS]			692,78			
	Local travel (Taxi) to location	14.3.2006			Taxi	1540 MKD	61,4	25,06			
	Local travel (Taxi) to location Helsinki airport-Home	17.3.2006			Taxi			21,30			
	Total								3 175,14		
xx	Activity no. [5. Project preparation]										
	Mission of expert [Harri Pietarila]	23/08/2006-25/08/2006			ARRIVAL 23th August 2006 14:45 in Skopje AND DEPARTURE 25th August 2006 15:30 from Skopje						
	Fees	23/08/2006-25/08/2006	70020	31.10.2006	[2 X 250,00]			500,00			
	Flat rate compensation	23/08/2006-25/08/2006	55386	30.11.2006	1,5*500,00			750,00			
	Per diem	23/08/2006-25/08/2006	29027 and 19955	9.10.2006 and 25.9.2006	[2] x 176,00			352,00			
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	23/08/2006-25/08/2006	35002	29.9.2006	[2. CLASS]			450,27			
	Local travel to location										
	Total								2 052,27		





ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
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Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter (amendment)	Amount charged to contingencies	
xx	Activity no. [5. Project preparation, Project co-ordination]											
	Mission of expert [Harrt Pietarila]	26/09/2006-29/09/2006			ARRIVAL 26th September 2006 23:00 in Skopje AND DEPARTURE 29th September 2006 15:00 from Skopje]							
	Fees	26/09/2006-29/09/2006	70020	31.10.2006	[3 X 230,00]			790,00				
	Flat rate compensation	26/09/2006-29/09/2006	55386	30.11.2006	1,5*750,00			1.125,00				
	Per diem	26/09/2006-29/09/2006	29029 and 55335	9.10.2006 and 1.11.2006	[3] x 176,00			528,00				
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	26/09/2006-29/09/2006	35003	31.10.2006	[2. CLASS]			329,27				
	Local travel to location Skopje Airport-Hotel Karpos	26.9.2006	29036	13.11.2006	Taxi	1228 MKD	61,4	20				
	Local travel to location Hki Vantaa Airport-Korva	29.9.2006	21516	1.11.2006	Taxi			22,41				
	Total							2.773,68				
	xx	Activity no. [5. Project preparation, Project co-ordination]	26/09/2006-29/09/2006									
Mission of expert Christian Nagl		26/09/2006-29/09/2006	30113	2.11.2006	ARRIVAL 26th September 2006 13:50 in Skopje AND DEPARTURE 28th							
Fees		26/09/2006-29/09/2006	30113	2.11.2006	[2 X 326]			652,00				
Flat rate compensation		26/09/2006-29/09/2006	30113, 55386	2.11.2006, 30.11.2006	1,5*750,00			979,00				
Per diem		26/09/2006-29/09/2006	30113	2.11.2006	[2] x 176,00			352,00				
Air ticket Wien - Skopje		26/09/2006-29/09/2006	30113	2.11.2006	[2. CLASS]			404,69				
Local travel to location												
Total								2.386,69				
xx		Activity no. [5. Project preparation, Project co-ordination an 1 day 2.1.1.]										
		Mission of expert Kari Mäkelä	27/09/2006-29/09/2006			ARRIVAL 26th Sept 2006 23:00 in Skopje AND DEPARTURE 29th Sept 2006 15:00 from Skopje]						
	Fees	27/09/2006-29/09/2006	70020	31.10.2006	[3 X 350,00]			1.050,00				
	Flat rate compensation	27/09/2006-29/09/2006	22669, 55386	30.11.2006	1,5*1050,00			1.575,00				
	Per diem	27/09/2006-29/09/2006	29029	9.10.2006	[3] x 176,00			528,00				
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	26/09/2006-29/09/2006	22669	30.11.2006	[2. CLASS]			389,27				
	Local travel to location Hki Vantaa Airport-Home	29.9.2006	29029	9.10.2006				37,41				
	Total							3.579,68				

ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
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Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter (amendment)	Amount charged to contingencies	
xx	Activity no. [2.1.1, Identify and appoint stakeholders 2.3.2. Support to develop collection of activity data]											
	Mission of expert [Kari Mäkelä]	16/10/2006-20/10/2006			ARRIVAL 15th October 2006 23:00 in Skopje AND DEPARTURE 20th October 2006 15:00 from Skopje]							
	Fees	16/10/2006-20/10/2006	70021	15.11.2006	[5 X 350,00]			1.750,00				
	Flat rate compensation	16/10/2006-20/10/2006	22669, 55386	30.11.2006	1,5*500,00			2.625,00				
	Per diem	16/10/2006-20/10/2006	29034	10.11.2006	[5] x 176,00			880,00				
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	16/10/2006-20/10/2006	22669	30.11.2006	[2. CLASS]			389,27				
	Local travel to location Hki Vantaa Airport-Espoo	20.10.2006	29034	10.11.2006	Taxi			37,41				
	Total							5.681,68				
	xx	Activity no. [2.1.2, 2.3.2]	19/11/2006-24/11/2006									
		Mission of expert Kari Mäkelä	19/11/2006-24/11/2006			ARRIVAL 19th November 2006 13:00 in Skopje AND DEPARTURE 24th November 2006 15:00 from Skopje]						
Fees		19/11/2006-24/11/2006	70022	30.11.2006	[5 X 350]			1.750,00				
Flat rate compensation		19/11/2006-24/11/2006	22669, 55386	30.11.2006	1,5*1750,00			2.625,00				
Per diem		19/11/2006-24/11/2006	29041	27.11.2006	[5] x 176,00			880,00				
Air ticket Helsinki - Skopje		19/11/2006-24/11/2006	22669	30.11.2006	[2. CLASS]			303,27				
Local travel to location Hki Vantaa Airport-Espoo		24.11.2006	29041	27.11.2006				37,76				
Total								5.596,03				
xx		Activity no. [5. Project preparation: Project co-ordination, and 5.1.1.]										
		Mission of expert Ari Karpainen	27/09/2006-29/09/2006			ARRIVAL 27th Sept 2006 14.45 in Skopje AND DEPARTURE 29th Sept 2006 15:30 from Skopje]						
	Fees	27/09/2006-29/09/2006	70023	31.10.2006	[2 X 250,00]			500,00				
	Flat rate compensation	27/09/2006-29/09/2006	55386	30.11.2006	1,5*500,00			750,00				
	Per diem	27/09/2006-29/09/2006	29029	9.10.2006	[2] x 176,00			352,00				
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	26/09/2006-29/09/2006	35003	15.11.2006	[2. CLASS]			687,21				
	Local travel to location Hki Vantaa Airport-Home	29.9.2006	29029	9.10.2006	Taxi			21,3				
	Total							2.320,51				





ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
Twinning Contract number: MK05/IB-EN-01 - 05MAC01/13/102 Macedonia -2006 - Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter amendment	Amount charged to contingencies
xx	Activity no. [5.1.1., 5.2.1., 5.3.1., 5.3.2.]										
	Mission of expert [Ari Karppinen]	8/11/2006-10/11/2006			ARRIVAL 6th Nov 2006 12:00 in Skopje AND DEPARTURE 19th October 2006 14:50 from Skopje]						
	Fees	8/11/2006-10/11/2006	70022	30.11.2006	[4 X 250,00]			1 000,00			
	Flat rate compensation	8/11/2006-10/11/2006	55386	30.11.2006	1,5*500,00			1 500,00			
	Per diem	8/11/2006-10/11/2006	29038	16.11.2006	[4] x 176,00			704,00			
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	8/11/2006-10/11/2006	35009	15.11.2006	[2. CLASS]			368,27			
	Local travel to location Hki Vantaa Airport-Espoo		29038	16.11.2006	Taxi			21,67			
	Total							3 593,94			
xx	Activity no. [4.6.1., 4.7.1.]	23/10/2006-27/10/2006									
	Mission of expert Johannes Raine	23/10/2006-27/10/2006			ARRIVAL 22th October 2006 12:00 in Skopje AND DEPARTURE 27th October						
	Fees	23/10/2006-27/10/2006	70022	30.11.2006	[5 X 350]			1 750,00			
	Flat rate compensation	23/10/2006-27/10/2006	22669, 55386	30.11.2006	1,5*1750,00			2 625,00			
	Per diem	23/10/2006-27/10/2006	29040	27.11.2006	[5] x 176,00			880,00			
	Air ticket Helsinki - Skopje	23/10/2006-27/10/2006	22669	30.11.2006	[2. CLASS]			373,13			
	Local travel to location taxi Airport-home, Espoo	27.10.2006	29040	27.11.2006				34,81			
	Total							5 662,98			
xx	Activity no. [4.5.1., 4.5.2., 4.7.1.]										
	Mission of expert Hannele Hakola	15/10/2006-20/10/2006			ARRIVAL 15th Oct 2006 22:40 in Skopje AND DEPARTURE 20th Oct 2006 15:00 from Skopje]						
	Fees	15/10/2006-20/10/2006	70021	15.11.2006	[5 X 250,00]			1 250,00			
	Flat rate compensation	15/10/2006-20/10/2006	55386	30.11.2006	1,5*1250,00			1 875,00			
	Per diem	15/10/2006-20/10/2006	29032	25.10.2006	[5] x 176,00			880,00			
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	15/10/2006-20/10/2006	35009	15.11.2006	[2. CLASS]			368,27			
	Local travel to location Skopje Airport-Hotel	15.10.2006	29002	25.10.2006		410 MKD	60,29	6,80			
	Total							4 380,07			

ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
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Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter amendment	Amount charged to contingencies
xx	Activity no. [4.5.1., 4.5.2., 4.7.1.]										
	Mission of expert [Vuokko Karlsson]	15/10/2006-20/10/2006			ARRIVAL 15th October 2006 23:19 in Skopje AND DEPARTURE 20th October 2006 15:00 from Skopje]						
	Fees	15/10/2006-20/10/2006	70021	15.11.2006	[5 X 250,00]			1 250,00			
	Flat rate compensation	15/10/2006-20/10/2006	55386	30.11.2006	1,5*500,00			1 875,00			
	Per diem	15/10/2006-20/10/2006	29031	25.10.2006	[5] x 176,00			880,00			
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	15/10/2006-20/10/2006	35008	15.11.2006	[2. CLASS]			328,27			
	Local travel to location BC Airport-Skopje-Hotel Karpos	20.10.2006	29031	25.10.2006	Taxi	410 MKD	60,29	6,80			
	Local travel to location Hki Vantaa Airport-Espoo	16.10.2006	29031	25.10.2006	Taxi			39,44			
	Total							4 379,51			
xx	Activity no. [5. Project preparation, Project co-ordination]	26/09/2006-29/09/2006									
	Mission of expert Jari Walden	26/09/2006-29/09/2006			ARRIVAL 26th Sept 2006 14:00 in Skopje AND DEPARTURE 29th Sept 2006 16:50						
	Fees	26/09/2006-29/09/2006	70022	30.11.2006	[3 X 250]			750,00			
	Flat rate compensation	26/09/2006-29/09/2006	55386	30.11.2006	1,5*750,00			1 125,00			
	Per diem	26/09/2006-29/09/2006	29037, 55378	13.11.2006, 30.11.2006	[3] x 176,00			528,00			
	Air ticket Helsinki - Skopje	26/09/2006-29/09/2006	35008	31.10.2006	[2. CLASS]			786,16			
	Local travel to location taxi Airport-home, Espoo										
	Total							3 189,16			
xx	Activity no. [4.1.1., 4.1.2., 4.7.1.]										
	Mission of expert Jari Walden	22/10/2006-27/10/2006			ARRIVAL 22th Oct 2006 14:45 in Skopje AND DEPARTURE 27th Oct 2006 15:30 from Skopje]						
	Fees	22/10/2006-27/10/2006	70022	30.11.2006	[5 X 250,00]			1 250,00			
	Flat rate compensation	22/10/2006-27/10/2006	55386	30.11.2006	1,5*1250,00			1 875,00			
	Per diem	22/10/2006-27/10/2006	29038, 22692	13.11.2006, 30.11.2006	[5] x 176,00			880,00			
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]	22/10/2006-27/10/2006	35002	31.10.2006	[2. CLASS]			368,27			
	Local travel to location Skopje Airport-Hotel	27.10.2006	22692	1.12.2006				39,63			
	Total							4 412,90			





ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
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Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter / amendment	Amount charged to contingencies
xx	Activity no. [4.4.1., 4.4.2., 4.4.3.]										
	Mission of expert (Timo Salmi)	15/10/2006-20/10/2006			ARRIVAL 15th October 2006 23:10 in Skopje AND DEPARTURE 20th October 2006 15:30 from Skopje						
	Fees	15/10/2006-20/10/2006	70021	15.11.2006	[5 X 250,00]			1.250,00			
	Flat rate compensation	15/10/2006-20/10/2006	55386	30.11.2006	1,5*1250,00			1.875,00			
	Per diem	15/10/2006-20/10/2006	29033	25.10.2006	[9] x 176,00			880,00			
	Air ticket (PLACE OF DEPARTURE Helsinki -DESTINATION Skopje)	15/10/2006-20/10/2006	35006	15.11.2006	[2. CLASS]			368,27			
	Local travel to location	20.10.2006	29033	25.10.2006	Taxi			38,88			
	Local travel to location BC Airport - Skopje hotel	15.10.2006	29033	25.10.2006	Taxi	615 MKD	61,38	10,02			
	Total							4.422,18			
xx	Activity no. [5. Project preparation, Project co-ordination]	26/09/2006-29/09/2006									
	Mission of expert Alec Estlander	26/09/2006-29/09/2006			ARRIVAL 26th Sept 2006 13:25 in Skopje AND DEPARTURE 29th Sept 2006 15:00						
	Fees	26/09/2006-29/09/2006	22506	23.11.2006	[3 X 450]			1.350,00			
	Flat rate compensation	26/09/2006-29/09/2006	22506, 55386	23.11.2006, 30.11.2006	1,5*1350,00			2.025,00			
	Per diem	26/09/2006-29/09/2006	22506	23.11.2006	[3] x 176,00			528,00			
	Air ticket Helsinki - Skopje	26/09/2006-29/09/2006	22506	23.11.2006	[2. CLASS]			454,27			
	Local travel to location taxi Airport-home Lihderanta	29.9.2006	22506	23.11.2006				29,44			
	Total							4.386,71			
xx	Activity no. [1.1.1., 1.1.2]										
	Mission of expert Alec Estlander	13/11/2006-17/11/2006			ARRIVAL 12th November 2006 12:45 in Skopje AND DEPARTURE 17th Nov 2006 14:50 from Skopje						
	Fees	13/11/2006-17/11/2006	22636	29.11.2006	[5 X 450,00]			2.250,00			
	Flat rate compensation	13/11/2006-17/11/2006	22636, 55386	29.11.2006	1,5*2250,00			3.375,00			
	Per diem	13/11/2006-17/11/2006	22636	29.11.2006	[5] x 176,00			880,00			
	Air ticket (PLACE OF DEPARTURE Helsinki -DESTINATION Skopje)	13/11/2006-17/11/2006	22636	29.11.2006	[2. CLASS]			454,27			
	Local travel to location Skopje Airport-Home Lihderanta	17.11.2006	22636	29.11.2006				29,63			
	Total							6.988,90			

ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
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Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter / amendment	Amount charged to contingencies
xx	Activity no. [2.1.1., 2.1.2., 2.2.1.]										
	Mission of expert (Samtu Mattila)	16/10/2006-20/10/2006			ARRIVAL 15th October 2006 23:10 in Skopje AND DEPARTURE 20th October 2006 15:30 from Skopje						
	Fees	16/10/2006-20/10/2006	22506	23.11.2006	[5 X 250,00]			1.250,00			
	Flat rate compensation	16/10/2006-20/10/2006	22506, 55386	23.11.2006	1,5*1250,00			1.875,00			
	Per diem	16/10/2006-20/10/2006	22506	23.11.2006	[5] x 176,00			880,00			
	Air ticket (PLACE OF DEPARTURE Helsinki -DESTINATION Skopje)	16/10/2006-20/10/2006	22506	23.11.2006	[2. CLASS]			454,27			
	Local travel to location										
	Local travel to location										
	Total							4.459,27			
xx	Activity no. [1.1.1., 1.1.2]	13/11/2006-17/11/2006									
	Mission of expert Mika Seppälä	13/11/2006-17/11/2006			ARRIVAL 12th November 2006 14:35 in Skopje AND DEPARTURE 17th November						
	Fees	13/11/2006-17/11/2006	22626	29.11.2006	[5 X 250]			1.250,00			
	Flat rate compensation	13/11/2006-17/11/2006	22626, 55386	29.11.2006, 30.11.2006	1,5*1250,00			1.875,00			
	Per diem	13/11/2006-17/11/2006	22626	29.11.2006	[5] x 176,00			880,00			
	Air ticket Helsinki - Skopje	13/11/2006-17/11/2006	22626	29.11.2006	[2. CLASS]			389,27			
	Local travel to location taxi Airport-home Numšiivik	29.9.2006	22626	29.11.2006				41,48			
	Total							4.435,76			
xx	Activity no. []										
	Mission of expert										
	Fees										
	Flat rate compensation										
	Per diem										
	Air ticket (PLACE OF DEPARTURE Helsinki -DESTINATION Skopje)										
	Local travel to location Skopje Airport-Home Lihderanta										
	Total										





ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
Twinning Contract number: MKG5IB-EN-01 - 05MAC01/13/02 Macedonia -2006 -
Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter amendment	Amount charged to contingencies
xx	Activity no. [5. Project preparation]										
	Mission of expert [Harri Pietarila, Tiina Harju]	14/03/2006-17/03/2006 10/04/2006-12/04/2006 23/08/2006-25/08/2006			Total cost of project preparation						
	Fees				[3 X 350,00 + 2 x 350+ 2 x 250 + 3 x 250,00 +			3 500,00	4 300,00		
	Fiat rate compensation				1,5 x 3500,00			5 250,00	6 450,00		
	Per diem				10 x 187,00 + 2 x 176			2 222,00	2 618,00		
	Air ticket [PLACE OF DEPARTURE -DESTINATION]				[2. CLASS]			2648,33	3000		
	Local travel to location BC (Airport-hotel/home 22:00-7:00)							25,06	75,00		
	Local travel to location MS (Airport-home 22:00-7:00)							98,19	225,00		
	Total							13 741,58	16 668,00		
xx	Activity no. [Project co-ordination]										
	Mission of experts Harri Pietarila, Christian Nagl, Alec Estlander, Kari Mäkelä, Ari Karpinen, Jari Walden	28/09/2006-29/09/2006									
	Fees	26/09/2006-29/09/2006			[X 250]			4 202,00	12 214,00		
	Fiat rate compensation	26/09/2006-29/09/2006			1,5*			6 303,00	18 321,00		
	Per diem	26/09/2006-29/09/2006			[] x 176,00			2 288,00	7 687,00		
	Air ticket Helsinki or Wien - Skopje	26/09/2006-29/09/2006			[2. CLASS]			3059,96	7 680,00		
	Local travel to location BC 22:00-7:00 (taxi)	26/09/2006-29/09/2006					61,4	20	175,00		
	Local travel to location MS 22:00-7:00 (taxi)	26/09/2006-29/09/2006						110,56	315,00		
	Visability costs								3 000,00		
	Audit certificate costs								5 000,00		
	Total							15 983,52	54 382,00		
xx	Activity no. [Component 1: 1.1.1.]										
	Mission of expert [Alec Estlander, Mika Seppälä]										
	Fees							1 650,00	1 650,00		
	Fiat rate compensation							2 475,00	2 475,00		
	Per diem							880,00	935,00		
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]							843,54	1 420,00		
	Local travel to location BC Skopje Airport+Hotel							0	50,00		
	Local travel to location MS Airport+Home							71,11	90,00		
	Total							5 919,65	6 620,00		





ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
 Twinning Contract number: MK05/IB-EN-01 - 05MAC01/13/102 Makedonia -2006 -
 Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter amendment	Amount charged to contingencies
xx	Activity no. [1.2.]										
	Mission of experts (Alea Estlander, Mika Saipola)							1 850,00	1 850,00		
	Fees							2 775,00	2 775,00		
	Flat rate compensation							880,00	935,00		
	Per diem										
	Total							5 505,00	5 580,00		
xx	Activity no. [2.1.1.]										
	Mission of experts Karl Mäkelä, Santtu Mattila	27.-29.9. (1 DAY), 10.-20.10. (1 DAY), 15.-20.10.08 (1 DAY)									
	Fees				2 x 350 + 1 x 250			950,00	1 650,00		
	Flat rate compensation							1 425,00	2 475,00		
	Per diem				2 x 176 + 1 x 176			528,00	935,00		
	Air ticket (PLACE OF DEPARTURE Helsinki - SKOPJE)				2. CLASS			843,54	1 800,00		
	Local travel to location BC 22:00-7:00 (taxi)							0	75,00		
	Local travel to location MS 22:00-7:00 (taxi)							37,41	135,00		
	Total							3 783,96	7 070,00		
xx	Activity no. [2.1.2.]										
	Mission of experts Karl Mäkelä, Santtu Mattila	19.-24.11.08 (4 DAY), 15.-20.10.08 (3 DAY)									
	Fees				3 x 250 + 4 x 350			2 150,00	2 750,00		
	Flat rate compensation							3 225,00	4 125,00		
	Per diem				7 x 176			1 232,00	1 683,00		
	Air ticket (PLACE OF DEPARTURE Helsinki -DESTINATION Skopje)							303,27	600,00		
	Local travel to location BC Skopje Airport-Hotel								25,00		
	Local travel to location MS Airport-Home							37,78	45,00		
	Total							6 948,05	9 228,00		
xx	Activity no. [2.2.1.]										
	Mission of expert Santtu Mattila	15.-20.10.08 (1 DAY)									
	Fees				1 x 250			250,00	700,00		
	Flat rate compensation							375,00	1 050,00		
	Per diem				1 x 176			176,00	374,00		
	Total							801,00	2 124,00		

ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
 Twinning Contract number: MK05/IB-EN-01 - 05MAC01/13/102 Makedonia -2006 -
 Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter amendment	Amount charged to contingencies
xx	Activity no. [2.3.2.]										
	Mission of experts (Karl Mäkelä)	18.-20.10.08 (4 day), 19.-24.11.08 (1 day)									
	Fees				5 x 350,00			1 750,00	3 200,00		
	Flat rate compensation							2 625,00	4 800,00		
	Per diem				5 x 176			880,00	1 870,00		
	Air ticket (PLACE OF DEPARTURE Helsinki -DESTINATION)								800		
	Local travel to location BC (Airport-home 22:00-7:00)								25		
	Local travel to location MS (Airport-home 22:00-7:00)								45,00		
	Total							5 235,00	10 540,00		
xx	Activity no. [4.1.1.]										
	Mission of experts Jari Walden	22.-27.10.08 2 day									
	Fees				2 x 250			500,00	500,00		
	Flat rate compensation							750,00	750,00		
	Per diem				2 x 176			352,00	374,00		
	Air ticket (PLACE OF DEPARTURE Helsinki - SKOPJE)				2. CLASS			368,27	600,00		
	Local travel to location BC 22:00-7:00 (taxi)								25,00		
	Local travel to location MS 22:00-7:00 (taxi)							39,63	45,00		
	Total							2 009,90	2 294,00		
xx	Activity no. [4.1.2.]										
	Mission of experts Jari Walden	22.-27.10.08 3 day									
	Fees				3 x 250			750,00	750,00		
	Flat rate compensation							1 125,00	1 125,00		
	Per diem				3 x 176			528,00	561,00		
	Air ticket (PLACE OF DEPARTURE Helsinki -DESTINATION Skopje)										
	Local travel to location BC Skopje Airport-Hotel										
	Local travel to location MS Airport-Home										
	Total							2 403,00	2 436,00		





ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
 Twinning Contract number: MK05IB-EN-01 - 05MAC01/13/102 Makedonia -2006 -
 Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter (amendment)	Amount charged to contingencies
xx	Activity no. [4.4.1]										
	Mission of experts [Timo Salmi]	15.-20.10.06 2 day									
	Fees				2 x 250,00			500,00	500,00		
	Flat rate compensation							750,00	750,00		
	Per diem				2 * 176			352,00	374,00		
	Air ticket [PLACE OF DEPARTURE -DESTINATION]							368,27	600		
	Local travel to location BC (Airport-hotel/home 22:00-7:00)							10,00	25		
	Local travel to location MS (Airport-home 22:00-7:00)							38,89	45,00		
	Total							2 019,16	2 294,00		
xx	Activity no. [4.4.2]										
	Mission of experts Timo Salmi	15.-20.10.06 2 day									
	Fees				2 x 250			500,00	500,00		
	Flat rate compensation							750,00	750,00		
	Per diem				2 x 176			352,00	374,00		
	Air ticket Helsinki - Skopje				[2. CLASS]			0	0,00		
	Local travel to location BC 22:00-7:00 (taxi)							0	0,00		
	Local travel to location MS 22:00-7:00 (taxi)							0	0,00		
	Total							1 602,00	1 624,00		
xx	Activity no. [4.4.3]										
	Mission of experts Timo Salmi	15.-20.10.06 1 day									
	Fees				1 x 250			250,00	750,00		
	Flat rate compensation							375,00	1 125,00		
	Per diem				1 X 176			176,00	935,00		
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]										
	Local travel to location BC Skopje Airport-Hotel										
	Local travel to location MS Airport-Home										
	Total							801,00	2 810,00		

ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
 Twinning Contract number: MK05IB-EN-01 - 05MAC01/13/102 Makedonia -2006 -
 Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter (amendment)	Amount charged to contingencies
xx	Activity no. [4.5.1]										
	Mission of experts [Hannele Hakola]	15.-20.10.06 2 day									
	Fees				2 x 250,00			500,00	500,00		
	Flat rate compensation							750,00	750,00		
	Per diem				2 * 176			352,00	374,00		
	Air ticket [PLACE OF DEPARTURE -DESTINATION]							368,27	600,00		
	Local travel to location BC (Airport-hotel/home 22:00-7:00)							6,8	25,00		
	Local travel to location MS (Airport-home 22:00-7:00)							0	45,00		
	Total							1 977,07	2 294,00		
xx	Activity no. [4.5.2]										
	Mission of expert Hannele Hakola, Vukko Karlsson	15.-20.10.06 3 day, 15.-20.10.06 3 day									
	Fees				6 x 250			1 500,00	2 000,00		
	Flat rate compensation							2 250,00	3 000,00		
	Per diem				6 x 176			1 056,00	1 486,00		
	Air ticket Helsinki - Skopje				[2. CLASS]			328,27	600,00		
	Local travel to location BC 22:00-7:00 (taxi)							6,8	25,00		
	Local travel to location MS 22:00-7:00 (taxi)							39,44	45,00		
	Total							5 180,51	7 166,00		
xx	Activity no. [4.6.1]										
	Mission of experts Johannes Roine	23.-27.10.06 3 days									
	Fees				3 x 350			1 050,00	1 050,00		
	Flat rate compensation							1 575,00	1 575,00		
	Per diem				3 X 176			528,00	661,00		
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]							373,17	600,00		
	Local travel to location BC Skopje Airport-Hotel								25,00		
	Local travel to location MS Airport-Home							34,81	45,00		
	Total							3 560,98	3 856,00		





ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
Twinning Contract number: MK05IB-EN-01 - 05MAC01/13/102 Macedonia -2006 -
Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter (amendment)	Amount charged to contingencies
xx	Activity no. [4.7.1]										
	Mission of experts [Vuokko Karlsson, Jari Walden, Johannes Rome]	15.-20.10.06 2 day, 22.-27.10.06 1 day, 23.-27.10.06 2 day									
	Fees				3 x 250,00 + 2 x 350			1.450,00	2.200,00		
	Flat rate compensation							2.175,00	3.300,00		
	Per diem				5 * 176			880,00	1.486,00		
	Air ticket [PLACE OF DEPARTURE -DESTINATION]							0	0,00		
	Local travel to location BC (Airport-hotelfhome 22:00-7:00)							0	0,00		
	Local travel to location MS (Airport-home 22:00-7:00)							0	0,00		
	Total							4.505,00	6.986,00		
xx	Activity no. [5.1.1]										
	Mission of expert Ari Karpinen	8.-10.11.2006 2 day									
	Fees				2 x 250			500,00	1.250,00		
	Flat rate compensation							750,00	1.875,00		
	Per diem				2 x 176			352,00	935,00		
	Air ticket Helsinki - Skopje				2. CLASS			368,27	600,00		
	Local travel to location BC 22:00-7:00 (taxi)							0	25,00		
	Local travel to location MS 22:00-7:00 (taxi)							21,87	45,00		
	Total							1.991,94	4.730,00		
xx	Activity no. [5.2.1]										
	Mission of experts Ari Karpinen	8.-10.11.2006 1 day									
	Fees				1 x 250			250,00	1.250,00		
	Flat rate compensation							375,00	1.875,00		
	Per diem				1 x 176			176,00	935,00		
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Skopje]							0	600,00		
	Local travel to location BC Skopje Airport-Hotel							0	25,00		
	Local travel to location MS Airport-Home							0	45,00		
	Total							801,00	4.730,00		

ANNEX 1 - Expenditures (See excel file - Expenditure Report Template)
Twinning Contract number: MK05IB-EN-01 - 05MAC01/13/102 Macedonia -2006 -
Section 3: Expenditures

Section No.	Name of services / goods purchased or direct costs	Date(s) of services	Invoice number	Date of invoice	Breakdown and clarification	Amount paid in local currency (if applicable)	INFO-EURO exchange rate	Amount paid in EUR	Amount foreseen in original budget	Amount introduced by side letter (amendment)	Amount charged to contingencies
xx	Activity no. [5.3.1]										
	Mission of experts [Ari Karpinen]	8.-10.11.2006 1 day									
	Fees				1 x 250,00			250,00	1.250,00		
	Flat rate compensation							375,00	1.875,00		
	Per diem				1 * 176			176,00	935,00		
	Air ticket [PLACE OF DEPARTURE -DESTINATION]							0	600,00		
	Local travel to location BC (Airport-hotelfhome 22:00-7:00)							0	25,00		
	Local travel to location MS (Airport-home 22:00-7:00)							0	45,00		
	Total							801,00	4.730,00		
xx	Activity no. [5.3.2]										
	Mission of expert Ari Karpinen	8.-10.11.2006 1 day									
	Fees				1 x 250			250,00	1.250,00		
	Flat rate compensation							375,00	1.875,00		
	Per diem				1 x 176			176,00	935,00		
	Air ticket Helsinki - Skopje				2. CLASS			0	600,00		
	Local travel to location BC 22:00-7:00 (taxi)							0	25,00		
	Local travel to location MS 22:00-7:00 (taxi)							0	45,00		
	Total							801,00	4.730,00		
xx	Resident Twinning Adviser [Tiina Harju]									(3 months)	
	Gross salary	30.9.-31.10.2006 and 30.11.2006	70018, 70020, 70022	30.9., 31.10.2006 and 30.11.2006	3 x [MONTHLY SALARY 3553,20]			10.659,60	10.659,60		
	Non wage labour costs	30.11.2006		30.11.2006	3 x 2025,80			6.077,40	6.077,40		
	% of sal/hon wage	30.11.2006	55386	30.11.2006	3 x 335,00			1.005,00	1.005,00		
	RTA 50 % allowances (RTA costs reports)				(Monthly cost reports)						
	Total							17.742,00	17.742,00		
xx	RTA Assistant Martina Toveva (acting on a freelance basis) salary costs	29.9.2006, 1.11.2006, 28.11.2006		7.11.06, 21.802, 30.11.06, 29042	29.9.2006, 1.11.2006, 28.11.2006	29.9.2006 500,00 €; 1.11.2006 454,55 €, and 28.11.2006 500,00 €		1.454,55	1.500,00		
	Total							1.454,55	1.500,00		
xx	Activity no. [3. RTA training]										
	Mission of expert [Tiina Harju]	21.06.2006-23.06.2006	22669	30.11.2006	ARRIVAL 21st June 2006 18:15 in Brussels AND DEPARTURE 24th June 2006 20:20 from Brussels)						
	Per diem	22.06.2006-23.06.2006	22669	30.11.2006	[3] x 201			603,00	603,00		
	Air ticket [PLACE OF DEPARTURE Helsinki -DESTINATION Brussels]	21.06.2006-23.06.2006	22669	30.11.2006	[2. CLASS]			451,53	720,00		
	Local travel to location [Helsinki Airport - Home, Espoo]	25.6.2006	22669	30.11.2006	Taxi			38,19			
	Total							1092,66	1.323,00		





REPORT OF RTA COSTS IN SEPTEMBER 2006

TWINNING PROJECT

Project Title: Air Quality Improvement
Twinning Contract Number: MK05/IB-EN-01
Agency Contract Number: 05MAC01/13/102

Name of services / goods purchased or direct costs	Date(s) of services	Invoice No.	Date of invoice	Breakdown and clarification	Costs, €	Notes
Daily Allowances (50%)	from [date] to [date] 3.9.-30.9.2006	No. of MS administration document against which payment has been made to the RTA 29025	Date of this MS administration document 9.10.2006	[No of days] * 50% [per diem] 28 days* 93.5 €/day	2618,00	1. The applicable rates are fixed at the time of the signature of the Twinning Contract for its entire duration. They are not subject to revision during the lifetime of the project. 2. This is checked against the dates of travel to/from place of duty for the first and last quarter respectively
Allowances for RTA for first 30 days	from [date] to [date] 3.9.-1.10.2006	Hotel invoice(s) No. FMI 29025 (603770, 603934, 604091)	Hotel invoice(s) date FMI 9.10.06 (13.9.2006, 22.9.2006, 1.10.2006)	[Name of hotel] and [No of nights] * [per diem] Hotel Karpos, 28 nights *187 €/nights	5236,00	The period must not overlap with the period claimed under accommodation
Taxi 7:00-22:00	3.9.2006	FMI 29025 (603798)	FMI 9.10.2006 (15.9.2006)	Hotel Karpos, transfer from the airport to Hotel Karpos, Skopje, 20 €	20,00	
Excess luggage	Date of travel 3.9.2006	No. of receipt FMI 29025 19490074	Date of receipt FMI 9.10.2006 3.9.2006	[No. of kg] * [rate per kg] = actual amount paid 40 kg *16.10 €/kg	644,00	Up to 50 kg
Travel to place of duty	Date of travel 3.9.2006	M5931163, FMI 35002	18.8.2006, payed by FMI 29.9.2006	Helsinki-Vantaa Airport – Skopje, Makedonia Air fare	526,39	1. Actual costs are reimbursed. 2. If the RTA travels by car payment is based on a quotation for an economy air ticket or a first class train ticket, whichever is more appropriate and economically advantageous.
Estate Agent's fee	30.9.2006	No. of receipt 21802 (FMI)	Date of receipt 7.11.2006	[Name of estate agent Josif Milevski / company] [Amount paid]	50,00	Can be claimed if clearly included in the budget
TOTAL					9094,39	

RTA in Twinning Project Air Quality Improvement

REPORT OF RTA COSTS IN OCTOBER 2006

TWINNING PROJECT

Project Title: Air Quality Improvement
Twinning Contract Number: MK05/IB-EN-01
Agency Contract Number: 05MAC01/13/102

Name of services / goods purchased or direct costs	Date(s) of services	Invoice No.	Date of invoice	Breakdown and clarification	Costs, €	Notes
Daily Allowances (50%)	from [date] to [date] 1.10.-31.10.2006	No. of MS administration document against which payment has been made to the RTA 21802	Date of this MS administration document 7.11.2006	[No of days] * 50% [per diem] 31 days* 93.5 €/day	2898,50	1. The applicable rates are fixed at the time of the signature of the Twinning Contract for its entire duration. They are not subject to revision during the lifetime of the project. 2. This is checked against the dates of travel to/from place of duty for the first and last quarter respectively
Estate Agent's fee		No. of receipt FMI 21802	Date of receipt FMI 7.11.2006 3.10.2006	[Name of estate agent / company] [Amount paid] ADRIATIK93/50	625,00	Can be claimed if clearly included in the budget
Accommodation	from [date] to [date] 1.10.2006-31.10.2006	No. of receipt FMI: 29025	Date of receipt 30.9.2006 FMI paid 9.10.	[Starting date of lease] [Name of landlord] (for first report only and after that if changed) [No. of months] * [monthly rent] 1.10.2006, Mr. Josif Milevski, 1 month * 950 €/month	950,00	1. Full month's rent can be claimed even if some of the period is beyond the period reported in the Quarterly Report. 2. The first month for which rent is claimed must not overlap with the period claimed under "Allowances for first 30 days". In case of overlap the first rent is reduced accordingly
Health and accident insurance for RTA	from 1.9.2006 to 31.12.2006	Insurance policy No. 70-0900-9178-0/999 FMI 55320	Insurance policy date 25.8.2006, FMI paid 31.10.2006	[No of months] * [monthly rate] or [Amount paid] Amount paid	249,60	1. Can be claimed for a period longer than the period reported in the Interim Quarterly Report. 2. If there is only one policy for the RTA, spouse and/or children, the insurance policy must show the names of the insured persons and the Insurance company must issue an additional document stating the monthly rates for the different insured persons.
Monthly allowance for special economically priced return tickets	Period 1.10.-31.10.2006	Quotation No. FMI 21802	Quotation date 7.11.2006	[Name of travel agency that has issued the quotation] AREA [No. of months] 1*600 €/[flat rate as stated in the quotation]	600,00	1. Only applicable, if no removal of personal belongings or any other costs related to accompanying family members are charged to the project.





REPORT OF RTA COSTS IN NOVEMBER 2006

TWINNING PROJECT

Project Title: Air Quality Improvement
 Twinning Contract Number: MK05/IB-EN-01
 Agency Contract Number: 05MAC01/13/102

Name of services / goods purchased or direct costs	Date(s) of services	Invoice No.	Date of invoice	Breakdown and clarification	Costs, €	Notes
Daily Allowances (50%)	from [date] to [date]	No. of MS administration document against which payment has been made to the RTA 29042	Date of this MS administration document 30.11.2006	[No of days] * 50% [per diem] 30 days* 93.5 €/day	2805,00	1. The applicable rates are fixed at the time of the signature of the Twinning Contract for its entire duration. They are not subject to revision during the lifetime of the project. 2. This is checked against the dates of travel to/from place of duty for the first and last quarter respectively
Monthly allowance for special economically priced return tickets	Period 1.11.-30.11.2006	Quotation No. 29042	Quotation date 30.11.2006	[Name of travel agency that has issued the quotation] [No. of months] * [flat rate as stated in the quotation] AREA 1 month * 600 €	600,00	1. Only applicable, if no removal of personal belongings or any other costs related to accompanying family members are charged to the project. 2. Eligible from the second month of secondment
Accommodation	from [date] to [date] 1.11.2006-30.11.2006	No. of receipt FMI: 30090	Date of receipt FMI paid 18.10.2006.	[Starting date of lease] [Name of landlord] (for first report only and after that if changed) [No. of months] * [monthly rent] 1.11.2006, Marija Boskovska, 1 month * 1 250,00 €/month	1 250,00	1. Full month's rent can be claimed even if some of the period is beyond the period reported in the Quarterly Report. 2. The first month for which rent is claimed must not overlap with the period claimed under "Allowances for first 30 days". In case of overlap the first rent is reduced accordingly
Taxi 7:00-22:00	19.11.2006	29042	30.11.2006	Transfer from the airport, Skopje home, 20 €	20,00	
TOTAL					4675,00	

RTA in Twinning Project Air Quality Improvement

