TWINNING WORK PLAN – AIR QUALITY IMPROVEMENT

I COMPONENT – GUIDELINES AND SECONDARY LEGISLATION

	Intervention logic	Benchmarks	Sources of information	Assumptions (external to the project)	
Overall Objective	To improve air quality in the country.				
Project purpose	Approximate the national legislation on air quality Improve the information base for air quality related environmental management – especially concerning national emission inventories for air Enhance the basis for a comprehensive ambient air monitoring system following the provisions of the EU Air Quality Framework Directive 96/62/EC (AQFD) and Daughter Directives Improve the MEPP operation of the National Ambient Air Monitoring Network and include other relevant institutions in this activity				
Mandatory results	1. The EU air quality legislation based on the already harmonized air quality framework directive further aligned 2. A Draft sub legislations on Air Quality completed 3. About 50 person trained and training material and instructions manual prepared	GAP analysis Concordance Tables Draft Sub legislation existing About 25 pages manual Training for 50 people arranged	Report Report Manual Training course material	- Cooperation and outputs of CARDS 2004 and CARDS 2005 projects - Translation of legislation and documents - Co-operation with the relevant stakeholders functional	
Activities		Methods	Resources	Responsible personnel	Timing
	1.1.1. Review current secondary legislation, and preparation of Table of concordance for: 99/30/EC, 2004/107/EC	MS STE mission: Gap analysis Concordance Tables	5 BC expert MoEPP, 1 BC expert HMA, 1 BC expert RIHP 2 MS expert, 5 days 4 BC expert, 40 days Translation of laws	Alec Estlander, MS Mika Seppälä, MS Tanja Paunovska, BC Aneta	10/2006 10-11/2006

	and 2000/69/EC • Regulation on limit values, • Rulebook on air quality assessment			Stefanovska, BC Liljana Todorova Talevska,BC Mihail Kocubovski,BC	
	1.1.2. Analysis of the needed sub legislation for further implementation of first, second and fourth – Directive 99/30/EC, 2004/107/EC and 2000/69/EC	MS STE mission: Overview of further harmonization required on the field of air quality	2 MS expert, 5 days 3 BC expert, 15 days Translations	Alec Estlander, MS Mika Seppälä, MS Marijonka Vilarova, BC Aleksandra N. Krsteska, BC Liljana Todorova Talevska,BC	10/2006 10-11/2006
	1.2.1. Drafting the sub legislation of monitoring and reporting for ambient air quality under the FWD and the daughter Directives.	MS STE mission: Concordance Tables Analysis	4 MS expert, 17 days 3 BC, 60 days Side Letter 4 Side letter 3 Both were involved 3/2007	Alec Estlander, MS Mika Seppälä, MS Wolfgang Spangl, MS Tanja Paunovska, BC, Biljana Stavrevska, BC Arminda Rushiti, BC Marijonka Vilarova, BC	3/2007 3-9/2007
	1.2.2. Drafting of sub legislation – 2004/224/EC and 96/62/EC regarding National plans and programs	MS STE mission: Workshop	3 MS expert, 15 days 4 BC expert, 80 days Side letter 3 Both were involved 3/2007	Alec Estlander, MS Mika Seppälä, MS Mr. Lorenz Moosmann, MS Tanja Paunovska, BC Biljana Stavrevska, BC Marijonka Vilarova, BC Aleksandra N. Krsteska, BC Mihail Kocubovski,BC	3/2007 3-9/2007
		4 BC expert + RTA assistant x 3 days Study tour to Austria	5 BC expert, 12 days	Marijonka Vilarova, BC Tanja Paunovska, BC Aleksandra N. Krsteska, BC Arminda Rushiti, BC Mihail Kocubovski,BC	2/2007
	1.2.3. Review of a rulebook for zones and agglomerations prepared	MS STE mission: Preparation of guidelines	1 MS expert, 2 days 2 BC, 20 days	Mr. Wolgang Spangl, MS Marijonka Vilarova,	6/2007

	by CARDS 2004 project (as it was agreed at the Steering Committee meeting 28 June 2007)		Side letter 4	BC Arminda Rushiti, BC	
	1.2.4 Amendments of the CAFÉ directive on air quality law	MS STE mission: Overview of needed amendments on air quality law Side letter 4	1 MS expert, 3 days 4 BC, 12 days	Alec Estlander, MS Marijonka Vilarova, BC Aleksandra N. Krsteska, BC Biljana Stavrevska, BC Mihail Kocubovski, BC	10/2007
	1.3.1. Draft Instructions to assist the application of secondary legislation – considering air quality.	MS STE mission: Manual	3 MS expert, 10 days 3 BC, 30 days Printing costs Side letter 4	Mr. Wolfgang Spangl, MS Mr. Lorenz Moosman, MS Marina Froehlich, MS Tanja Paunovska, BC Marijonka Vilarova, BC Aleksandra N. Krsteska, BC Arminda Rushiti, BC	9/2007 9-11/2007
	1.3.2. Capacity building of stakeholders to use Manual	MS STE mission IV: Training of about 50 persons	1 MS expert, 5 days 1 BC expert, 15 days Hire of training room, refreshments etc Side letter 4	Mr. Wolfgang Spangl, MS Svetlana Gjorgjeva, BC Marijonka Vilarova, BC Martina Toceva, BC	12/2007

II COMPONENT – EMISSION INVENTORIES

	Intervention logic	Benchmarks	Sources of information	Assumptions (external to the project)
Overall Objective	To improve air quality in the country.			
Project purpose	Approximate the national legislation on air quality Improve the information base for air quality related environmental management – especially concerning national emission inventories for air Enhance the basis for a comprehensive ambient			

	air monitoring system following the provisions of the EU Air Quality Framework Directive 96/62/EC (AQFD) and Daughter Directives Improve the MEPP operation of the National Ambient Air Monitoring Network and include other relevant institutions in this activity				
Mandatory results	1. Institutional capacity and tools improved for maintaining emission data inventories and improved tools 2. Report on compliance with EU based national emission system and priority list for improvement 3. Improvement National methodology for air emission inventories for the country. 4. Capacities improved and draft training materials prepared on emission inventories and reports 5. Support to EPER reporting	Capacity of personnel and tools improved Priority list Improved methodology and inventories Draft training materials EPER report	Report Report Reports Training material Report	- Results from CARDS 2003 Regional available - Activity data is available and its quality meets the requirements - software and hardware meets the requirements - skilful personnel available and enough personnel resources - stakeholders available and willing to cooperate	
Activities		Methods	Resources	Responsible personnel	Timing
	2.1.1. Identify and appoint stakeholders	MS STE mission: Meetings	3 MS expert, 5 days 2 BC expert, 10 days	Kristiina Saarinen, MS Santtu Mattila, MS Kari Mäkelä, MS Svetlana Gjorgjeva, BC Marijonka Vilarova, BC	9-10/2006 10-11/2007
	2.1.2 Support to construct the database and its content for preparation of the reports to relevant international bodies	MS STE mission: Categorizing the existing fleet of vehicles according to EU standards for creating emission inventories using the COPERT models	2 MS expert, 9 days 2 BC expert, 20 days Side letter 5	Kari Mäkelä, MS Santtu Mattila, MS Aneta Stefanovska, BC (since 8.3.07 maternity leave) Marijonka	9-10/2006 and 9-10/2007 10/2006-4/2007

				Vilarova, BC Igor Paunovski, BC (since May 2007) Driton Idrizi, BC(since May 2007)	
	2.2.1. Identify data gaps for compliance with EU-based national air emission system and reporting requirements	MS STE mission: Analysis	1 MS expert, 2 days 2 BC expert, 6 days	Kristina Saarinen, MS Aleksandra N. Krsteska, BC Aneta Stefanovska, BC	10/2006, 3/2007 10/2006-3/2007
	2.2.2. Preparing a Draft a list of priorities for recommended improvements	MS STE mission: Analysis	2 MS expert, 2 days 1 BC expert, 5 days	Kristina Saarinen, MS Santtu Mattila, MS Svetlana Gjorgjeva, BC MartinaToceva, BC Igor Paunovski, BC (since May 2007) Driton Idrizi, BC(since May 2007)	3/2007 3/2007
			Side letter 5		
			Side letter 9		
	2.3.1. Support to developing a National Emission Factors and inventory methods	MS STE mission: Analysis	2 MS expert, 4 days 2 BC expert, 20 days	Kari Mäkelä, MS Kristina Saarinen, MS Marijonka Vilarova, BC Aleksandra N. Krsteska, BC Igor Paunovski, BC (since May 2007) Driton Idrizi, BC(since May 2007)	10/2006 and 3/2007 10-12/2006
			Side letter 9		
	2.3.2. Support to develop collection of activity data	MS STE mission: Coordination with SSO Analysis	3 MS expert, 13 days 2 BC expert, 20 days Side letter 7	Kari Mäkelä, MS Kristina Saarinen, MS Santtu Mattila, MS Marijonka Vilarova, BC Aleksandra N. Krsteska, BC Martina Toceva, BC Igor Paunovski,	10/2006 and 3/2007 10/2006 and 3/2007
			Side letter 5		

				BC (since May 2007) Driton Idrizi, BC(since May 2007)	
	2.3.3. Support to update the National Methodology for air emissions inventories for the country with special attention on subjects that need improvements such as emission from farming, emissions from wood burning, emissions from road traffic, emissions from air traffic and railroad traffic, emissions from off-road machinery	MS STE mission: Analysis, meetings, hands on training	3 MS expert, 8 days 2 BC expert, 20 days Side letter 5 Side letter 9	Kari Mäkelä, MS Kristina Saarinen Santtu Mattila, MS Aleksandra N. Krsteska, BC Marijonka Vilarova, BC Martina Toceva, BC Igor Paunovski, BC (since May 2007) Driton Idrizi, BC(since May 2007)	9/2007 9/2007
	2.4.1. Improve capacities to Develop comprehensive training program (supporting training materials) on emission inventories and reports	MS STE mission: Seminars and training materials	2 MS expert, 3 days 2 BC expert, 16 days Side letter 9	Kari Mäkelä, MS Kristina Saarinen, MS Svetlana Gjorgjeva, BC Aleksandra N. Krsteska, BC	9/2007 9-10/2007
	2.5.1. Support to EPER reporting in general	MS STE mission: Hands on training	2 MS expert, 4 days 2 BC expert, 20 days side letter 7	Kristina Saarinen, MS Santtu Mattila, MS Marijonka Vilarova, BC Svetlana Gjorgjeva, BC Martina Toceva, BC	9/2007 9-11/2007

III COMPONENT – PRELIMINARY ENVIRONMENTAL ASSESSMENT

	Intervention logic	Benchmarks	Sources of information	Assumptions (external to the project)
Overall Objective	To improve air quality in the country.			
Project purpose	Approximate the national legislation on air quality Improve the information base for air quality related environmental management – especially			

	concerning national emission inventories for air Enhance the basis for a comprehensive ambient air monitoring system following the provisions of the EU Air Quality Framework Directive 96/62/EC (AQFD) and Daughter Directives Improve the MEPP operation of the National Ambient Air Monitoring Network and include other relevant institutions in this activity				
Mandatory results	1. Improvement of methodology for preliminary assessment 2. Revised agglomeration and non-agglomeration zones, established with CARDS 2004 Projects 3. A preliminary assessment of ambient air quality has been worked out and reported to the EEA 4. Awareness raised on the importance of the air quality monitoring system	Improved preliminary air quality assessment Zone and agglomeration definition ready Preliminary Air Quality Assessment reported Workshop	Report Maps of zone and agglomerations Report Workshop materials Report	- Cooperation and outputs of CARDS 2004 - Emission data, other activity data and AQ measurement data available and its quality meets requirements - Dispersion model and GIS tools existing and meets requirements - enough personnel resources available - enough resources for producing and distributing promotion materials	
Activities		Methods	Resources	Responsible personnel	Timing
	3.1.1 Analyses and review the outcome of CARDS 2004 Projects 3.1.2. Improvement of methodology for preliminary assessment taking into account CARDS 2004 Projects output.	MS STE mission: Coordination with CARDS 2004 & analysis MS STE mission	3 BC expert MoEPP, 1 BC expert HMA, 1 BC expert RIHP 1 MS expert, 5 days 2 BC expert, 20 days Translations 1 MS expert, 5 days 3 BC expert, 30 days Side letter 5	Harri Pietarila, MS Marijonka Vilarova, BC Svetlana Gjorgjeva, BC Birgitta Alaviippola,MS Aleksandra N. Krsteska, BC Arminda Rushiti, BC Margareta Cvetkovska, BC	1/2007 1-2/2007 4/2007 2-4/2007

	3.1.3. Integrate emission inventory data and dispersion modelling within preliminary assessment.	MS STE mission: Hands on training & case studies	1 MS expert, 5 days 4 BC expert, 40 days Side letter 5	Birgitta Alaviippola,MS Marijonka Vilarova, BC Aleksandra N. Krsteska, BC Arminda Rushiti, BC Margareta Cvetkovska, BC	5/2007 5-6/2007
	3.2.1. Revision of agglomeration and non agglomeration zones	MS STE mission: Hands on training	1 MS expert, 5 days 4 BC expert, 40 days Side letter 5	Birgitta Alaviippola,MS Marijonka Vilarova, BC Aleksandra N. Krsteska, BC Arminda Rushiti, BC Margareta Cvetkovska, BC	9/2007 9-10/2007
			1 MS expert, 2 days Side letter 9	Harri Pietarila	9/2007
	3.3.1. Reporting and visualization of the assessment results	MS STE mission: Hands on training	1 MS expert, 10 days 5 BC expert, 40 days Side letter 5	Birgitta Alaviippola, MS Igor Atanasov, BC Ljupco Grozdanovski, BC Aleksandra N. Krsteska, BC Arminda Rushiti, BC Margareta Cvetkovska, BC	10-12/2007 11-12/2007
	3.4.1. Perform campaign to promote results for public	MS STE mission: Workshop Booklets, brochures, presentations, video-clips	1 MS expert, 3 days 1 BC expert, 10 days Translation	Harri Pietarila, MS Svetlana Gjorgjeva, BC	1/2008 1/2008
	3.4.2. Preparation of a brochure covering the air quality situation in the BC, (most important pollutants and their health effects, concentration levels and most important emission sources and their contribution to air quality)		1 MS expert, 5 days 4 BC experts, 8 days	Pia Anttila, MS Aleksandra N. Krsteska, BC Marijonka Vilarova, BC Aneta Stefanovska, BC	3/2008 3/2008

	and the role and importance of air quality monitoring system.			Driton Idrizi, BC	

IV COMPONENT – AIR QUALITY MEASUREMENTS AND LABORATORY WORK

	Intervention logic	Benchmarks	Sources of information	Assumptions (external to the project)
Overall Objective	To improve air quality in the country.			
Project purpose	Approximate the national legislation on air quality Improve the information base for air quality related environmental management – especially concerning national emission inventories for air Enhance the basis for a comprehensive ambient air monitoring system following the provisions of the EU Air Quality Framework Directive 96/62/EC (AQFD) and Daughter Directives Improve the MEPP operation of the National Ambient Air Monitoring Network and include other relevant institutions in this activity			
Mandatory results	1. Operation of the calibration laboratory improved and the staff is trained 2. Capacity built for operation, maintenance, calibration and repairs of air quality monitoring stations and samplers. 3. An draft QA/QC plan has been worked out 4. Plan for improvement and training for data management has been completed 5. Plan for improvement and training for GCs analysis for air samples has been completed 6. The operation of Mobile	Operation of the laboratory improved Capacity of people improved Draft QA/QC plan Improvement plan Staff trained Improvement plan Staff trained	Mission Report Mission report Report Mission report Mission report	- Skillful personnel available - Hardware and Software requirements met - Enough resources for new spare parts and/or equipments - New detector and a sample injection system for GC procured in the Environmental Laboratory - New equipments and spare parts for mobile emission laboratory procured

	Emission Monitoring Laboratory is improved and the staff received proper training for emissions measurements 7. Specifications and priority list for investment (software, laboratory equipment and additional equipment for air quality monitoring stations and mobile emission laboratory)	Operation improved Staff trained Specifications and priority list	Mission report Report		
Activities		Methods	Resources	Responsible personnel	Timing
	4.1.1. Review of the present situation at the calibration laboratory.	MS STE mission: Laboratory visit and interview of BC experts	8 BC expert MoEPP, 1 MS expert, 2 days 2 BC expert, 8 days	Jari Walden, MS Igor Atanasov, BC Ljupco Grozdanovski, BC	10/2006 10-11/2006
	4.1.2. Preparing a Plan for Improvement of calibration laboratory	MS STE mission: analysis	1 MS expert, 3 days 2 BC expert, 8 days	Jari Walden, MS Igor Atanasov, BC Ljupco Grozdanovski, BC	10/2006 10-11/2006
	4.1.3. Sharing EU MS country's experience and training on air quality monitoring	8 BC expert + RTA assistant 1 week Study visit to Finland	8 BC experts + RTA assistant, 50 days Side letter 5	Svetlana Gjorgjeva, BC Marijonka Vilarova, BC Liljana Todorova Talevska, BC Aleksandra N. Krsteska, BC Ljupco Grozdanovski, BC Igor Atanasov, BC Driton Idrizi, BC Igor Paunovsli, BC + RTA assistant Maja Gramatikova, BC	8/2007
	4.1.4 Training technical staff on calibration of instruments	MS STE mission: Hands on training	1 MS expert, 2 days 2 BC expert, 4 days	Jari Walden, MS Igor Atanasov, BC Ljupco Grozdanovski, BC	4/2007 4/2007
	4.1.5. Calibrate and check instruments in cooperation with technical staff	MS STE mission: Hands on training	1 MS expert, 3 days 2 BC expert, 6 days	Jari Walden, MS Igor Atanasov, BC Ljupco Grozdanovski, BC	4/2007 4/2007
	4.2.1. Training technical staff on repair maintenance	MS STE mission: Hands on training	1 MS expert 5 days 2 BC expert, 10 days	Kai Lindgren, MS Igor Atanasov, BC Ljupco Grozdanovski, BC	4/2007 4/2007

	4.2.2. Implement and assist in the preparation of SOP for maintenance and calibration of monitors	MS STE mission: Preparation of SOP	1 MS expert 5 days 4 BC expert, 30 days	Jari Walden, MS Aleksandra N. Krsteska, BC Igor Atanasov, BC Ljupco Grozdanovski, BC Margareta Cvetkovska, BC	8/2007 8-10/2007
	4.2.3 Training technical staff on repair and maintenance for BTX analysers	MS STE mission: Hands on training	1 MS expert, 5 days 2 BC experts Side letter 3 Side letter 9	Pirjo Kuronen, MS Igor Atanasov, BC Ljupco Grozdanovski, BC	2/2008 2/2008
	4.2.4. Training on maintenance of electronic compounds of the analysers in the monitoring stations	MS STE mission: hands on training,	1 MS expert 5 days, 2 BC experts,10 days Side letter 8	Harri Granath, Igor Atanasov, Ljupco Grozdanovski,	2/2008 2/2008
	4.2.5. Training on calibration of the analysers on the monitoring stations	MS STE mission: Hands on training	1 MS expert, 5 days, 2 BC experts, 10 days Side letter 9	Kaj Lindgren, Igor Atanasov, Ljupco Grozdanovski	1/2008 1/2008
	4.3.1. Developing draft QA/QC plan	MS STE mission: Planning	1 MS expert 10 days 5 BC expert, 45 days Side letter 4	Veijo Pohjola, MS Margareta Cvetkovska, BC Arminda Rushiti, BC Aleksandra N. Krsteska, BC Igor Atanasov, BC Ljupco Grozdanovski, BC	9/2007 9-10/2007
	4.3.2. Training on QA/QC	MS STE mission: hands on training	1 MS expert 5 days 5 BC expert, 25 days	Veijo Pohjola, MS Margareta Cvetkovska, BC Arminda Rushiti, BC Aleksandra N. Krsteska, BC Igor Atanasov, BC Ljupco Grozdanovski, BC	11/2007 11/2007
		MS STE mission: hands on training	1 MS expert 5 days 5 BC expert, 20 days	Jari Walden, MS Margareta Cvetkovska, BC Arminda Rushiti, BC	1/2008 1/2008

				Aleksandra N. Krsteska, BC Igor Atanasov, BC Ljupco Grozdanovski, BC	
	4.4.1. Review of present situation for data management system	MS STE mission: Study	1 MS expert 2 days 1 BC expert, 3 days	Timo Salmi, MS Aneta Stefanovska, BC	10/2006 10/2006
	4.4.2. Identified needs for furthered development of the software	MS STE mission: Study	1 MS expert 2 days 2 BC expert, 6 days	Timo Salmi, MS Aneta Stefanovska, BC Maja Gramatikova BC	10/2006 10-11/2006
	4.4.3. Plan and specification for procurement of new data management software	MS Study mission: Preparation of specification	1 MS expert 3 days 2 BC expert, 8 days	Timo Salmi, MS Aneta Stefanovska, BC Maja Gramatikova, BC	10/2006 10-11/2006
	4.5.1. Review of present situation in Central Environmental Laboratory on GCs analysis for air samples	MS STE mission: Study	1 MS expert 2 days 1 BC expert, 4 days	Hannele Hakola, MS Borco Aleksov, BC	10/2006 10-11/2006
	4.5.2 Preparing a Plan for improvement of chemical laboratory; assessing the target compounds, laboratory infrastructure and standard operation procedures.	MS STE mission: Assessment&Plan	1 MS expert 3 days 1 MS expert 5 days 1 BC expert, 5 days	Hannele Hakola, MS Vuokko Karlsson, MS Borco Aleksov, BC	10/2006 10-11/2006
	4.5.3. Arrange and perform training courses for staff concerning standard operation procedures of target compounds for GC analysis for air samples (Include staff from HMA and RIHP Institute of Chemistry from the university and other stakeholders in training courses)	4 BC expert + RTA assistant 1 week Study visit to Finland: Hands on training	5 BC experts, 25 days	Suat Ibishi, BC Aleksandra N. Krsteska, BC 1 HMA, BC 1 RIHP, BC Margareta Cvetkovska, BC	5/2007
		MS study mission: Hands on training	2 MS expert 10 days 4 BC expert, 20-40 days	Hannele Hakola, MS Vuokko Karlsson, MS Suat Ibishi, BC Aleksandra N. Krsteska, BC 1 HMA, BC 1 RIHP, BC	11/2007 11/2007

	4.6.1. Check instruments of mobile emission laboratory and prepare plan for improvement and support to repair and renew equipment	MS study mission: Study & plan	1 MS expert 3 days 2 BC expert, 10 days	Johannes Roine, MS Valerij Penev, BC Stefan Hristov, BC	10/2006 10-11/2006
	4.6.2. Check the results of improvements	MS study mission: Hands on training	1 MS expert 4 days 2 BC expert, 10 days Side letter 9	Johannes Roine, MS Tomo Grujoski, BC Branko Jakimovski, BC	1/2008 1/2008
	4.6.3. Training course (part 1) on emission measurements; basic principles	MS study mission: Workshop & Hands on training	1 MS expert 5 days 4 BC expert, 16 days Side letter 9	Harri Puustinen, MS Tomo Grujoski, BC Branko Jakimovski, BC	2/2008 2/2008
	4.6.4. Training course (part 2) on emission measurements; advanced emission measurements techniques and emission measurement audit on selected industrial source	MS STE mission: Workshop & Hands on training	1 MS expert 6 days 4 BC expert, 28 days Side letter 9	Tuula Pellikka, MS Tomo Grujoski, BC Branko Jakimovski, BC	2/2008 2/2008
	4.7.1. Preparation a draft specification and priority list of investment (software, laboratory equipment and additional equipment for air quality monitoring stations and mobile emission laboratory)	MS STE mission: Preparation of specification and priority list, consulting BC experts	4 MS experts, 8 days 4 BC expert, 20 days	Jari Walden, MS Hannele Hakola, MS Johannes Roine, MS Vuokko Karlsson, MS Marijonka Vilarova, BC Aneta Stefanovska, BC Dejan Popovski, BC Igor Atanasov, BC	10/2006 10/2006

V COMPONENT – DISPERSION MODELLING

	Intervention logic	Benchmarks	Sources of information	Assumptions (external to the project)	
Overall Objective	To improve air quality in the country.				
Project purpose	Approximate the national legislation on air quality Improve the information base for air quality related environmental management – especially concerning national emission inventories for air Enhance the basis for a comprehensive ambient air monitoring system following the provisions of the EU Air Quality Framework Directive 96/62/EC (AQFD) and Daughter Directives Improve the MEPP operation of the National Ambient Air Monitoring Network and include other relevant institutions in this activity				
Mandatory results	1. An air quality model has been supplied and implemented 2. Methods to provide meteorological and emission dataset for dispersion modeling has been established 3. The staff is trained in the use and validation of the model results 4. Real case studies prepared	Operational model for dispersion calculations procured and implemented at the MEIC Meteorological and emission dataset available Staff trained Real case study	Report about description of the model and it's implementation Report Report on results Report	- BC human resources and computer meets requirements - Resources for model procurement available - Co-operation with HMA - GIS, emission and meteorological data available	
Activities		Methods	Resources	Responsible personnel	Timing
	5.1.1. Specification and	MS STE mission:	4 BC expert MoEPP, 2 BC expert HMA, 1 BC expert RIHP 2 MS expert, 5 days	Ari Karppinen,	11/2006

	procurement of an appropriate system for AQ modelling on local scale (Gaussian point source dispersion modelling system)	Specification and procurement	Side letter 9 3 BC expert, 15 days	MS Risto Varjoranta, MS Igor Paunovski, BC Marijonka Vilarova, BC Aneta Stefanovska, BC	11-12/2006
	5.2.1. Investigate available meteorological data from HMA and Skopje airport and develop methods to provide meteorological data for dispersion modelling	MS STE mission: Study, Hands on training	2 MS expert, 5 days 2 BC expert, 24 days Side letter 4 Side letter 9	Risto Varjoranta until May 2007, MS Sari Lappi, MS Ari Karppinen, MS Liljana Talevska Todorovska, BC Pece Ristevski, BC	2/2007 1-3/2007
	5.2.2. Preparation of emission and other input data for dispersion modelling	MS STE mission: Hands on training	1 MS expert, 7 days 2 BC expert, 28 days Side letter 4 Side letter 9	Risto Varjoranta until May 2007, MS Sari Lappi, MS Marijonka Vilarova, BC Aleksandra N. Krsteska, BC Driton Idrizi, BC Igor Paunovski, BC	4/2007 4/2007 2/2008 2/2008
	5.3.1. Training course on dispersion modeling and Demonstrate methods for validation of AQ models and for scenario making	MS STE mission: Hands on training	1 MS expert, 5 days 8 BC expert, 40 days	Ari Karppinen, MS Liljana Todorova Talevska, BC Pece Ristevski, BC Marijonka Vilarova, BC Margareta Cvetkovska, BC Aleksandra N. Krsteska, BC Igor Paunovski, BC Driton Idrizi, BC 1 RIHP, BC	4/2007 4/2007

	5.3.2. Develop training course materials 5.4.1. Use of dispersion modelling for air quality assessment in couple of real cases	MS STE mission: Preparing training MS STE mission IV Hands on training	1 MS expert, 5 days 1 MS expert, 3 days 8 BC expert, 52 days Side letter 4 Side letter 9	Ari Karppinen, MS Risto Varjoranta until May 2007, MS Sari Lappi, MS Liljana Todorova Talevska, BC Pece Ristevski, BC Marijonka Vilarova, BC Margareta Cvetkovska, BC Aleksandra N. Krsteska, BC Igor Paunovski, BC Driton Idrizi, BC 1 RIHP, BC	6/2007 9/2007 9/2007 2/2008 2/2008