Standard Summary Project Fiche

Project Number 2003.004-341.04.02

1. Basic Information:

Objective 4 - Environment and Nuclear Safety

1.1 CRIS Number: **2003.004-341.04.02**

1.2 Title **Preparation of national emission reduction and ambient air quality assessment programmes**

1.3 Sector **Environment**

1.4 Location **Ministry of Environment, Lithuania**

2. Objectives:

2.1 Overall Objective:

The overall objective of this **1.4 MEUR** project**,** of which **0.1 MEUR** is national co-financing, is to assist the Ministry of Environment of Lithuania to develop the system for emission control, air quality assessment and management in different scales according to the new EU requirements.

2.2 Project purpose:

- To prepare the national program for progressive reduction emissions of pollutants covered by EU Directive 2001/81/EC
- To support the implementation of the requirements of EU Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants.
- To support the implementation of the Framework Directive on ambient air quality assessment and management (96/62/EC) and subsequent daughter directives (1999/30/EC, 2000/69/EC, 2002/3/EC).
- To develop the system of the ambient air quality assessment and control on the basis of common methods and criteria under the requirements of the air quality directives. including streamline and harmonise reporting required within air quality legislation.
- To strengthen the administrative capacities of the national institutions related to the air management sector (the Ministry of Environment, Joint Research Center)

2.3 Accession Partnership and NPAA Priorities

The proposed scope of the project activities fits with the priorities of accession to the EU, which are addressed in the Accession Partnership (AP) and National Programme for the Adoption of the Acquis (NPAA).

Accession Partnership 2001 foresees the following measures for the environment sector:
– Complete transposition of the Acquis;
– Continue strengthening the administrative and monitoring capacity, both at central and local level;
– Continue integration of environmental protection requirements into the definition and implementation of all other sectors' policies with a view to promoting sustainable development.

The Commission stated that in the field of *environment*, transposition has reached a relatively good level, but implementation is not yet fully satisfactory. Lithuania needs to focus on finalising the transposition and strengthening the overall administrative capacity. Close attention is required to

implementation of the *acquis* with regard to waste management, water quality, industrial pollution control, chemicals and GMOs and nature protection.

3. Description:

3.1 Background and justification:

The relevant priorities set out in the EC Regular Report (2002) are:

- As regards *transposition of the acquis,* considerable alignment has been achieved in a number of areas, but secondary legislation remains still to be issued in certain areas (chemicals and genetically modified organisms, industrial pollution, waste, noise and nature protection).
- The *administrative and monitoring capacity at central and local levels* has been strengthened through training programmes and recruitment. Overall, this priority has been met to a considerable extent, but in particular in the areas of the ambient air quality assessment modelling and harmonisation of reporting within air quality legislation further efforts are required.

Following the European Commission's recommendations that by accession dose attention is required to the implementation of the *acquis* with regard to industrial pollution control and also following the requirements of relevant EU Directives on systematic ambient air quality control approach Lithuanian Ministry of Environment proposed this project.

At the moment various EU Directives regulates Lithuanian air quality management system, but unified systematic approach has never been applied. Therefore the project will enable Lithuania to use systematic air quality assessment and quality modeling tools and enable more efficient management of the system.

The proposed project encompasses implementation of several main international instruments: EU Directive 2001/81/EC on national emission ceilings; Protocol of the Convention on Long Range Transboundary Air Pollution; Framework Directive (96/62/EC) on air quality assessment and management and its Daughter Directives, 97/101/EC Council Decision of 27 January 1997 establishing a reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the Member States and Commission Decision of 17 October 2001 amending the Annexes to Council Decision 97/101/EC establishing a reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the Member States (Text with EEA relevance) (notified under document number C(2001) 3093).

EU Directive 2001/81/EC

The new EU Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants prescribes national emission ceilings for the EU countries as regards SO_2, NO_x, VOC and NH_3 which are nearly identical to the emission ceilings specified in the Protocol of the Convention on Long Range Transboundary Air Pollution for abatement of Acidification, Eutrophication and ground-level Ozone. Lithuania signed the Convention in 1994 and is expected within two years to ratify this Convention. The adequate targets set in EU Directive 2001/81/EC and above-mentioned protocol shall be followed by the common measures. There are number of aims defined in the Directive 2001/81/EC:

- limit emissions of acidifying and eutrophying pollutants and ozone precursors in order to improve the protection in the Community of the environment and human health against risks of adverse effects from acidification, soil eutrophication and ground-level ozone;
- move towards the long-term objectives not exceeding critical levels and loads;
- protect effectively all people against recognized health risks from air pollution by establishing national emission ceilings, taking the years 2010 and 2020 as benchmarks, and by means of successive reviews as set out in Articles 4 and 10.

Directive (96/62/EC)

The implementation of Framework Directive (96/62/EC) on air quality assessment and management and its Daughter Directives introduce the use of modelling in assessment and management of air quality is essential in the development of action plans for improving air quality, which is the ultimate goal in order to fulfil obligations under the directives. Models improve the effectiveness of air quality management. Through models, the contributions to exceed the limit values from various sources and source categories can be established.

Another main advantage to be gained from this project is that the applied model will enhance the ability to map the spatial distribution of the pollutant concentrations. This opens the possibility to reduce the number of stations, and thus produce a more cost-effective, and yet complete, air quality assessment. Knowledge about the spatial distribution of the pollutant concentrations in the zone is therefore required, and models are appropriate tools to obtain that information.

97/101/EC Council Decision

According to the provisions of 97/101/EC Council Decision Lithuania shall provide the information on ambient air quality by mid 2005 for the year 2004. Therefore, it is important that these systematic air quality assessment and modelling methods, to be proposed by the project, are described in guidebook, which will serve as methodological instrument for Lithuanian institutions to comply with mentioned EU directives and this named Council Decision.

The above - mentioned international legally binding instruments require to address the following main components during the project implementation:

- Gap analysis of Lithuania legislation related to the air sector, final transposition and proposal of technical and administrative system for implementation;
- Proposal, preparation and adoption of necessary models for ambient air quality assessment and management;
- Procurement and supply of necessary specialised equipment to run the adopted models in order to comply with the requirements of the international instruments. There close co-ordination with Phare 2002 project “Development and Implementation of Integrated Computerized Information System for Environmental Management (ICISEM)” is foreseen to avoid the overlapping of investments.

- Training of institution concerned. The project shall also propose needed administrative and technical measures, so that the model application is effective and sustainable in long term. Therefore, the training component is foreseen at the end of the project.

With appearance of new EU Directives (Emissions Ceilings Directive), which come into the force with Lithuanian accession regulate new pollutants and their loads also new requirement for reporting, exchange of information and their levels.

Number of projects related to air quality management and legislation were performed in Lithuania, but no one of them was directly related to modeling and determination of ceiling levels. Moreover, as already mentioned above, new requirements brought Lithuania into the situation that without this project assistance the transposition and readiness for new ambient air quality management systematic approach can not be expected.

As requirements of all Directives mentioned above should be transposed into the national legislation by accession, this project will only focus on the implementation of those directives, including assessment of gaps in national legislation regarding air quality managing and preparation of relevant national legislation. The project will also assist in preparation of National programme, which is one of the requirements of the Directives (National Emission Ceiling) and will help to define more precise estimations and forecasts for the emissions. This is already done by Lithuania, but could be improved by using EU experience.

In general, the project will assist Lithuania timely create uniform system and methodology of ambient air quality assessment, monitoring, modeling and its techniques, which will integrate existing separate levels of quality evaluation gained through monitoring of separate pollutants.

3.2 Linked activities:

Current project is not directly associated with other projects or activities. But the deliverables and experience of the following set of projects will be used:
The project "Strengthening of Environmental Monitoring Capacities" (1999 Phare, L199/IB/EN-01). General outputs are:

- Survey on QC/QA as basis for the development of a comprehensive QC/QA handbook for Lithuania;
- Survey on air data management in Lithuania with special regard to the link to possibilities of data publication;
- Survey on air data publication and interpretation in Lithuania;
- Development of a strategy for the use of data in an interdisciplinary way;
- Report on gap analysis on air monitoring in Lithuania with regard to EU requirements for implementation;
- Review of contents and results of parallel projects dealing with similar issues in order to avoid the doubling of work and the achievement of synergies.

The project "Long Term Assistance on Information and Reporting. Information Management programme" (2002) was established in co-operation between Danish Environmental Agency and the Lithuanian Ministry of Environment. The main subjects are (no separate reporting on this project related measures):

- Strengthening the information management capacities;
- Identification of international reporting and national obligations for environmental data;
- Creation of an overview of the existing national data collecting system;
- Identification of gaps and inconsistencies in reporting requirements;
- Development of an Information Management Programme;
- Drafting of legislation for transposition of EU requirements on reporting.

The World Bank funded project "Environmental Policy Development and Regulatory Capacity Building Programe in Air Sector" (1999) was undertaken on behalf of the Ministry of Environment of Lithuania by the Centre Environmental Policy, Vilnius in association with Milieu Ltd, Brussels.
General outputs are:

- Identification and assessment of the institutional set-up for air quality management in Lithuania (except of new EU directives);
- Preparation of legal gap analysis and legal acts prepared;
- Development of approximation programmes in four following areas: ambient air quality standards, stationary emission sources, mobile emission sources and information systems.

3.3 Results

The following overall results will be achieved through the activities of this project:

- Limited emissions of acidifying and eutrophying pollutants and ozone precursors against risks of adverse effects from acidification, soil eutrophication and ground-level ozone in order not to exceed critical levels and loads.
- The areas where critical loads are exceeded, loads be reduced by at least 50 % (in each grid cell) in 2010 compared with the 1990 situation.
- The ground-level ozone load above the critical level for human health (AOT60=0) to be reduced by two-thirds in all grid cells in 2010 compared with the 1990 situation and the ground-level ozone load not to exceed an absolute limit of 2,9 ppm.h in any grid cell.
- The ground-level ozone load above the critical level for crops and semi-natural vegetation (AOT40=3 ppm.h) to be reduced by one-third in all grid cells in 2010 compared with the 1990 situation and the ground-level ozone load not to exceed an absolute limit of 10 ppm.h, expressed as an exceedance of the critical level of 3 ppm.h in any grid cell.

The following results will be achieved by the end of the project:

- Required legal acts (secondary legislation) regarding emission ceilings prepared.
- Existing emission-inventory data reviewed and emission data requirements for ambient air quality calculation/ modeling identified;
- Proposed and developed procedure for data collection on emissions in accordance with EU requirements;
- Suitable models and other mathematical techniques based on current ambient air quality situation in Lithuania and depending on pollutant according temporal, spatial aspects and accuracy requirements of air quality directives in place.
- Inventory of pollutants carried out and based on the National program for progressive reduction emissions of pollutants covered by EU Directive 2001/81/EC prepared.
- Emission projections for 2010 (yearly) and 2020 as benchmarks for the pollutants referred in EU Directive 2001/81/EC (sulphur dioxide, nitrogen oxides, volatile organic compounds and ammonia) according the methodologies agreed upon by the Convention on Long-range Transboundary Air Pollution projected, e.g. EMEP/CORINAIR guidebook.
- System for air quality modelling, forecasting and data processing established**.**
- According to the identified needs soft and hardware equipment, models and their application means supplied.
- Acquisition and application of air quality models and other mathematical techniques.
- Guidebook on ambient air quality assessment prepared.
- Developed models applied in practice in different scales.

- Administrative capacities of the Ministry of Environment and Joint Research Centre strengthened, training programme prepared and training provided.

3.3 Activities

The following activities are foreseen for this project:

- Assessment of Lithuanian legislation for the air quality management (i.e. for the implementation of the measures below) in relation to relevant EU directives for the purpose of preparation of the secondary legislation.
- Reconciliation of discrepancies between transposed legislation regarding emission ceilings and other relevant national legal acts.
- Development of secondary legislation on the basis of the assessment.
- Review and update, in accordance with EU requirements, existing emission-inventory data.
- Identification of emission data requirements for ambient air quality calculation/ modeling;
- Proposal and development of procedure for data collection on emissions in accordance with EU requirements;
- Preparation methodology for estimating emissions to atmosphere of pollutants that are the subject of assessment under air quality directives.
- Inventory of pollutants.
- Selection of suitable models and other mathematical techniques based on current ambient air quality situation in Lithuania.
- Development of institutional and technical models' adoption system.
- Preparation and issuing of guidebook on ambient air quality assessment.
- Preparation of training programme.
- Training of relevant stakeholders of the Ministry of Environment and Joint Research Center related to the implementation of all above measures provided.
- Modeling of ambient air quality by pollutants listed in Directive 96/62 in different scales (national, regional, urban, local).
- Updating of indicative list of required equipment and preparation of required documentation for the equipment acquisition.
- Purchase of software and hardware equipment.

Technical assistance

The implementation of the project activities will consist of two parts:
- Technical assistance;
- Procurement/Supplies of equipment.

It is not proposed to implement activities as a twinning project due to the predominantly specific and integral technical assistance content of the project. The implementation of project tasks requires specific professional expertise and a substantial number of local experts, which would be difficult to achieve through a twinning arrangement.

The Technical Assistance project will be carried out with the help of one LTE expert over a period of 18 months together with a pool of foreign and local experts (total for EU experts – 18 man/months and local experts – 18 man/months).

Profile of LTE

The LTE (approximately 18 man months) should provide overall management of the project and strategic institutional support across the whole sector of air protection and quality management. She/he will be requested to be aware of EU requirements and mechanisms, related to the project activities and general air quality control and management. The LTE shall have at least 5 years of adequate experience in main fields related to this particular project activities. The LTE will work in close co-operation with the management and staff of the Ministry of Environment of the Republic of Lithuania.

Profile of STEs

Approximately 8-10 combined EU and local Short Term Experts (STE's) for 22 man/ months is foreseen.
The STEs should have appropriate experience in the areas relevant to the project. STEs will provide assistance to collecting data for assessment of the existing air quality situation in Lithuania, revision and updating of legal acts, drafting of guidebook for ambient air quality assessment, preparation and implementation of training programme, assistance for institutions applying air quality assessment models. IT assistance should also be provided for definition of specific training needs and the overall co-ordination of the delivery of training. Assistance will also provide the inputs of for the procurement supply component.
The LTE and STEs will assist in analysing the needs of equipment (special software, databases, etc.) to be purchased, development of the specialised databases, as it is indicated and justified in the Section 3.4 "Activities", the drafting of obligatory documents, specifications and tender documentation for procurement.

Supplies

Equipment required for the data collection, transferring, modeling and strengthening of administrative capacities would be purchased under supply component. Experts will prepare the list of required equipment.

A way to enlarge the spatial coverage of the air quality assessment is to conduct modeling. Acquisition of software for modeling pollution levels in different scales and special purposes. Software for preprocessing meteorological and emission data needed for modeling. Hardware to obtain meteorological data on boundary layer vertical sounding and data on traffic intensity.

This preliminary list should be reviewed and updated taking into account the requirements for the establishment of ambient air quality monitoring and management system.

3.4 Lessons learned

The conclusions and recommendations from the previous (see 3.2 Linked Activities) projects Reports concerning the need for activities, which are foreseen to be implemented under this project have been considered, indicating and defining responsibilities and division of competencies between the Joint Research Centre within the Ministry of Environment, as well as involving all relevant stakeholders in the project activities.

Strengthening the capacities in the air sector, EC Phare financing was received in 1999 for the project "Strengthening of the Monitoring Capacities in Lithuania". One of outputs related to this project concerning survey and development of air data management in Lithuania with special interest for the link to possibilities of data publication will be fully taken into account implementing this project.

Measures and decisions defined in the Commission Decisions of 17 July 2000 and 17 October 2001concerning requirements of the relevant Directives were considered preparing this project as well.

4. Institutional Framework

Environmental Quality Department of the Ministry of Environment and Joint Research Center of the Ministry of Environment will be responsible for co-ordination of the project implementation.
Project implementation will involve day-to-day contacts with relevant divisions of the subordinated institutions. The implementation of this project will be assured by a Steering Committee appointed by the Ministry of Environment (MoE) and consisting of representatives of the stakeholder departments of the MoE, the LTE. A representative of the EC Delegation and National Aid Co-ordinator (NAC) will be invited to participate as observers. Steering Committee will meet every quarter in order to follow-up and monitor project implementation.

Project implementation will involve day to day contacts with Air division at the Environmental Quality Department, which consists of 5 employees and Joint Research Center, which is reorganized to the Environmental protection Agency starting from January 2003. Currently 5 employees in the JRC is responsible for the issues concerning air quality management.

5. Detailed Budget (in MEUR)

Project Components	**Investment Support**	**Institution Building**	**Total Phare (=I+IB)**	**National Co-financing**	**IFI**	**TOTAL**
Technical assistance		1.0	1.0			1.0
Supply	0.3		0.3	0.1		0.4
Total	**0.3**	**1.0**	**1.3**	**0.1**		**1.4**

The Phare amount is binding as a maximum amount available for the project. The ratio between the Phare and national co-finance amounts is also binding and has to be applied to the final contract price.
The national co-financing commitment is a tax-excluded net amount.

6. Implementation Arrangements

6.1 Implementing Agency

PAO:	Zilvinas Pajarskas, Director of the CFCU		
Address:	J. Tumo Vaizganto 8a/2	Telephone:	+ 370 5 222 66 21
	2600 Vilnius	Fax:	+ 370 5 222 53 35
	Lithuania	E-mail:	*Info@cfcu.lt*

The beneficiary institution is the Ministry of Environment and the following person is the responsible officer for the Project and the main contact point:

	Vytautas Krusinskas	Telephone:	+370 5 2 66 34 96
Address:	A. Jaksto 4/9	Fax:	+370 5 2 66 36 63
	2600 Vilnius	E-mail:	v.krusinskas@aplinkuma.lt
	Lithuania		

6.2 Twinning

There is no Twinning component in the project.

6.3 Non-standard aspects

There are no non-standard aspects to this project.

The Practical Guide for the Implementation of Phare, ISPA & SAPARD will strictly be followed.

6.4 Contracts

Two tenders will be launched:

1. Technical assistance: 1.0 MEUR
2. Supply: 0.4 MEUR, including 0.1 MEUR of national co-financing

6. Implementation Schedule

Component	Start of Tendering	Start of Project Activity	Project Completion
Technical assistance	1Q/03	3Q/03	4Q/04
Supply	3Q/03	1Q/04	2Q/04

8. Equal Opportunity

Equal opportunity principles and practices in ensuring equal gender participation in the project will be guaranteed.

The Constitution of Lithuania, the Law on Equal Opportunity between Men and Women, and other legal acts explicitly forbid the discrimination on the basis of sex, nationality, and religion. A Controller on equal opportunities between men and women is appointed by the Parliament. The institution involved in the project execution will observe equal opportunity of men and women in its recruitment and human resources development. Vacancies are equally open to both genders. The beneficiary will also ensure equal access of men and women to the project activities and results.

Women and men will have equal access to participate in the project activities (Steering Committee, training, information, etc.).

9. Environment

The investment component of this project is related to Institutional Building activities.

10. Rates of return

The investment component of this project is related to Institutional Building activities.

11. Investment criteria

The investment component of this project is related to Institutional Building activities.

12. Conditionality and sequencing

The project is conditional on co-financing being available for the procurement component of the project.

ANNEXES TO PROJECT FICHE

1. **Logical framework matrix in standard format**
2. **Detailed implementation chart**
3. **Contracting and disbursement schedule**
4. **Reference to feasibility / pre-feasibility studies**

LOGFRAME PLANNING MATRIX FOR Project: Preparation of national emission reduction and ambient air quality assessment programmes		Programme Name and number: Phare National Contracting Period Expires: 2Q/2005 Total Budget: 1.4 MEUR	 Disbursement Period Expires: 2Q/2006 Phare Budget: 1.3 MEUR
Overall Objectives • To limit emissions of acidifying and eutrophying pollutants and ozone precursors against risks of adverse effects from acidification, soil eutrophication and ground-level ozone in order not to exceed critical levels and loads. • To reduce pollutions loads of areas where critical loads are exceeded and to limit load of ground – level ozone. • To assess ambient air quality on the basis of common methods and criteria under the Framework Directive on ambient air quality assessment and management (96/62/EC) and subsequent daughter legislation.	**Objectively Verifiable Indicators** • The areas where critical loads are exceeded, loads be reduced by at least 50 % in 2010 compared with the 1990 situation. • The ground-level ozone load above the critical level for human health to be reduced by two-thirds in all grid cells in 2010 compared with the 1990 situation and the ground-level ozone load not to exceed an absolute limit of 2,9 ppm.h in any grid cell. • The ground-level ozone load above the critical level for crops and semi-natural vegetation to be reduced by one-third in all grid cells in 2010 compared with the 1990 situation and the ground-level ozone load not to exceed an absolute limit of 10 ppm.h, expressed as an exceedance of the critical level of 3 ppm.h in any grid cell.	**Source of Verification** • Ministry of Environment	
Project Purpose • To prepare the national program for progressive reduction emissions of pollutants covered by EU Directive 2001/81/EC • The transposition and implementation of the requirements of EU Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants. • Development of the system for air quality assessment and management. • Strengthening of the national institutions related to the air sector.	**Objectively Verifiable Indicators** • EU requirements by the accession are met as defined in Directive 2001/81/EC. • Institutional set-up is strengthened by training of 20 people. • EU requirements by the accession are met as defined in Directive (96/62/EC) and subsequent daughter legislation	**Source of Verification** • Ministry of Environment • EC Delegation to Lithuania • Progress reports	**Assumptions** • Resources are allocated from Lithuania budget • Other institutions concerned are willing to co-operate

Results	**Objectively Verifiable Indicators**	**Source of Verification**	**Assumption**
• Required legal acts (secondary legislation) regarding emission ceilings prepared. • Existing emission-inventory data reviewed and emission data requirements for ambient air quality calculation/modeling identified; • Proposed and developed procedure for data collection on emissions in accordance with EU requirements; • Suitable models and other mathematical techniques based on current ambient air quality situation in Lithuania and depending on pollutant according temporal, spatial aspects and accuracy requirements of air quality directives in place. • Inventory of pollutants carried out and based on the National program for progressive reduction emissions of pollutants covered by EU Directive 2001/81/EC prepared. • Prepared the national program for progressive reduction emissions of pollutants covered by EU Directive 2001/81/EC. • Emission projections for 2010 (yearly) and 2020 as benchmarks for the pollutants referred in EU Directive 2001/81/EC (sulphur dioxide, nitrogen oxides, volatile organic compounds and ammonia) according the methodologies agreed upon by the Convention on Long-range Transboundary Air Pollution projected, e.g. EMEP/CORINAIR guidebook. • System for air quality modelling, forecasting and data processing established. • According to the identified needs soft and hardware equipment, models and their application means supplied. • Acquisition and application of air quality models and other mathematical techniques. • Guidebook on ambient air quality assessment prepared. • Developed models applied in practice in different scales. • Administrative capacities of the Ministry of Environment and Joint Research Centre strengthened, training programme prepared and training provided.	• Equipment is available, installed and operational. • 20 people trained. • Guidance on ambient air quality assessment prepared by the end of the project.. • Legal acts developed by the end of the project..	• Ministry of Environment • Steering Committee of the project • Final Report	• The Ministry of Environment staff is co-operating on the implementation of the project • Steering Committee makes required decisions on time • All counterparts are co-operating and providing required information
Activities	**Means**		**Assumptions**
• Assessment of Lithuanian legislation for the air quality management (i.e. for the implementation of the measures below) in relation to relevant EU directives for the purpose of preparation of the secondary legislation. • Reconciliation of discrepancies between transposed legislation	• A 18 months Long Term EU expert and STE's of EU) and local experts. • Documentation, equipment and other resources.		• Qualified and capable company and pool of EU and local experts is selected to implement the project

regarding emission ceilings and other relevant national legal acts. • Development of secondary legislation on the basis of the assessment. • Existing emission-inventory data reviewed and emission data requirements for ambient air quality calculation/modeling identified; • Proposed and developed procedure for data collection on emissions in accordance with EU requirements; • Suitable models and other mathematical techniques based on current ambient air quality situation in Lithuania and depending on pollutant according temporal, spatial aspects and accuracy requirements of air quality directives in place. • Inventory of pollutants carried out and based on the National program for progressive reduction emissions of pollutants covered by EU Directive 2001/81/EC prepared. • Emission projections for 2010 (yearly) and 2020 as benchmarks for the pollutants referred in EU Directive 2001/81/EC (sulphur dioxide, nitrogen oxides, volatile organic compounds and ammonia) according the methodologies agreed upon by the Convention on Long-range Transboundary Air Pollution projected, e.g. EMEP/CORINAIR guidebook. • System for air quality modelling, forecasting and data processing established. • According to the identified needs soft and hardware equipment, models and their application means supplied. • Acquisition and application of air quality models and other mathematical techniques. • Guidebook on ambient air quality assessment prepared. • Developed models applied in practice in different scales. • Administrative capacities of the Ministry of Environment and Joint Research Centre strengthened, training programme prepared and training provided.			• Qualified local specialists are attracted • The Ministry is providing necessary support, including office space (if indicated in ToR)
			Preconditions Co-financing available.

Annex 2

Detailed Implementation Chart for the Project

Year	2003												2004												2005											
Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Technical assistance																																				
Supply																																				

design

tendering

implementation

Annex 3

CUMULATIVE CONTRACTING AND DISBURSEMENT SCHEDULE (PHARE Contribution only, MEUR)

	Date												
	2003			2004				2005					
	31/06	30/09	31/12	31/03	30/06	30/09	31/12	31/03	30/06	30/09	31/12		
Contracting													
• Technical assistance		1.0											
• Supply				0.3									
Total contracting (cumulative)		1.0		1.3									
Disbursement													
• Technical assistance		0.3	0.42	0.54	0.66	0.78	0.9	1.0					
• Supply				0.18	0.27	0.3	0.3	0.3					
Total disbursement (cumulative)		0.3	0.42	0.72	0.93	1.08	1.2	1.3					

Annex 4

Indicative list of the equipment needs to be financed under the Project

No	Component	Indicative Phare Budget (MEUR)	Indicative national co-financing (MEUR)	Total budget (MEUR)
1	High speed data transferring network	0.023	0.007	0.03
2	PC workstations (hardware/software)	0.037	0.013	0.05
3.	Modeling and statistical data analysis software	0.06	0.02	0.08
4.	Hardware and software for obtaining basic input data to run models	0.18	0.06	0.24
	Total	0.30	0.10	0.4