

Standard Summary Project Fiche – IPA decentralised National programmes
(maximum 12/15 pages without the annexes)

1. Basic information

- 1.1 CRIS Number: TR2009/0327.03
- 1.2 Title: Implementation Capacity for Environmental Noise Directive
- 1.3 ELARG Statistical code: 27 - Environment
- 1.4 Location: Turkey (İstanbul, Bursa, İzmir, Kocaeli, Antalya, Samsun, Ankara).

Implementing arrangements:

1.5 Implementing Agency:

The Central Finance and Contracting Unit (CFCU) will be Implementing Agency and will be responsible for all procedural aspects of the tendering process, contracting matters and financial management, including payment of project activities. The director of the CFCU will act as Programme Authorizing Officer (PAO) of the project.

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1.6 Beneficiary (including details of SPO):

Main beneficiary

Beneficiary of the project is the Ministry of Environment and Forestry. Details of the **Senior Programme Officer** (SPO) are as follows:

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Financing:

1.7 Overall cost (VAT excluded)¹:6,180,000 EUR

1.8 EU contribution: 5,557,500 EUR

1.9 Final date for contracting: 2 years after the signature of the Financing Agreement

1.10 Final date for execution of contracts: 2 years after the last day of the contracting deadline

¹ The total cost of the project should be net of VAT and/or other taxes. Should this not be the case, the amount of VAT and the reasons why it should be considered eligible should be clearly indicated (see Section 7.6)

1.11 Final date for disbursements: 1 year after the end date for the execution of contracts

2. Overall Objective and Project Purpose

2.1 Overall Objective:

The wider objective of this project is to assist Turkey in laying the basis for developing measures to reduce noise emitted by major sources, in particular road and rail vehicles and infrastructure, outdoor and industrial equipment and mobile machinery in accordance with Directive 2002/49/EC

2.2 Project purpose:

To develop and strengthen the institutional capacity in selected municipalities and institutions which are responsible for the preparation of noise maps and action plans for major noise sources

2.3 Link with AP/NPAA / EP/ SAA

AP

In the Accession Partnership 2008 document, the short term priority is to adopt a comprehensive strategy for the gradual transposition, implementation and enforcement of the acquis, including plans for building up the necessary administrative capacity at national, regional and local level and required financial resources, with an indication of milestones and timetables,

NPAA:

There is no statement about environmental noise in the National Programme 2008 since the Directive was transposed into Turkish legislation.

2.4 Link with MIPD

-Environment: Adoption of a revised programme for transposition and implementation of the acquis; Transposition of framework legislation, international environmental conventions, and legislation on nature protection, water quality, air quality, Industrial Pollution Control and waste management, environmental impact and strategic impact assessment, chemicals and GMOs, climate change, strengthening of the relevant institutions;

2.5 Link with National Development Plan (where applicable)

In the Ninth National Development Plan 2007-2013,

-Within the EU harmonization process, even though progress has been achieved regarding waste management, protection of the nature, noise and environmental impact assessment, any regulations are still needed in this field. However, as a result of the excessive amount of costly investments required for harmonization, new financing methods including the

participation of the private sector has come into the agenda. In this context, achievement of legislative harmonization and necessary additional investments will take a long time.

2.6 Link with national/ sectoral investment plans(where applicable)

Link with UÇES (EU Integrated Environmental Approximation Strategy-2007 - 2023)

1. Purpose : Noise maps will be prepared and exposure to environmental noise will be determined.

Target 1: The strategic noise maps for areas of more than 250 thousand residential population, the land routes on which more than 6 million vehicles pass every year, railway points through which more than 60 thousand trains pass through annually, airports where more than 50 thousand movements take place in a year, will be prepared until year 2013. Furthermore the strategic maps for areas of more than 100 thousand residential population, the land routes on which more than 3 million vehicles pass every year, railway points through which more than 30 thousand trains pass through annually, will be prepared until 2018 and these will be updated every 5 years.

Strategy 1: The institutional structure of the authorized institutions and establishments will be strengthened for the noise maps to be prepared.

2: Until Year 2011 the number of areas with more than 250 thousand residential population, the land routes on which more than 6 million vehicles pass every year, railway points through which more than 60 thousand trains pass through annually, airports where more than 50 thousand movements take place in a year will be determined and furthermore until year 2014 the number of areas with more than 100 thousand residential population, the land routes on which more than 3 million vehicles pass every year, railway points through which more than 30 thousand trains pass through annually will be determined.

3: For the strategic noise maps to be prepared the necessary data will be collected on the basis of the noise sources (land routes, railways, airports and industry).

4: The measurement and calculation standards oriented towards the determination of the noise level along with the utilization guides directed towards the preparation of the noise maps will be prepared.

2.Purpose: Action plans will be prepared to combat noise pollution.

Target 1:The noise limit values will be determined until the end of 2007 by using dose-effect relationship.

2: Until Year 2014 the action plans for areas with more than 250 thousand residential population, the land routes on which more than 6 million vehicles pass every year, railway points through which more than 60 thousand trains pass through annually, airports where more than 50 thousand movements take place in a year will be determined in line with the noise maps established and furthermore until year 2019 the action plans for areas with more than 100 thousand residential population, the land routes on which more than 3 million vehicles pass every year, railway points through which more than 30 thousand trains pass through annually will be determined again in line with the noise maps prepared for these places and these will be updated every 5 years.

Strategy 1:The institutional structure will be strengthened.

2: The institutional structure of the authorized institutions and establishments will be strengthened for the action plans to be prepared.

3: The national noise limit values will be determined by using dose-effect relationship.

4: User's manuals will be prepared with regard to the measures for the control of noise.

5: Action plans oriented towards the measures of economic and organizing nature such as the utilization planning of land, traffic planning, technical measures at the sources of noise, selection of less noise generating sources, reduction of noise dispersion will

3. Description of project

3.1 Background and justification:

The aim of the EU Directive on the assessment and management of environmental noise is to provide for a common approach to the avoidance, prevention and reduction of the harmful effects of exposure to environmental noise. The Directive aims at harmonising noise indicators and assessment methods for environmental noise. Using these common indicators and assessment methods, it seeks to gather information in the form of 'strategic noise maps'. This information will be made available to the public and will form the basis for 'action plans' at the local level. It is not the intention of the Directive to set common EU-wide noise limits. The setting of limits remains the responsibility of Member States.

Current State of Play in Turkey

Turkish National Legislation has been full harmonized with the EU Environmental Noise Legislation (END). "The Regulation on the Assessment and Management of Environmental Noise (RAMEN)" has been put into force after being issued on dated 01 July 2005. This regulation has been revised under project on 'Strengthening the Capacity of the MoEF in the Field of Noise Management' which was financed under 2004 Financial Cooperation Programme and put into force after being published on 7 March 2008. This twinning project was finalized on June 2008. Overall objective of the project was strengthening of institutional and administrative capacity of MoEF. One of the outputs of that project is MASTER PLAN which has been prepared accordance with the requirements of RAMEN. A document on Legislation Specific Approximation Strategy which was prepared based on Master Plan has been sent to the EU Commission.

It is also stated in **Screening report 2007** that, Turkey has achieved a good level of legislative alignment in this sector through the transposition of the noise directive. It has taken steps as regards implementation by defining the timetable for the identification of relevant areas, preparation of strategic noise maps and action plans. However, Turkey needs to secure the financial resources and to reinforce the administrative capacity required to fully implement the noise acquis. Turkey needs to undertake an assessment of the administrative capacity and financial resources required and prepare a plan for their reinforcement.

Key problems

Turkey has some progress on environmental noise with 2004 Financial Cooperation Programme Twinning project (TR/2004/IB/EN/02). Within the project 5 pilot cities were selected and draft noise maps for a limited area of the pilot region and one noise source (road, rail, aircraft, and industrial noise) had been drawn up. Staffs working in related department had been informed about the END requirements and trained on basic noise mapping studies. There had been faced up with some obstacles during obtaining the area and source data in 5

pilot region while preparing draft noise maps. These problems especially occur in big cities which have a high population and also which have complicated and concentrated noise sources. According to the lessons learned from the completed twinning project, availability and reliability of data and knowledge in acoustical issues is very important during the preparation of noise maps.

Despite the fact that there some deficiencies mentioned above , Turkey has an obligation to implement the Master Plan to fulfill the requirement of the END within the determined time period.

The detailed implementation schedule of Master Plan is given below;

Table-1

Activity of Implementation	Date of Implementation
Determination of <ul style="list-style-type: none"> • Agglomeration with more than 250.000 inhabitants • Major roads with more than 6 Mio vehicles per year • Major railways with more than 60.000 trains per year • Major airports with more than 50.000 movements 	no later than 30.06.2011
Preparation of strategic noise maps for <ul style="list-style-type: none"> • Agglomeration with more than 250.000 inhabitants • Major roads with more than 6 Mio vehicles per year • Major railways with more than 60.000 trains per year • Major airports with more than 50.000 movements per year Preparation of action plans for <ul style="list-style-type: none"> • Agglomeration with more than 250.000 inhabitants • Major roads with more than 6 Mio vehicles per year • Major railways with more than 60.000 trains per year • Major airports with more than 50.000 movements per year 	no later than 30.06.2013 no later than 18.07.2014
Consultation of the public on action plans Information of the public on final noise maps and action plans	no later than 18.07.2014 no later than 18.07.2014
Determination of <ul style="list-style-type: none"> • Agglomeration with more than 100.000 up to 250.000 inhabitants • Major roads with more than 3 Mio up to 6 Mio vehicles per year • Major railways with more than 30.000 up to 60.000 trains per year 	no later than 30.06.2014
Preparation of strategic noise maps for <ul style="list-style-type: none"> • Agglomeration with more than 100.000 up to 250.000 inhabitants • Major roads with more than 3 Mio up to 6 Mio 	no later than 30.06.2018

<ul style="list-style-type: none"> vehicles per year Major railways with more than 30.000 up to 60.000 trains per year 	
Preparation of action plans for <ul style="list-style-type: none"> Agglomeration with more than 100.000 up to 250.000 inhabitants Major roads with more than 3 Mio up to 6 Mio vehicles per year Major railways with more than 30.000 up to 60.000 trains per year 	no later than 30.06.2019
Consultation of the public on action plans	no later than 18.07.2019
Information of the public on final noise maps and action plans	no later than 18.07.2019
Review of strategic noise maps and action plans	each 5 years

The fields required to be prepared strategic noise maps accordance with the Master Plan have been determined for Turkey. Detailed information about these fields are given below;

Table-2

Activity of Implementation	Determined	Date of Implementation
<u>Determination of Noise sources</u> <ul style="list-style-type: none"> Agglomeration with more than 250.000 inhabitants Major roads with more than 6 Mio vehicles per year Major railways with more than 60.000 trains per year Major airports with more than 50.000 movements 	18 cities (Adana, Ankara, Antalya, Bursa, Denizli, Elazığ, Eskişehir, İstanbul, İzmir, Kayseri, Kocaeli, Malatya, Manisa, Kahramanmaraş, Sivas, Şanlıurfa Van And Batman) 1784 km 42 km <ul style="list-style-type: none"> İstanbul Atatürk Havaalanı Ankara Esenboğa Havalimanı İzmir Adnan Menderes 	no later than 30.06.2011 <u>Completed</u>

Preparation of strategic noise maps for determined areas	Havalimanı <ul style="list-style-type: none"> • Antalya Havaalanı 	no later than 30.06.2013
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Up to now this master plan has been started to be implemented by the responsible authorities. Turkey has fulfilled the one of the requirements of Master Plan which is determination of noise sources to be mapped before the given deadline in that plan. The proceeding step is the preparation of noise maps which is the following activity. However, in Turkey, there is no expert and consultants which have capable of preparing such noise maps for agglomerations, major roads, railways and airports. A special challenge arises from the necessity of employing a high number of educated and experienced personnel in the administration as well as in the industry, in universities, organizations, and in private consulting firms. At this stage, an education and training program benefited from foreign experts, concerning acoustics and all issues related to noise mapping and action planning, is an essential prerequisite for the further implementation. With these educated people and prepared noise maps, it will have been fulfilled the part of the requirements. Moreover, these studies will be guide and a reference study for the other provinces.

To master these challenges and to provide sustainability, Turkey needs a clear strategy and a road map on how the Noise Directive could be implemented and enforced by national, regional and local authorities.

Achivement of key problems

With this proposed project, institutional capacity in selected beneficiaries will be developed and strengthened in order to implement Environmental Noise Directive (2002/49/EC).

As one of the output in this proposed project noise maps belong to the various noise sources which are included in RAMEN will be prepared. While studying on these noise maps training programmes will be organized with selected cities and other related institutions.

Therefore, the activities of the proposed project will be helpful to handle the key problems mentioned above (eg. Lack of noise experts, lack of knowledge in acoustical issues).

Main Context of Project

This project will address the implementation of Environmental Noise Directive in Turkey. It will consist of two components.

(1) Technical Assistance (TA) component will provide assistance to prepare strategic noise maps in coordination with local experts for following cities and sources.

- İstanbul, Bursa, İzmir and Ankara (agglomerations, highways, airports, railways, seaports, industry etc.)
- Adana (airport),
- Samsun (seaports),

The cities included in the proposed project has been chosen because of the fact that they are the agglomerations to be prepared strategic noise maps in frame of Master Plan as given in Table-2. Since they have different noise sources, problems and population, these will be representative ones for whole Turkey. Additionally, all these cities selected as an example

since they have got GIS at their institutional capacity. In the completed twinning project (Turkey-EU Financial Cooperation Program 2004), the draft noise maps were prepared for the certain-limited noise sources in 5 pilot great municipalities (İstanbul-aircraft, Ankara-railway, Adana and izmir-road and Bursa-industrial area) and the capacity of personnel working at these municipalities have been strengthened. In previous twinning project road noise map was partial 36 km² studied in İzmir and railway noise map was partial 5 km studied in Ankara. But, it is aimed with this proposed project that entire noise map for İzmir and Ankara will be prepared.

While preparing final noise maps for these cities, sample noise maps and action plans will be prepared in selected 10 pilot areas (Muğla, Antalya, Nevşehir, İzmir-Aliğa, Eskişehir, Adana, Erzurum, Gaziantep, Samsun and Edirne) representing 7 geographical regions and will be ensured capacity building at whole Turkey.

Capacity building will be developed on preparation of noise maps and action plans on regional and local level (including NGOs, industry, competent authorities) with organizing training programmes.

TA component will also include :

- Assessment of the administrative capacity and financial resources required and to prepare a plan or their reinforcement
- Overview the noise calculation methods and adaptation to the Turkish system.
- Development of training and educational capacity in the field of environmental noise

(2) Supply component will support the pilot studies by ensuring 9 hardware packages.

3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)

The involvement of more and more stakeholders, especially NGOs and industry, will ensure wide dissemination of knowledge and skills throughout Turkey on the requirements of the END. The present project will strengthen the existing capacity of the governmental institutions involved in implementation of the noise management legislation, and increase the institutional capacity for the implementation of the environmental noise Regulation in Turkey. It is goaled to achieve a Sustainable Noise Management System via training and education in the field of noise management for entire Turkey.

The project is expected to two outcomes:

1. Training of minimum 180 staff on preparation of noise maps and action plans representing the 7 geographical regions and procurement of 13 software and hardware and training of minimum 25 staff for supplies.
2. Training of minimum 15 people as future trainers on environmental noise
3. Preparing of 9 noise maps and for selected cities.

Sustainability will be in the form of improved capacity, including the infrastructure, of the Turkish Government for implementation of the environmental *acquis*.

Cross border effects are not applicable for the present project requirements.

3.3 Results and measurable indicators:

Results	Measurable Indicators
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<p>1-All relevant stakeholders, especially designated competent authorities, consultants and NGOs are practically acquainted with the requirements for the implementation and enforcement of the Noise Assessment Directive (2002/49/EC)</p>	<p>-Final strategic noise maps prepared by the 30 month of the Project. -Training programmes prepared on data assessment management and noise mapping by the 30 th month of the Project -Several on-the-job trainings by the 30 month of the Project.</p>
<p>2- Institutional, Financial and Legal Framework conditions are in place to enable effective and efficient implementation of the Noise Assessment Directive (2002/49/EC)in Turkey.</p>	<p>-An action plan on the basis of the Masterplan elaborated at the end of project -A Draft document prepared on assessment of education on acoustics in Turkey by 2012 -A Core Group of Turkish Trainers working on environmental noise consisting of at least 15 people trained as future trainers by 2012. -180 staff trained on noise mapping</p>
<p>3- Competent implementing authorities better physically equipped to perform their tasks in relation with the Noise Assessment Directive (2002/49/EC).</p>	<p>- Document on technical specifications by the 3 month of the Project.</p>

3.4 Activities:

EU means for realising these activities are mentioned within brackets. As regards these sources, results will be achieved through one supply and one Technical Assistance contract. Activities will be duly organised in that manner. (laid down as follows)

Co-financing source for Technical Assistance contract activities is budget of selected municipalities, MoEF and Ministry of Transport. Co-financing source for supply contract activities is budget of Ministry of Environment and Forestry. This total budget will be available once it is nominated for the fiscal year, in which the activities are executed.

TA project is envisaged for a 30 month period. The Technical Assistance Team (TAT) will assist selected Municipalities and related institutions in implementing END in Turkey. Based on the road map the TAT will work together with the staff of related institutions and MoEF. The following subsequent activities to be carried out by the counterpart are listed below:

Activity 1.1 (TA)

Determination and provision of the most available software programme for areas to be studied on strategic noise maps if need.

Activity 1.2 (TA)

Preparation of main road noise maps in agglomerations given below:

İstanbul, Bursa, İzmir, and Ankara Agglomerations (highways, airports, railways, seaports, industry etc

Activity 1.3 (TA)

Preparation of major airport noise map (Adana-10 km²)

Activity 1.4 (TA)

Preparation of industrial noise map (Kocaeli -Gebze-134 km²)

Activity 1.5 (TA)

Preparation of harbour noise maps (Samsun-60 km²)

Activity 1.6 (TA)

Establishment of data base system including noise sources, field data and maps for Istanbul

Activity 1.7 (TA)

Organizing detailed training program in order to establish necessary infrastructure in selected municipalities and related institutions to implement the END.

- Two training program on Geographical Information System (GIS)
- At least ten other Training programmes

Activity 1.8 (TA)

Organizing study visits in EU Member States to share information and exchange between related institutions on

- data base management system on noise mapping,
- local implementation of noise mapping and action plans

Activity 1.9 (TA)

Preparation of sample noise maps and action plans (for limited area) in selected pilot cities given below:

- Muğla, Antalya, Nevşehir (recreational noise maps and action plans)
- İzmir-İzmir region (industrial noise map and action plan)
- Eskişehir (rail way noise map and action plan)
- Adana, Erzurum, Gaziantep, Samsun and Edirne (road noise maps and action plans)

Activity 2.1(TA)

Preparation of a detailed Master Plan-based Action Plan which will include need analysis and assessment (such as equipment, personnel, cost, data existence situation, national and international financial sources) for noise sources given table 2.

Activity 2.2 (TA)

Introduction of EU Projects on noise calculation methods, such as Imagine and Harmonoise, that have been completed by DG Environment.

Activity 2.3 (TA)

A Case study on dose effect relation for a specified area.

Activity 2.4 (TA)

Assessment of education on acoustics in Turkey by comparing education on acoustics in Member States of EC, and making feasibility studies.

- Evaluation of training and educational needs
- A study visit to Acoustics Center in A Member State

Activity 2.5 (TA)

Training of a Core Group of minimum 15 people that will be identified by MoEF as pecifical trainers; based on the training needs assessment done in Act. 2.4

Activity 3. (Supply)

Procurement of 9 hardware packages in order to prepare sample noise maps in pilot areas.

3.5 Conditionality and sequencing:

Before proposing this project, Ministry of Environment and Forastray had a meeting with related Municipalities and Ministry of Transport to introduce this project details and activities. TA project team will study with İstanbul, Bursa, İzmir, Ankara, Antalya, Kocaeli, Samsun Gretaer Municipalities, Muğla, Nevşehir, Eskişehir, Adana, Erzurum, Gaziantep, and Edirne Municipalities and Ministry of Transport. Formal letters were sent to related municipalities and institutions in order to receive their support and technical participation to the Project. All municipalities and Ministry of Transport are willing to give their full support to the Project. All mentioned municipalities had accepted to join this project actively and they sent letter to the Ministry to give technical and financial support. Municipalities which will give financial support to the project have sent a letter about their financial commitment to the MoEF.

3.6 Linked activities

In the framework of Turkey-EU Financial Cooperation Program 2004 project on ‘Strengthening the Capacity of the MoEF in the Field of Noise Management’ was finalized on June 2008. Overall objective of the project was strengthening of institutional and administrative capacity of MoEF. Within the project 5 pilot cities (İstanbul, Ankara, Adana, izmir and Bursa) were selected and draft noise maps for a limited area of the pilot region and one noise source (İstanbul-aircraft, Ankara-railway, Adana and izmir-road and Bursa-industrial area) had been drawn up.

Proposed project includes preparation noise maps with the support of training programmes for newly determined cities and sources, whereas the completed project consisted only limited areas for one noise source in each pilot area. Therefore, this project will be complementary for studied areas in previous project and will be a logical follow-up for whole Turkey with newly added areas.

3.7 Lessons learned

1-Data availability and reliability and based upon a GIS is very crucial in order to prepare strategic noise maps which is the main requirements of END.

- 2- The technical staff in the related institutions should work as active as the designated experts throughout the project.
- 3- The translations of the documents are indeed crucial, and the translations should be made by the qualified person specific to the project's subjects, and also after the translations were carried out, the translated documents should be controlled carefully by the Ministry staff.
- 4- The close-cooperation with the stakeholders in the implementation of the project is the key aspect for the project success.

4. Indicative Budget (amounts in EUR)

			SOURCES OF FUNDING										
			TOTAL EXP.RE	TOTAL PUBLIC EXP.RE	IPA COMMUNITY CONTRIBUTION		NATIONAL PUBLIC CONTRIBUTION					PRIVATE CONTRIBUTION	
ACTIVITIES	IB (1)	INV (1)	EUR (a)=(b)+(e)	EUR (b)=(c)+(d)	EUR (c)	% (2)	Total EUR (d)=(x)+(y)+(z)	% (2)	Central EUR (x)	Regional/ Local EUR (y)	IFIs EUR (z)	EUR (e)	% (3)
Activity 1													
Service contract 1.1	X	–	6,090,000	6,090,000	5,481,000	90	609,000	10		609,000			–
Activity 2													
Supply contract 2.1	–	X	90,000	90,000	76,500	85	13,500	15	13,500				–
contract 2.2	–	–											–
.....													
TOTAL IB			6,090,000		5,481,000		609,000						
TOTAL INV			90,000		76 500		13 500						
TOTAL PROJECT			6,180,000		5,557,500		622,500		13 500	609 000			

Amounts net of VAT

(1) In the Activity row use "X" to identify whether IB or INV

(2) Expressed in % of the **Public Expenditure** (column (b))

(3) Expressed in % of the **Total Expenditure** (column (a))

***It is planed that Terms of Referance document on TA and detailed supply tender documents of the project will be prepared under SEI programming**

****During the preparation of the programme it was planned to put the provision of software with licence under the Service Contract not to limit the competition conditions for the TA tender as many TA are experienced on specific software. This will be subject to CFCU and EC delegetaion decision**

5. Indicative Implementation Schedule (periods broken down per quarter)

Contracts	Start of Tendering	Signature of contract	Project Completion
Service Contract 1.1	2010/1Q	2010/3Q	2013/1Q
Supply Contract 1.2	2011/1Q	2011/4Q	2012/1Q

Duration of the project

Service Contract: 30 months

Supply Contract: 3 months

All projects should in principle be ready for tendering in the 1ST Quarter following the signature of the FA

6. Cross cutting issues (where applicable)

6.1 Equal Opportunity

Participation in this project will be open to both males and females involved in the sector. Records of professionals' participation in all project related activities will reflect this and will be kept with the project documentation.

6.2 Environment

The Project itself is focused on the achievement of long-term environmental improvements in Turkey. The Project itself will probably not have any adverse environmental impacts, other than those due to normal activities (e.g. transport). Nevertheless, as an example to others and as a matter of principle, the environmental impact of activities must be minimised as far as possible, e.g. by conserving paper.

6.3 Minorities and Vulnerable

According to the Turkish Constitutional System, the word minorities encompass only groups of persons defined and recognized as such on the basis of multilateral or bilateral instruments to which Turkey is a party. This project has no negative impact on minority and vulnerable groups

6.4. Civil Society

As an output of this project noise maps will be prepared and, the people will have been informed about the noise exposure in their living areas.

ANNEX 1: Logical framework matrix in standard format

Logical framework matrix in standard format

LOGFRAME PLANNING MATRIX FOR IMPLEMENTATION CAPACITY FOR ENVIRONMENTAL NOISE DIRECTIVE	Programme name and number	IPA-I / 2009 Programming
	Contracting period expires: 2 years after the signature of the Financing Agreement	Disbursement period expires: 1 year after the final date for execution of the contracts
	Total budget : 6,180,000 EUR	IPA budget: 5,557,500 EUR

Overall objective	Objectively verifiable indicators	Sources of Verification
to assist Turkey in laying the basis for developing measures to reduce noise emitted by major sources, in particular road and rail vehicles and infrastructure, outdoor and industrial equipment and mobile machinery in accordance with Directive 2002/49/EC	<p>Turkish noise management system developed inline with EU requirement</p> <p>Becoming better capacity of municipalities and institutions on prepare noise maps and action plans at the end of the project</p> <p>The increased quantity and quality of the final noise maps and action plans as compared to baseline of year 2008.</p>	<p>- Regular report on Turkey's progress on accession as a candidate country</p> <p>- Training programmes and documents</p>

Project purpose	Objectively verifiable indicators	Sources of Verification	Assumptions
<p>To develop and strengthen the Institutional capacity in selected municipalities and institutions which are responsible for the preparation of noise maps and action plans for major noise sources</p>	<p>4. Minimum 180 staff trained and 9 hardware procured on preparation of noise maps and action plans representing the 7 geographical regions in Turkey by 2013 5. Noise maps prepared for selected cities at the end of project.</p>	<ul style="list-style-type: none"> • Commission progress reports on Turkey • Project's inception report, activity progress reports, interim reports and final report 	<ul style="list-style-type: none"> • Adequate resources in staff and consumables made available. • Willingness of staff at MoEF and other ministries to work in collaboration and co-ordination with each other and with project team
Results	Objectively verifiable indicators	Sources of Verification	Assumptions
<p>1-All relevant stakeholders, especially designated competent authorities, consultants and NGOs are practically acquainted with the requirements for the implementation and enforcement of the Noise Assessment Directive (2002/49/EC)</p>	<p>1 -Final strategic noise maps prepared by the 30 month of the Project. -Training programmes prepared on data assessment management and noise mapping by the 30 th month of the Project -Several on-the-job trainings by the 30 month of the Project.</p>	<ul style="list-style-type: none"> • Reports on training sessions and reports on study tours/exchanges • Project monitoring and evaluation reports • Project reports, including strategic noise maps • Report on implementation of action plans 	<ul style="list-style-type: none"> • Financial resources allocated for environmental improvement and sustainable development by the Turkish Government. • Personnel supported during the project training activities are kept in the responsible bodies to implement the directive in the future

<p>Results</p> <p>2- Institutional, Financial and Legal Framework conditions are in place to enable effective and efficient implementation of the Noise Assessment Directive (2002/49/EC) in Turkey.</p> <p>3- Competent implementing authorities better physically equipped to perform their tasks in relation with the Noise Assessment Directive (2002/49/EC).</p>	<p>Objectively verifiable indicators</p> <p>2- An action plan on the basis of the Masterplan elaborated at the end of project -A Draft document prepared on establishment of acoustical educational center by 2012 -A Core Group of Turkish Trainers working on environmental noise consisting of at least 15 people trained as future trainers by 2012. -180 staff trained on noise mapping</p> <p>3- 9 hardware procured at the end of the project.</p>	<ul style="list-style-type: none"> • Training and educational needs assessment report <p>Sources of Verification</p> <ul style="list-style-type: none"> • Final document on Action Plan • Training document 	
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Activities	Means	Costs	Assumptions
<p>Activity 1.1 (TA) Determination and provision of the most available software programs for areas to be studied on strategic noise maps if need.</p>	TA	6,090,000 EUR	<ul style="list-style-type: none"> • Other ministries and institutions will have manageable levels of staff turnover and be able to sustain effective working groups
<p>Activity 1.2 Preparation of main road noise maps in agglomerations given below: İstanbul, Bursa, İzmir and Ankara Agglomerations (highways, airports, railways, seaports, industry etc)</p>	TA		<ul style="list-style-type: none"> • Data relating the noise maps are reliable and reflect the real cases
<p>Activity 1.3 Preparation of major airport noise map (Adana-10 km²)</p>	TA		<ul style="list-style-type: none"> • Relevant ministries and institutions are willing to close co-operation.
<p>Activity 1.4 Preparation of industrial noise map (Kocaeli (Gebze-134 km²))</p>	TA		
<p>Activity 1.5 Preparation of harbour noise map (Samsun-60 km²)</p>	TA		
<p>Activity 1.6 Establishment of data base system including noise sources, field data and maps for İstanbul</p>	TA		
<p>Activity 1.7 Organizing detailed training program in order to establish necessary infrastructure in selected municipalities and related institutions to implement the END.</p>	TA		

<p>-Two training program on Geographical Information System (GIS) -At least ten other Training programmes</p>	TA		
<p>Activity 1.8 (TA)</p> <p>Organizing 3 study visits in EU Member States to share information and exchange between related institutions on</p> <ul style="list-style-type: none"> • data base management system on noise mapping, • local implementation of noise mapping and action plans 	TA		
<p>Activity 1.9</p> <p>Preparation of sample noise maps and action plans (for limited area) in selected pilot cities given below:</p> <ul style="list-style-type: none"> • Muğla, Antalya, Nevşehir (recreational noise maps and action plans) • İzmir-Aliğa region (industrial noise map and action plan) • Eskişehir (rail way noise map and action plan) • Adana, Erzurum, Gaziantep, Samsun and Edirne (road noise maps and action plans) 	TA		
<p>Activity 2.1</p> <p>Preparation of a detailed Master Plan-based Action Plan which will</p>	TA		

<p>include need analysis and assessment (such as equipment, personnel, cost, data existance situation, national and international financial sources) for noise sources given table 2.</p>	TA		
<p>Activity 2.2 Introduction of EU Projects on noise calculation methods, such as Imagine and Harmonoise, that have been completed by DG Environment.</p>	TA		
<p>Activity 2.3 Case study on dose effect relation for a specified area.</p>	TA		
<p>Activity 2.4 Assessment of education on acoustics in Turkey by comparing education on acoustics in Member States of EC, and making feasibility studies. - Evaluation of training and educational needs -A study visit to Acoustics Center in A Member State</p>	TA		
<p>Activity 2.5 Training of a Core Group of minimum 15 people that will be identified by MoEF as pecifical trainers; based on the training needs assessment done in Act. 2.4</p>	Supply	90,000 EUR	
<p>Activity 3. Procurement of 9 amounth of hardware in order to prepare sample</p>			

noise maps in pilot areas.

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