

(9)	<i>Closure of existing landfills</i>			
(a)	8. NUMBER OF LANDFILLS TO BE CLOSED if adequate specify the following for each existing landfill			
	total volume of waste stored	m ³		
	<i>composition of waste</i>			
	glass	%		
	plastics	%		
	paper / board	%		
	metal	%		
	wood	%		
	organic matters from kitchen, gardens etc.	%		
	inert material (construction waste)	%		
(b)	method of closure			
	fencing	yes/no		
	surface sealing,	yes/no		
	gas drainage layer	yes/no		
	artificial sealing layer	yes/no		
	impermeable mineral layer	yes/no		
	drainage layer	yes/no		
	top soil layer	yes/no		
	greening and plantation	yes/no		
(c)	gas collection			
	recuperation	yes/no		
	estimated quantity	m ³		

	energy production	yes/no		
	flaring	yes/no		
	none	yes/no		
(d)	will sealed landfill be opened to public for recreational purposes if yes, year	yes/no year		
(e)	leachate			
	drainage ditch	yes/no		
	connected to wastewater treatment plant	yes/no		
	other methods of leachate disposal	explain		
(10)	<i>After care and control</i>			
	<i>A 8.1.1. monitoring authority</i>			
	responsible authority	authority		
	frequency of inspections	number per year		
(11)	Creation of new landfill(s)			
(a)	planning horizon planned capacity	year m ³		
(b)	level of ground water at site	m		
(c)	bottom sealing	explain		
	artificial sealing layer	yes/no		
(d)	drainage layer	explain		
(e)	<i>separation on site (after collection)</i>	yes/no		
	<i>materials separated</i>			

	glass	yes/no		
	paper / board	yes/no		
	plastics	yes/no		
	metals	yes/no		
	wood	yes/no		
	other	yes/no		
(f)	composting facility on site use of compost	yes/no explain		
(g)	gate control	years		
	weighting system			
	visual inspection sampling	yes/no frequency explain		
(h)	gas collection anticipated year of start of collection on site estimated quantity at start year	Year m^3		
(i)	leachate treatment			
	drainage ditch	yes/no		
	connected to wastewater treatment plant	yes/no		
	other methods of leachate disposal	explain		
(12)	Monitoring			
	Responsible authority	authority		
	Frequency of inspections	number per year		

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3. Wastewater Treatment

Wastewater project:

Yes ☐ No ☐

Combined drinking water - wastewater project:

Yes ☐ No ☐

Reference year data:
year

			<i>Situation today</i>	<i>Situation after realisation of project</i>
8.1.1.1. Indicators				
(1)	Is this “measure” or part of it in a receiving area or catchment classified (or to be classified) as sensitive			
(a)	receiving body river basin river basin district	Sea/lake/river explain		
(b)	status of receiving body (coastal water, estuary, freshwater)	explain		
	is receiving body (area or catchment) declared as sensitive (cf Annex II A, CD 91/271/EEC)	yes/no		
(2)	Total population in agglomeration or area covered	1000		
(a)	total estimated p.e. of area covered (households, industries, commerce, services) – connected plus not-connected indicative design horizon	p.e. end year		

	estimated p.e. before industrial pre-treatment (connected only)	p.e.		
	estimated p.e. after industrial pre-treatment (connected only)	p.e.		
(b)	population equivalent (p.e.) of treatment plant(s) calculation base Art. 2.6 – dir - 91/271 EEC	p.e.		
(c)	if seasonal variations (in m ³ /day) origin of variations natural commercial	peak m ³ low m ³		
(3)	Population connected	% of (1)		
	real number of people connected to the system	Persons 1000		
(4)	Length of network (wastewater)	km		
(a)	9. PART OF NETWORK TO BE REHABILITATED	km		
(b)	number of pumping stations	number		
(5)	Total throughput			
(a)	hydraulic load (m ³ /d)	m ³ /d		
(b)	biological load (kg BOD/d)	kg BOD/d		
(c)	discharge per capita	litre per capita per day		
(d)	from households - hydraulic load (m ³ /d) - biological load (kg BOD/d)	% of (4a) % of (4b)		
(d)	from industrial and commercial users (incl. Services, public services) - hydraulic load (m ³ /d)	% of (4a)		

	- biological load (kg BOD/d)	% of (4b)%		
	number of connected industrial units	Number		
	industrial pre-treatment	yes/no		
	number of industries with pre-treatment	number		
	type of industries (specify)	type of industries		
	part of industrial effluents which is not pre-treated	% of (4)		
	type of industries without pre-treatment (specify)	type of industries		
(6)	10. MEASURED NETWORK LEAKAGE IN DRINKING WATER SYSTEM (M³/D) <i>(answer also for wastewater projects)</i>	(m ³ /d)		
(a)	losses measured (m ³ /d)	(m ³ /d)		
(b)	losses estimated (m ³ /d)	(m ³ /d)		
(c)	total unaccounted for water	% of total drinking water production		
(d)	date of last systematic water network audit	year		
(7)	Infiltration to the sewerage system	m ³		
(a)		explain		
(b)	- estimated volume	m ³		
(c)	- date of last systematic network audit	year		
(8)	11. CHARGING AND METERING (METERING FOR DRINKING WATER)			
(a)	total coverage by metering of households and industry	% of total drinking water production		

	of which households			
	of which industries (including services, commerce, administrations)			
(b)	method of metering per apartment per apartment block per individual house per street block per quarter per industrial, commercial, administrative establishment none	% of total drinking water production		
(c)	does charging system for waste water take into account other parameters than consumption of drinking water (e.g. sealed area, flat rate component)) if yes: shortly describe	yes/no explain		
(d)	population (households) covered by metered charges	% of (2)		
	charges represent % of average household disposable income	%		
	has charging system in agglomeration a social component	yes/no		
	if yes			
	by income	yes/no		
	by family size	yes/no		
	or any other system to assist low income households(e.g. direct transfer by government, municipality etc)	explain		
e)	industrial coverage			
	rates different from household rates	yes/no		
	are industrial rates decreasing with consumption	yes/no		

(f)	is for industrial charges PPP principle applied (full cost recovery - capital, operation and maintenance cost for industrial part)	yes/no		
(9)	12. IS THERE MORE THAN ONE WWTP If more than one plant, answer questions 9, 10, 11 12, 13 for each individual plant	yes/no		
	number of plants 13. TOTAL DESIGN CAPACITY	number m^3		
(a)	overall design capacity	m^3		
plant 1	used capacity	%		
(b)	overall design capacity	m^3		
plant 2	used capacity	%		
(c)	overall design capacity	m^3		
plant 3	used capacity	%		
(i)	overall design capacity	m^3		
plant i	used capacity	%		
(10)	Storm drainage, separate system			
	totally separate	yes/no		
	partially separate	yes/no		
	part of separate system share of total length	% of (3)		
(a)	storage capacity of overflows	m^3/ha		
(b)	peaking factor for flow	Q24 max		
(c)	treatment of storm water discharge in treatment plant	m^3		

	direct discharge in receiving waters	m ³			
(11)	Quality of waste water treatment - effluent standards	influent concentration	effluent standards	Fill only one of the two	
				effluent standards	% reduction
	<i>effluent standards for secondary treatment</i>				
(a)	BOD ₅	concentration mg/l			
(b)	COD	concentration mg/l			
(c)	Suspended solids	concentration mg/l			
	<i>effluent standards for tertiary treatment (only compulsory for sensitive areas)</i>				
(d)	Total Nitrogen	concentration mg/l			
(e)	Total Phosphorus	concentration mg/l			
(f)	Monitoring method Annual average calculated on daily, weekly monthly samples	specify			
(g)	14. RE-USE OF EFFLUENT	specify			
(12)	Treatment technology				
(a)	screening	yes/no			
(b)	pre-sedimentation	yes/no			
(c)	other mechanical	yes/no			
(d)	biological treatment	type			
	patented system	yes/no			
(e)	tertiary treatment level	yes/no			
(f)	other technologies used	explain			

	Briefly describe			
(13)	Sludge Management	yes/no		
(a)	type of sludge treatment used	explain		
	dry solids content			
	dangerous substances, heavy metals in sludge			
	Cadmium	mg/kg		
	Copper	mg/kg		
	Nickel	mg/kg		
	Lead	mg/kg		
	Zinc	mg/kg		
	Mercury	mg/kg		
	Chromium	mg/kg		
(b)	disposal volume and route	Total tons		
	agriculture (**)	% of 10(b)		
	soils	% of 10(b)		
	landfill	% of 10(b)		
	incineration	% of 10(b)		
	other specify (**)	% of 10(b)		
(14)	Monitoring authority			
(a)	wastewater discharges and effluent standards	authority		
(b)	sludge disposal	authority		
			Explain	
(**)	For other modes of sludge disposal, explain how compliance with relevant EC directives on waste disposal are respected:			
sludge	- Framework CD 75/442/EEC on waste and CD 91/689/EEC on hazardous waste			

disposal	- CD 1999/31/EC on the landfill of waste, CD 2000/76/EC on incineration of waste	
Characteristics of the collection system	Does the collecting system take into account wastewater treatment requirements? <i>Are the flows of the sewers and the wastewater treatment plant (WWTP) well balanced</i> <i>(cf. CD 91/271/EEC Annex 1A)</i>	
	Is the design of the collecting system in accordance with BAT, regarding: - volume and characteristics of urban waste water, - prevention of leaks, - limitation of pollution of receiving waters due to storm water overflows	
Pre-treatment of industrial water discharges	Is there a legal obligation for industries to pre-treat their water <i>(cf. Annex 1c of CD. 91/271/EEC)?</i> <i>Provide reference of the legal</i>	
Discharge of dangerous substances into the aquatic environment	Have competent authorities elaborated an inventory and a programme for the pollution reduction of substances covered by list I and list II of CD 76/464/EEC and the specific directives for list I substances (CDs 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC as amended by 88/347/EEC and 90/415/EEC) and being discharged indirectly into the aquatic environment via the sewerage system and wastewater treatment plant? <i>These programmes should focus on the authorisation of indirect discharges of small and medium sized enterprises and the more generic pollution reduction from multiple sources, as mentioned in CD 86/280/EEC, Article 5.</i>	

(**)

Limit values for heavy-metal concentrations in sludge for use in agriculture

Parameters	Limit values (mg/kg of dry matter)
Cadmium	20 to 40
Copper	1 000 to 1 750
Nickel	300 to 400
Lead	750 to 1 200
Zinc	2 500 to 4 000
Mercury	16 to 25
Chromium	not yet fixed

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ANNEX IX
TEMPLATE
BILATERAL PROJECT AGREEMENT
BETWEEN
THE GOVERNMENT OF THE REPUBLIC OF TURKEY
AND
THE EUROPEAN COMMISSION
CONCERNING THE CO-FINANCING
OF THE MAJOR PROJECT
(.....)
CCI No:
UNDER
THE INSTRUMENT FOR PRE-ACCESSION ASSISTANCE (IPA)
IPA Component III – Regional Development
Operational Programme
"Environment"
CCI No: 2007 TR 16 I PO 001
Title and Priority Axis No:
Title and Measure No:

The Government of the Republic of Turkey
and
the European Commission

Hereafter jointly referred to as "the Parties" or individually as "the Beneficiary", in the case of the Government of the Republic of Turkey, or "the Commission", in the case of the European Commission

Whereas

- 1) On 17 July 2006, the Council of the European Union adopted Regulation (EC) No 1085/2006 establishing an Instrument for Pre-Accession Assistance¹⁹.
- 2) On 12 June 2007, the Commission adopted Regulation (EC) No 718/2007 implementing Council Regulation (EC) No 1085/2006 establishing an instrument for pre-accession assistance (IPA)²⁰, detailing applicable management and control provisions.
- 3) On 29 November 2007, the Commission adopted Decision C(2007) 5758 approving the multi-annual operational programme "Environment" for Community assistance from the Instrument for Pre-Accession Assistance for the Regional Development component in Turkey. On {DATE} the Commission adopted Decision C(20XX)XXXX modifying the programme.
- 4) On {DATE}, the Beneficiary and the Commission concluded a Framework Agreement setting out the rules for co-operation concerning the EU financial assistance from the Instrument for Pre-Accession Assistance (IPA).
- 5) On {DATE} the Beneficiary and the Commission concluded a Financing Agreement laying down specific provisions for the implementation of the multi-annual programme "Environment". This Financing Agreement entered into force on {DATE}. On {DATE} the Beneficiary and the Commission concluded a modified Financing Agreement which entered into force on {DATE}.
- 6) In accordance with Article 54 of the Financing Agreement, the Operating Structure submitted to the Commission a major project {NAME} in which it envisages a contribution from the Instrument for Pre-Accession Assistance under priority axis {NAME} of the multi-annual operational programme "Environment" [*where applicable*] [At the request of the Commission, the Operating Structure submitted additional information on {DATE}].
- 7) On {DATE}, the Commission adopted decision C {NUMBER} approving a IPA contribution to the major project {NAME}.

¹⁹ OJ L210, 31.7.2006, p.82.

²⁰ OJ L 170, 29.6.2007, p.1.

- 8) In accordance with Article 54 of the Financing Agreement, the decision of the Commission approving the project should be followed by a Bilateral Project Agreement with the Beneficiary.

HAVE AGREED AS FOLLOWS:

Article 1

Subject matter

1. This Bilateral Project Agreement is concluded between the Government of the Republic of Turkey and the European Commission. It concerns the project {NAME} adopted by Commission Decision C {NUMBER} as described in the Annex. All documents and correspondence pertaining to this project shall bear the reference CCI {NUMBER}.

Article 2

Project funding

1. The eligible expenditure, calculated in accordance with Article 150 of Regulation (EC) No 718/2007, is set at EUR (...).
2. The co-financing rate for the priority axis {NAME} of the "Environment" Operational Programme applies to the project. The maximum IPA contribution to the project is set at EUR (...).
3. The IPA contribution to the co-financing of the project is subject to the fulfilment of the provisions of this Bilateral Project Agreement and the obligations and conditions set out in the Framework Agreement, Financing Agreement as well as the regulatory and conventional framework applicable to pre-accession assistance.

Article 3

Eligibility period

1. The eligibility period is as laid down in Articles 11(3), 34, 43 of the Financing Agreement.

Article 4

Eligible expenditure

1. Expenditure incurred in the implementation of the project shall be eligible for IPA co-financing if:
 - a) it has been actually incurred within the eligibility period referred to in Article 3 and is supported by receipted invoices or accounting documents of equivalent probative value;

- b) contracts giving rise to such expenditure are consistent with the project, as adopted by Commission Decision C {NUMBER} of (date);
- c) it has been incurred in accordance with the principles of sound financial management and, in particular, of economy and cost-effectiveness and
- d) it conforms to the eligibility rules laid down in Chapter VI of the Financing Agreement.

Article 5 Agreement

- 1. An agreement as laid down in Article 51(3) of the Financing Agreement must be signed prior to the commencement of any contract within the project. The agreement shall also define the modalities of handing over the project to the end recipient of assistance after its completion.
- 2. A signed copy of the agreement shall be sent to the Commission services.
- 3. Notwithstanding paragraphs 1 and 2, the requirements of Article 27 of the Financing Agreement remain applicable.

Article 6 Procurement rules and procedures

- 1. The procurement rules and procedures to be followed are stipulated in Articles 44, 46 and 48 of the Financing Agreement. Where applicable, the rules laid down in Article 20 of the Financing Agreement governing procurement by International Financing Institutions (IFIs) shall also apply.
- 2. In duly substantiated exceptional cases, derogation from the rules of participation and origin might be authorised in line with the provision of Article 19(6) of Regulation (EC) No 1085/2006 {to specify}.

Article 7 Monitoring

- 1. Monitoring refers to the use of a system of information in order to trace the progress made in implementing the project. Monitoring shall use financial and physical indicators which enable actual progress towards completion of the project to be compared with the Indicative Work Schedule/Expenditure Plan presented in Annex.
- 2. The implementation of the project shall be monitored in line with the stipulations of Chapter XIII (Monitoring and Evaluation) of the Financing Agreement. This, amongst others, will require:
 - a. the Operating Structure, and where appropriate the relevant Contracting Authority, managing the project monitoring activities;

- b. the Sectoral Monitoring Committee reviewing the progress of implementation;
- c. the preparation of the monitoring sheets provided by the Commission: these monitoring sheets form the principal part of the sectoral annual report on implementation in accordance with Articles 84 and 85 of the Financing Agreement;
- d. special or ad-hoc monitoring reports, if deemed necessary by the Operating Structure or the Commission services;
- e. physical on the spot checks.

Article 8 Evaluation

1. An assessment of the project may be carried out during its implementation at the request of the Beneficiary, or on the initiative of the Commission, in order to assess whether the project is proceeding towards completion in accordance with the objectives originally laid down in Annex to this Agreement and to propose adjustments to take account of problems encountered during implementation.
2. An ex-post assessment of the impact of the project may be carried out by an assessor appointed either by the Beneficiary or the Commission once the project has been completed.

Article 9 Project modification

1. Any modification to the approved project shall require the approval of the Commission by way of a modifying decision or by exchange of letters between the Beneficiary and the Commission services.
2. Expenditure relating to a physical object introduced in the project by way of a modification is eligible from the date of approval of the modification by the Commission.
3. Any modification to the project described in the Annex which affects the content of the operational programme {NAME}, will necessitate not only a Commission modifying decision concerning the project, but also a decision concerning modification of the operational programme. Therefore, such project modification requests are receivable only if submitted in parallel with the necessary request for a modification of the operational programme.
4. Any major modification to the project, as described in the Annex requires the approval by the Commission by way of a modifying decision. Such modifications must be supported by a duly motivated request to be submitted before the end of eligibility period referred to in Article 3.

A modification is considered **major** when it involves:

- a) a change in any of the elements described in points 5 (Project Description) and 6 (Objectives) of the Annex; or

- b) any change in the amount of IPA contribution allocated to the project; or
 - c) a change in the eligible expenditure of the project; or
 - d) a substantial change in the physical characteristics or the functional purposes of the project, which alter its objectives, including the addition of a physical component not covered by the original decision; or
 - e) a change in the conditions of ownership or operation of the project.
5. Any minor modification to the project can be approved by way of an exchange of letters between the Beneficiary and the Commission services, on the basis of a duly motivated proposal to be submitted before the end of eligibility period referred to in Article 3.
- Except in cases referred to in paragraph 4, an amendment is considered **minor**, and notably when it concerns:
- a) an extension to the period of implementation initially envisaged in the project application; or
 - b) amendments to the Indicative Work Schedule/Expenditure Plan that do not fall under paragraph 4 point c) above; or
 - c) a change to the physical characteristics or functional purposes of the project that does not affect its overall objectives.
6. The Sectoral Monitoring Committee shall be informed about major and minor project modification proposals.
7. As a general rule, the number of major project modifications requiring a Commission modifying decision should be kept to minimum.
8. Each request for a modification, be it major or minor, will be examined by the Commission on a case-by-case basis.
9. The Commission reserves the right to refuse project modification requests which would result in modifications of the operational programme it deems unacceptable.

Article 10 **Special Conditions**

{List any conditions which have to be fulfilled including related to payments and may be necessary for co-financing the project e.g. financial or legal arrangements, submitting of permits, evidence of the completion of land purchase, preliminary agreements, any requirements for later stages of the project (i.e. timetable for closing remaining landfills, disconnecting cess pits etc.).}

Article 11
Language

This Bilateral Project Agreement is drawn up in duplicate in the English language.

Signed, for and on behalf of the Government of the Republic of Turkey,

at

by

Signed, for and on behalf of the European Commission,

at

by

ANNEX

PHYSICAL OBJECT OF THE MAJOR PROJECT

Operational Programme

"Environment"

CCI No: 2007TR16IPO001

Project name

.....

CCI No:

Title and Priority Axis No:

Title and Measure No:

1. AUTHORITY RESPONSIBLE FOR THE APPLICATION (OPERATING STRUCTURE)

Name:
Address:
Contact
Telephone
Fax
E-mail

2. FINAL BENEFICIARY (ARTICLE 15 OF THE FINANCING AGREEMENT)

Name:
Address:
Contact
Telephone
Fax
E-mail

3. END RECIPIENT OF ASSISTANCE

Name:
Address:
Contact
Telephone
Fax
E-mail

4. PROJECT LOCATION

4.1. Beneficiary country:.....

4.2. County/province:.....

5. PROJECT DESCRIPTION

5.1. General description of the physical object of the project

(a) *(Provide a description of the project and the type of problems it addresses?)*

(Main goals, end users (i.e. target population served, quantified where possible) of the infrastructure. Where applicable, indicate the Trans-European Network agreed at EU level the project is linked to)

(b) *(Where the project is a phase of an overall project, provide a description of the proposed stages of implementation (explaining whether they are technically and financially independent)*

5.2. Technical description of the infrastructure investment

- (a) *(Describe the proposed infrastructure and the work for which assistance is being proposed specifying its main characteristics and component elements - it is important to be comprehensive with this description to reduce doubt later regarding the eligibility of actions or equipment.*
- (b) *(In respect of the work involved, identify and quantify the key output indicators to be used)*
- (c) *(Give details of how the infrastructure is to be managed after the project is completed, (i.e., public management, concession, other form of Public Private Partnership)).*

6. OBJECTIVES

Outline the objectives of the project

7. INDICATIVE PHYSICAL AND/OR PERFORMANCE INDICATORS

Provide the main physical and/performance indicators:

For drinking water projects e.g. reduction of water losses, increase in drinking water quality, increase in metering of water supplies, reduction in distribution costs, increase in network length, increase in length of network in serviceable condition (for rehabilitation projects) etc.

For waste water projects e.g. reduction in leakages, increase in % of population connected to the network, increase in the amount of sewage treated, increase in the level of sewage treatment, increase in quality of receiving waters, reduction in disposal costs, increase in network length, increase in length of network in serviceable condition etc.

For solid waste projects e.g. reduction in quantity of waste going to landfill, increase in amount of recycled materials, number of landfill sites closed and rehabilitated, % of population covered by waste removal services, etc.

For transportation projects e.g. length of road/rail/waterway constructed/rehabilitated/upgraded, reduction in travel times, reduction in operational and/or maintenance costs, increase in road/rail/waterway traffic capacity.

List the relevant EC Directives that the project will address. For transportation projects also list the technical standards that will be achieved.

The indicators might be refined in the Monitoring Committee when deemed necessary especially upon the finalisation of the contracting. Should it be the case, confirmation of the indicators will be by exchange of letters. In any case, the proposed physical and/or performance indicators are as follows*:

Indicative Indicators	Before	After
<p>a) Physical</p> <p>e.g. length (in km) of new/rehabilitated sewage/water networks, length (in km) of rehabilitated/new single railway track, reduction (%) in unaccounted for water, reductions in water pollutants i.e. BOD, COD, Suspended Solids, Nitrogen, Phosphorous (mg/l or %)</p>		
<p>b) Performance</p> <p>e.g. reduction in travelling time (mins), increase in line speed (km/h), reduction (%) in drinking water quality degradation through distribution, reduction in sewage pollution levels, beneficiary's compliance with discharge standards of Urban Waste Water Treatment Directive (%)</p>		

* Provide more than 1 table as necessary.

8. INDICATIVE WORK SCHEDULE / EXPENDITURE PLAN

Provide information concerning the number and type of contracts envisaged. Include and indicate clearly any IFI financed components

	Description of contract	Contract type* works/supply/s ervice	Estimated contract value** (€)	Tendering Launch month/year	Contract Award month/year	Contract Completion month/year
1						
2						
3						
4						
5						
6						

* indicate whether yellow or red FIDIC for works contracts.

** Contract values are indicative and do not include any contingency which for this project is calculated at EUR

9. SUMMARY OF THE MAIN RESULTS OF THE ECONOMIC AND SOCIAL COST-BENEFIT ANALYSIS

Provide the main conclusions of the economic and social cost benefit analysis:

- The estimated NPV for the project is (...) and the discount rate used is (....)
- The estimated Benefit/Cost ratio is:
- The estimated EIRR =

10. SUMMARY OF THE FINANCIAL ANALYSIS

Provide a summary of the main conclusions of the financial analysis.

Ensure that income generation is taken into account when calculating the IPA contribution:

- Based on the information provided in the application and/or any additional information obtained during appraisal
 - the FNPV for the project is estimated EURmillion.
 - the FIRR is estimated%.
- The eligible expenditure (funding gap) as calculated in accordance with Articles 17 and 19 of the Financing Agreement is set at EUR
- The IPA contribution is set at EUR.....

11. POLLUTER PAYS PRINCIPLE (FOR ENVIRONMENTAL PROJECTS ONLY)

Describe how the Polluter Pays Principle is to be applied on the project.

12. FINANCIAL SUSTAINABILITY AND AFFORDABILITY

Outline the main elements of the pricing policy to be pursued.

13. OPERATION AND MAINTENANCE

Describe the way the project will be operated and maintained. Describe the organisational and legal setup of the body responsible for managing the finished product.

14. SUMMARY OF THE MAIN FINDINGS OF THE ENVIRONMENTAL IMPACT ASSESSEMENT

If a decision has been issued by the relevant body concerning the completion of an EIA list the main conclusions of the non-technical summary. If no EIA has been carried out present a timetable for conducting a full EIA as part of the project, or list the reasons why this is not considered necessary with reference to national EIA legislation.

15. COST AND ASSISTANCE (IN EUR)

Provide an indicative cost breakdown between type of expenditure and project component.

A. Cost Breakdown between types of Expenditure

Item	Total costs (estimates) (EUR mln.)	Non-eligible costs (estimates) (EUR mln.)	Total eligible costs (estimates) (EUR mln.)
e.g. Land purchase			
e.g. Main works			
TOTAL ESTIMATED			

The above mentioned quantities are indicative and may vary upwards or downwards during the project contracting and during the course of implementation. These fluctuations of quantities should be in line with the existing legal framework, qualitatively reasonable and sufficiently justified.

B. Expected financial contribution

Estimated Total Costs (EUR)	of which non eligible (EUR)	Eligible Expenditure (EUR)	of which IPAContribution (EUR)	Public Contribution (EUR)	of which: National (EUR)	IFI (EUR)	Other (EUR)
(1)=(2)+(3)	(2)	(3)	(4)=(3)x (co- financing rate of the priority axis)	(5)=(6)+(7)+(8)	(6)	(7)	(8)

Note: Data other than eligible expenditures and IPA contribution are indicative. Non eligible expenditures are included in public contribution.

16. INVOLVEMENT OF IFIS

Outline the involvement of any IFIs in the project. Provide a detailed description of their scope of work, together with the financial costs and proposed implementation timescale. In addition provide details of any technical assistance measures envisaged by the IFI e.g. institutional reform as part of the project.

Describe the implementing arrangements (parallel or co-financing), what procurement rules will be applied, and whether the Operating Structure is accredited to apply the relevant procurement rules.

Where applicable, indicate for which contracts derogation from the rules of participation and origin is authorised in line with the provision of Article 19 of Regulation (EC) No 1085/2006 of 17 July 2006.

17. PUBLICITY MEASURES

Describe the publicity measures envisaged for the project

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ANNEX X

Model of Operation Identification Sheet

(max 5 pages)

1. Title and number of the Operation:
2. Operating Structure: **insert contacts**
3. Organisation Responsible for the Implementation of the Operation: **insert contacts, including contact person**
4. Compatibility and coherence with the Operational Programme
 - 4.1 Title and number of the programme
 - 4.2 Title of the priority axis
 - 4.3 Title of the measure
 - 4.4 Final Beneficiary (Article 15 of the Financing Agreement)
 - 4.5 End recipient of assistance
 - 4.6 Category/Type of activities foreseen under the measure
5. Description of the Operation
 - 5.1 Contribution to the achievement of the Operational Programme: Describe how the operation contributes to the achievement of the objectives of the Operational Programme (provided quantified indicators where possible) linked with the appropriate measure.
 - 5.2 Overall Objective: Explain in one sentence
 - 5.3 Operation Purpose: Explain in one sentence
 - 5.4 Location(s): Please keep in mind the eligible regions
 - 5.5 Duration: Duration of the operation cannot exceed the final date of eligibility of expenditure set in the Financing Agreement
 - 5.6 Target group(s) :
 - 5.7 Description of the Operation and background: Maximum 10 lines
 - 5.8 Results with measurable indicators:

5.9 Activities:

6. Implementation arrangements

- 6.1. Institutional framework: institutional arrangements foreseen for the implementation of the operation, e.g. operation coordination unit, steering committee, regional and/or provincial authorities, technical assistance team
- 6.2. Proposed monitoring structure and methodology: who will be responsible for monitoring of the operation, how will the operation be monitored, what will be the workflow and reporting lines?
- 6.3. Required procedures and contracts for the implementation of the operation and their sequencing: list the type of procedures (call for proposals, direct implementation by national institutions without prior call for proposals, direct agreements with international organisations, etc) and the corresponding contracts (grant contracts, contribution agreements with international organisations, services, supplies, works, etc) for the proposed activities, together with their sequencing

(please provide detailed chronogram for preparatory stages, tendering, contracting and starting of operations)

7. Risks and assumptions:
8. Expected impact of the operation on the target group and multiplier/spill over effects:
9. Sustainability:
10. Equal opportunity of disadvantaged persons and vulnerable groups (where relevant):
11. Links with other IPA component measures:
12. Requested financing from the European Commission:

The IPA contribution shall not exceed the ceiling of xx% of the eligible expenditure at the level at the priority axis.

(no operation shall benefit from a higher co-financing rate than the one relating to the priority axis concerned – Article 149.3 and 153.3 of IPA Implementing Regulation)

13. Co-financing: (please identify expected total contribution by source)
14. Budget breakdown:

(indicative, per operation component if applicable, including estimated total cost, public expenditure, IPA contribution, national public contribution and private contribution)

15. Cash flow requirements by source of funding

ANNEX XI

Composition and Functioning Modalities of the committee for the selection of operations

Pursuant to Article 50 of the Financing Agreement, the Operating Structure is not under the obligation of selecting operations through calls for proposals for any of the operations in the Operational Programme "Environment".

Operations under

1. Priority Axis 1: Improved water supply, sewerage and wastewater treatment services and under
2. Priority Axis 2: Improved integrated solid waste management

According to Article 50.2 of the Financing Agreement major projects included in the indicative list of major projects of the Environmental Operational Programme approved by the Commission may be selected without recourse to calls for proposals.

Since all the projects to be supported under the Environmental Operational Programme are major projects included in the indicative list of major projects there is no obligation to select operations through call for proposals.

Operations under

Priority Axis 3: Technical Assistance

Operations under this *Priority Axis* are initiated or initiated and implemented by national public bodies (Operating Structure) and pursuant to Article 50.1.a they may be selected without recourse to calls for proposals, subject to prior information of the Sectoral Monitoring Committee and the agreement by the Commission services.

Should the Operating Structure decide to have recourse to a selection committee for the selection of operations the modalities will be those indicated in the Operational Programme, as follows:

"The OS will establish a Project Selection Committee for the selection of operations. This committee will appraise project applications in compliance with the selection criteria and methodologies agreed by the SMC and published in the call for proposal documents. The administration and compliance check with eligibility and administrative criteria will be carried out by the Technical Implementation Sub-Unit under the IPA Unit in MoEF. The Committee will then make recommendations to the OS, in compliance with Article 158 of the IPA Implementing Regulation. The members of the Committee will include representatives from:

- *MoEF; SPO; Iller Bank; DSI.*

Procurement (including the award of major projects) will be in accordance with EC PRAG and will be conducted by the CFCU. The CFCU will also organise the tender selection committees for the evaluation of service, works and supply tenders."

The Commission may participate in the Selection Committee work as an observer.

ANNEX XII

Annual and Final Report

(Articles 85 and 102 of the Financing Agreement)

1. IDENTIFICATION

OPERATIONAL PROGRAMME	Programming period
	Programme number (CCI N°)
	Programme title
ANNUAL IMPLEMENTATION REPORT	Reporting year
	Date of approval of the annual report by the Sectoral Monitoring Committee

2. OVERVIEW OF THE IMPLEMENTATION OF THE OPERATIONAL PROGRAMME

2.1 Quantitative progress (by priority axis and measures)

Information on the physical progress made in implementing the operational programme, priority axes, measures and where relevant, operations or groups of operations, in relation to their specific, verifiable targets, with a quantification, when possible using the indicators at the appropriate level.

Where relevant, for the HRD component all indicators shall be broken down by gender. If the figures (data) are not yet available, information on when they will become available and when the Operating Structure will provide it to the Commission will be stated.

The list of operations financed under the operational programme should be annexed to the report.

2.2 Qualitative analysis

Analysis of the achievements as measured by physical and financial indicators, including a qualitative analysis on the progress achieved in relation to the targets set out initially.

List of unfinished operations and the schedule for their completion (final report only).

2.3 Financial information

	Expenditure paid out by the final beneficiaries included in payment applications sent to the Commission by the National Fund	Total expenditure committed and paid out by the National Fund	Corresponding public contribution	Corresponding private contribution	Total payments received from the Commission
Priority axis 1 Measure 1.1 Measure 1.2 Priority axis 2 Measure 2.1 Priority axis 3					
Total					

(all financial data should be expressed in euro)

In addition, financial information may also be provided graphically.

Indicative breakdown of allocations, by categories of expenditures (for component III only)

Information in accordance with the detailed list included in Annex XIII of the Financing Agreement.

Assistance repaid or re-used

Information on the use made of assistance repaid or re-used following cancellation of assistance as referred to in Articles 54 of the IPA Implementing Regulation.

2.4 Changes in the context of the operational programme implementation (if relevant)

Description of any elements which, without stemming directly from the assistance of the operational programme, have a direct impact on the programme's implementation (such as legislative changes or unexpected socio-economic developments).

2.5 Information about compliance with EU acquis

Any significant problems relating to the compliance with EU acquis which have been encountered in the implementation of the operational programme and the measures taken to deal with them.

2.6 Complementarity with other instruments

Summary of the implementation of the arrangements made ensuring demarcation and coordination between other programmes and components of IPA assistance, the interventions of the EIB and other existing financial instruments.

3. QUALITY AND EFFECTIVENESS OF IMPLEMENTATION

3.1 Monitoring arrangements

Monitoring and evaluation measures taken by the Operating Structure or the Sectoral Monitoring Committee, including data collection arrangements, difficulties encountered and steps taken to solve them.

3.2 Significant problems encountered and measures to overcome them

Any significant problems encountered in implementing the operational programme, including a summary of problems identified under the procedure in Article 29(2)(b) of the IPA Implementing Regulation, where appropriate, as well as any measures taken by the Operating Structure or the Sectoral Monitoring Committee to solve the problems.

3.3 Technical assistance

Explanation of the use made of technical assistance, including where relevant technical assistance prior to the conferral of management

Percentage of the amount of the IPA Funds contribution allocated to the operational programme spent under technical assistance.

4. INFORMATION AND PUBLICITY

Progress achieved in the implementation of the Communication Action Plan submitted according to the operational programme, stressing the measures undertaken and their impact.

5. MAJOR PROJECTS

- Progress in the implementation of major projects.
- Progress in the financing of major projects.
- Any change in the indicative list of major projects in the operational programme.

6. ACTIONS RELATED TO THE HUMAN RESOURCES DEVELOPMENT COMPONENT

Information on the implementation of horizontal issues such as equal opportunities for men and women, good governance, inclusion of disadvantaged persons, geographical concentration of support or sustainable development and environmental protection (as appropriate).

Where appropriate, a synthesis of the implementation of:

- Gender mainstreaming and gender specific actions
- Participation of migrants in employment
- Integration in employment and social inclusion of disadvantaged persons and other disadvantaged groups, including people with disabilities.

Where appropriate, a description of how the actions supported by IPA Human Resources Development Component are consistent with and contribute to the actions undertaken in the follow up of the Joint Assessment Paper (JAP) and the Joint Inclusion Memorandum (JIM).

ANNEX XIII
Allocations by category of expenditures
(Article 85(3)c) of the Financing Agreement)

Part A: Codes by Dimension

TABLE 1: CODES FOR THE PRIORITY THEME DIMENSION

Code	Priority theme
1	Transport
1.1	Rail infrastructure
1.1.1	Interconnection/interoperability between national networks
1.1.2	Interconnection/interoperability between national networks and trans-European
1.2	Road infrastructure
1.2.1	Interconnection/interoperability between national networks
1.2.2	Interconnection/interoperability between national networks and trans-European
1.3	Maritime ports infrastructure
1.4	Inland waterways
1.5	Airports infrastructure
1.6	Multi-modal transport infrastructure
1.7	Intelligent transport systems
1.8	Technical Assistance
1.9	Other
2	Environment
2.1	Waste management
2.2	Water supply
2.3	Urban waste water
2.4	Air quality
2.5	Rehabilitation of contaminated sites and land
2.6	Energy efficiency
2.7	Renewable energy
2.8	Other
2.9	Technical assistance
3	Regional Competitiveness
3.1	provision of business and technology services for enterprises, particularly in the
3.2	access and use of information and communication technologies
3.3	promotion of technological development, research and innovation including
3.4	development of business networks and clusters
3.5	creation and development of financing instruments which facilitate access to
3.6	provision of local infrastructure and services which contribute to facilitate
3.7	education and training infrastructures, where necessary for regional development
3.8	improvement of tourism potential of regions
3.9	Other
4.0	Technical assistance
4	Technical Assistance
4.1	Preliminary studies and technical support related to eligible activities, including
4.2	Programme management, monitoring, evaluation, information and control activities

TABLE 2: CODES FOR THE FORM OF FINANCE DIMENSION

Code	Form of finance
01	Non-repayable aid
02	Aid (<i>loan, interest subsidy, guarantees</i>)
03	Venture capital (<i>participation, venture-capital fund</i>)
04	Other forms of finance

Part B:**Cumulative breakdown of allocations of the IPA contribution by category in the annual and final report on implementation**

CCI No: _____

Name _____ of _____ the _____ programme:

Date of the last Commission decision for the Operational Programme concerned:

__/__/__

Code *	Code *	Amount
Dimension 1	Dimension 2	**
Priority theme	Form of finance	

* The categories should be coded for each dimension using the standard classification.

** Allocated amount of the IPA contribution for each combination of categories.

ANNEX XIV

Indicative description of the information requirements for a sufficient audit trail

(Article 90 of the Financing Agreement)

A sufficient audit trail, as referred to in Article 90, is present when, for a given measure, including individual projects within a group of projects:

1. Accounting records kept at the appropriate management level provide detailed information about expenditure actually incurred in the co-financed measure by the Operating Structure, including where the latter is not the final recipient of funding, the bodies and firms involved in the implementation of the measure, whether as concession-holders, delegates or otherwise. The accounting records show the date they were created, the amount of each item of expenditure, the nature of the supporting documents and the date and method of payment. The necessary documentary evidence (e.g., invoices) is attached.
2. For items of expenditure relating only partly to the co-financed measure, the accuracy of the allocation of the expenditure between the co-financed measure and the rest is demonstrated. The same applies to types of expenditure that are considered eligible only within certain limits or in proportion to other costs.
3. The technical specifications and financial plan of the measure, progress reports, documents concerning tendering and contracting procedures, and reports on inspections of the execution of the measure are also kept at the appropriate management level.
4. For declaring expenditure actually incurred in the co-financed measure to the National Fund, the information referred to in paragraph 1 is aggregated into a detailed statement of expenditure broken down by category. The detailed statements of expenditure constitute supporting documents for the accounting records of the National Fund and are the basis for the preparation of declarations of expenditure to the Commission.
5. Where there is one or more delegated bodies between the Operating Structures or the bodies or firms involved in implementation of the measure and the National Fund, each delegated body for its area of responsibility requires detailed statements of expenditure from the body below it as supporting documentation for its own accounting records, from which it provides at least a summary of the expenditure incurred on the measure to the body above it.
6. In the case of computerised transfer of accounting data, all the authorities and bodies concerned obtain sufficient information from the lower level to justify their accounting records and the sums reported upwards, so as to ensure a sufficient audit trail from the total summary amounts certified to the Commission down to the individual expenditure items and the supporting documents at the level of the Operating Structure and the other bodies and firms involved in the implementation of the measure.

ANNEX XV

List of data on operations to be communicated on request to the Commission for the purpose of documentary and on-the-spot checks

(Article 80(5) of the Financing Agreement)

The data requested may include the following, the precise content being subject to agreement with the Beneficiary Country. The field numbers represent the record structure preferred when compiling computer files for transfer to the Commission.

A. Data on operations

Field 1	Operational programme
Field 2	Number of priority
Field 3	Name of fund
Field 4	Code of region or area where operation is located/carried out (NUTS Level or other, if appropriate)
Field 5	Operating Structure
Field 6	National Authorising Officer
Field 7	Final beneficiary or other body that declares expenditure to Operating Structure, if applicable
Field 8	Unique code number of operation
Field 9	Short description of operation
Field 10	Starting date of operation
Field 11	Completion date of operation
Field 12	Body issuing approval decision
Field 13	Approval date
Field 14	Reference of end recipient
Field 15	Currency (if not euro)
Field 16	Total estimated cost of operation (1)
Field 17	Total eligible expenditure
Field 18	Total public eligible expenditure
Field 19	EIB (to include equivalent for IPA) financing

(1) i.e., including private funding but net of non-eligible expenditure and other financing.

B. Expenditure declared on operation

Field 20	Internal reference number of last application for reimbursement from operation
Field 21	Date on which last application for reimbursement from operation was entered into monitoring system
Field 22	Amount of eligible expenditure declared in last application for reimbursement from operation entered into monitoring system
Field 23	Total eligible expenditure for which an application for reimbursement has been made
Field 24	Location of detailed supporting documents for claim if not on premises of beneficiary
Field 25	Expenditure paid in areas adjacent to the eligible areas (cross border cooperation) (non eligible)
Field 26	Expenditure paid by partners located outside the area (transnational cooperation) (non eligible)
Field 27	Expenditure paid outside the European Union (cross-border, transnational and interregional cooperation)
Field 28	Expenditure paid for the purchase of land
Field 29	Expenditure paid for housing
Field 30	Expenditure paid for indirect costs/overheads charged at flat rates
Field 31	Revenue deducted from applications for reimbursement, if any
Field 32	Financial corrections deducted from applications for reimbursement, if any
Field 33	Total eligible expenditure declared from operation and included in statement of expenditure sent to the Commission by National Authorising Officer (in EUR)
Field 34	Total eligible expenditure declared from operation and included in statement of expenditure sent to the Commission by National Authorising Officer (national currency)
Field 35	Date of last statement of expenditure of the certifying authority containing expenditure from operation
Field 36	Date of verifications carried out pursuant to Article 81
Field 37	Date of audits pursuant to Article 82
Field 38	Body carrying out the audit or verification
Field 39	Degree of achievement of target for operation, if completed (%)

ANNEX XVI

Certificate and statement of expenditure and application for final payment

EUROPEAN COMMISSION

*INSTRUMENT FOR PRE-ACCESSION ASSISTANCE – IPA
Regional Development Component (Component III)
/Human Resources Development (component IV)*

Certificate and statement of expenditure and payment application

Name of operational programme

Commission Decision of

Financing Agreement of

Commission reference (CCI) No:

National reference (if any)

CERTIFICATE

I, the undersigned,

National Authorising Officer,

hereby certify that all expenditure included in the attached statement complies with the criteria for eligibility of expenditure set out in the Financing Agreement signed on {DATE} between the European Commission and the Government of Turkey and has been incurred and paid by the final beneficiaries on the implementation of operations selected under the operational programme in accordance with the conditions for granting IPA assistance.

after⁽¹⁾

		20...
--	--	-------

and amounts to:

euro ²	
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(exact figure to two decimal places)

The attached statement of expenditure, broken down by priority axis and measures, is based on accounts provisionally closed on

		20...
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and forms an integral part of this certificate.

I also certify that operations are progressing in accordance with the terms of the Financing Agreement, and in particular that:

1. all the requirements laid down in Article 69 of the Financing Agreement are fulfilled, in particular
 - The sectoral final implementation report for the programme concerned has been sent to the Commission by the Operating Structure;
 - An opinion on any final statement of expenditure, supported by a final activity report has been sent to the Commission by the Audit Authority in accordance with Article 92 of the Financing Agreement
 - The accreditation delivered by the Competent Accrediting Officer and the National Authorising Officer are in force, and the conferral of management by the Commission remains valid
2. the statement of expenditure is accurate, results from reliable accounting systems and is based on verifiable supporting documents;
3. the expenditure declared complies with applicable European Union and national rules and has been incurred in respect of operations selected for funding in accordance with the criteria applicable to the programme and complying with relevant applicable European Union and national rules, in particular as regards rules on protection of the environment, transport, competition, and the award of public contracts (PRAG).
4. the statement of expenditure and the payment application take account, where applicable, of any amounts recovered and of any interest received, and of net revenue accruing from operations financed under the operational programme;
5. the breakdown of the underlying operations is recorded on computer files and is available to the relevant Commission departments on request

(1) Starting date for eligibility of expenditure (date of signature of the Financing Agreement)

(2) total amount of eligible expenditure paid by final beneficiaries.

In accordance with Article 104 of the Financing Agreement, the supporting documents are and will continue to be available for at least three years following the closure of the operational programme by the Commission.

Date

		20...
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Name in capitals, stamp, position and signature
of National Authorising Officer

Statement of expenditure by priority axis and measures: Final payment	
Operational Programme reference (CCI No):	
Name of programme:	
Date of provisional closure of accounts:	Date of sending to the Commission:
Total certified eligible ²³ expenditure paid:	

Priority axis/measure	Total expenditure incurred to date (between.... ²⁴ and)	Expenditure certified in present declaration	Total expenditure planned (initial budget)	Expenditure incurred to date as proportion of initial budget (%)	Remarks
Priority Axis 1					
Measure 1.1					
Operation 1.1.1					
Operation 1.1.2					
Priority Axis 2					
Measure 2.1					
Priority Axis 3					
Measure 3.1					
Priority Axis 4					
Measure 4.1					

Breakdown by year of the total certified eligible expenditure²⁵ (amounts in euros)

Priority axis/measure	2008	2009	2010	2011	2012
Priority Axis 1					
Measure 1.1					
Priority Axis 2					
Measure 2.1					
Priority Axis 3					
Measure 3.1					
Priority Axis 4					
Measure 4.1					

²³ As defined by Articles 149, 150 and 152 of Commission Regulation (EC) 718/2007

²⁴ Starting date for eligibility of expenditure (signature of the Financing Agreement)

²⁵ By year: the breakdown mentioned in this table shall correspond to the payments made by the final beneficiaries in the year concerned. Where it is not possible to establish this breakdown precisely, the best estimate of the breakdown should be given.

ANNEX 1 to statement of expenditure:

The computerised listing of operations by measure and the corresponding expenditure, including contribution under the IPA Regulation and national public expenditure

Priority axis/measure	Total expenditure (EURO)	IPA funds (EURO)	National public expenditure (EURO)	IPA co-financing rate (%)
Priority Axis 1: total				
Measure 1.1				
Operation 1.1.1				
Operation 1.1.2				
.....				
Measure 1.2				
Operation 1.2.1				
Operation 1.2.2				
.....				
Measure 1.3				
Operation 1.3.1				
Operation 1.3.2				
.....				
Priority Axis 2: total				
Measure 2.1				
Operation 2.1.1				
.....				
Priority Axis 3				
Measure 3.1				
Operation 3.1.1				
.....				

ANNEX 2 to statement of expenditure:

Details of amounts recoverable following cancellation of all or part of the IPA contribution
for an operation

Name of the priority/measure /operation	
Amount ordered to be recovered	
Debtor	
Date of issue of recovery order	
Authority which issued recovery order	
Date of recovery	
Amount recovered	

ANNEX 3 to statement of expenditure:

The volume of IPA contribution in the component-specific euro account at the date of the last debit to which this statement refers and the interest earned

APPLICATION FOR PAYMENT: final payment

Name of operational programme:

Operational programme reference (CCI) No:

Pursuant to Annex A of the Framework Agreement (Article 25 of Regulation (EC) No 718/2007), I, the undersigned (name in capitals of National Authorising Officer), hereby request payment of the amount of EUR as a final payment.

This application is admissible because:

	Delete as appropriate
(a) no more than the maximum amount of assistance from IPA Funds as laid down in the Financing Agreement and the decision of the Commission approving the operational programme has been paid by the Commission during the whole period for each priority axis.	
(b) the Operating Structure has sent to the Commission the sectoral final implementation reports, in accordance with art. 67 of the Financing Agreement	— has been forwarded by Operating Structure within the time limit laid down in art. 100 of the Financing Agreement — is attached
(c) the Audit Authority has sent to the Commission, in accordance with Article 92 of the Financing Agreement, an opinion on any final statement of expenditure, supported by a final activity report	— has been forwarded by Audit Authority within the time limit laid down in art.90 of the Financing Agreement — is attached
(d) the accreditations delivered by the Competent Accrediting Officer and the National Authorising Officer are in force, and the conferral of management by the Commission remains valid	
(e) the payments have not been suspended in accordance with Article 72 of the Financing Agreement	
(f) none of the situations justifying blocking of payments to major projects have occurred	

The payment should be made by the Commission to the body designated by the beneficiary country for the purposes of making payments

Designated body	
Bank	
Bank account No	
Holder of account (where not the same as the designated body)	

Date

		20...
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Name in capitals, stamp, position and signature of

National Authorising Authority

ANNEX XVII

MODEL

FINAL CONTROL REPORT AND CLOSURE DECLARATION FOR OPERATIONAL PROGRAMMES

PURSUANT TO ARTICLE 29 OF COMMISSION REGULATION (EC) No 718/2007

Part A: Model final control report

1. INTRODUCTION

- Indication of the responsible audit authority and other bodies that have been involved in preparing the report.
- Indication of the reference period from which the random sample was drawn.
- Identification of the operational programme covered by the report and its Operating Structure and National Authorising Officer,
- Description of the steps taken to prepare the report.

2. CHANGES IN MANAGEMENT AND CONTROL SYSTEMS

- Indication of any significant changes in the management and control systems notified to the audit authority and of the dates from which the changes apply.

3. SUMMARY OF AUDITS CARRIED OUT

For systems audits:

- Indication of the body (ies) that have carried out systems audits, including the audit authority itself.
- Summary list of audits carried out: bodies audited and year of audit.
- Description of the basis for selection of audits in the context of the audit strategy.
- Description of the principal findings and the conclusions drawn from the audit work for the management and control systems and their functioning, including the sufficiency of management checks, accreditation procedures and the audit trail, adequate separation of functions and compliance with European Union requirements and policies.
- Indication of whether any problems identified were considered to be of a systemic character, and the measures taken, including a quantification of the irregular expenditure and any related financial corrections.

For audits of operations:

- Indication of the body (ies) that carried out the sample audits, including the audit authority itself.
- Description of the basis for selection of the sample(s).
- Indication of the materiality level and, in the case of statistical sampling, the confidence level applied and the interval, if applicable.
- Description of the principal results of the audits, indicating in particular the amount of irregular expenditure and the error rate resulting from the random sample audited.
- Indication of the conclusions drawn from the results of the audits with regard to the effectiveness of the management and control system.
- Information on the follow-up of irregularities, including revision of previously reported error rates.
- Indication of whether any problems identified were considered to be systemic in nature, and the measures taken, including a quantification of the irregular expenditure and any related financial corrections (1).

4. FOLLOW-UP OF AUDIT ACTIVITY

- Information on the follow-up of the results of systems audits and audits of operations.

5. ADDITIONAL WORK UNDERTAKEN BY AUDIT AUTHORITY IN PREPARING ITS CLOSURE DECLARATION

- Summary of audits of the closure procedure of the operating structure.
- Summary of the results of the re-performance of controls on the accuracy of the amounts declared in relation to supporting documents.
- Summary of the results of examination of reports of other national or European Union audit bodies (specify, by category, which reports have been received and examined).
- Summary of the results of examination of information relating to follow-up of audit findings and reported irregularities.
- Summary of the results of examination of additional work carried out by the operating structure or any other relevant body to enable an unqualified opinion to be provided.
- Other.

6. LIMITATIONS ON THE SCOPE OF THE EXAMINATION BY THE AUDIT AUTHORITY

- Details of any factors that have limited the scope of the examination by the audit authority should be reported (2).

- Estimated amounts of expenditure and the IPA contribution that are affected must be stated.

7. REPORTED IRREGULARITIES

- Confirmation that the procedure for reporting and following up irregularities, including the treatment of systemic problems, has been carried out in accordance with regulatory requirements in force.
- Confirmation of the accuracy of the information given in the final implementation report on the irregularities reported. .
- A list of cases of irregularity regarded as systemic and the amounts of expenditure affected.

8. OTHER INFORMATION (IF APPLICABLE)

9. TABLE FOR DECLARED EXPENDITURE AND SAMPLE AUDITS

IPA	CCI n°	Programme	Expenditure declared in reference year	Expenditure in reference year audited for the random sample		Amount and percentage (error rate) of irregular expenditure in random sample		Other expenditure Audited (3)		Amount of irregular expenditure in other expenditure sample	Total expenditure declared cumulatively	Total expenditure audited cumulatively as a percentage of total expenditure declared cumulatively
				(1)	(2)	Amount	%	(1)				

(1) Amount of expenditure audited

(2) Percentage of expenditure audited in relation to expenditure declared to the Commission in the reference year

(3) Expenditure from complementary sample and expenditure for random sample not in reference year

Part B: Closure declaration

To the European Commission, Directorate-General

1. INTRODUCTION

I, the undersigned, representing the ... (name of the body designated by the Beneficiary Country), have for the operational programme ... (name of the operational programme, CCI code number, period) examined the results of the audit work carried out on this programme by or under the responsibility of the audit authority in accordance with the audit work plan (and have carried out the additional work I judged necessary). The results of the examination and any additional work I have performed are summarised in the attached final audit activity report (which also contains the information required by the annual audit activity report for the period 1 January 2015 to 31 December 2016). I have planned and performed this work with a view to obtaining a reasonable assurance as to whether the payment application for the final balance of the IPA contribution to the operational programme is correct and valid and the underlying transactions covered by the final statement of expenditure are legal and regular.

2. SCOPE OF THE EXAMINATION

The examination was carried out in accordance with the audit strategy in respect of this programme and reported in the attached final control report pursuant to Article 29 of Commission Regulation (EC) No 10718/2007.

Either

There were no limitations on the scope of the examination.

Or

The scope of the examination was limited by the following factors:

- (a) ...
- (b) ...
- (c) etc.

(Indicate any limitation on the scope of the examination, for example any systemic problems, weaknesses in the management and control system, lack of supporting documentation, cases under legal proceedings, etc., and estimate the amounts of expenditure and the IPA contribution affected. If the audit authority does not consider that the limitations have an impact on the final expenditure declared, this should be stated.)

3. IRREGULARITIES AND ERROR RATES

Either

The cases of irregularity and error rates found in the audit work are not such as to preclude an unqualified opinion given the satisfactory way they have been dealt with by the operating structure and the trend in the level of their occurrence over time.

Or

The cases of irregularity and error rates found in the audit work and the way they have been dealt with by the operating structure are such as to preclude an unqualified opinion. A list of these cases is provided in the final control report, together with an indication of their possible systemic character and the scale of the problem. The amounts of total declared expenditure and public contribution that could be affected are xxxx respectively. As a consequence, the corresponding IPA contribution that could be affected is xxx.

4. OPINION

Either

(Unqualified opinion)

If there were no limitations on the scope of the examination and the cases of irregularity and error rates and the way they have been dealt with by the Operating Structure do not preclude an unqualified opinion:

Based on the examination referred to above, it is my opinion that the final statement of expenditure presents fairly, in all material respects, the expenditure paid under the operational programme, that the application for payment of the final balance of the IPA contribution to this programme is valid and that the underlying transactions covered by the final statement of expenditure are legal and regular.

Or

(Qualified opinion)

If there were limitations on the scope of the examination and/or the cases of irregularity and error rates and the way they have been dealt with by the Operating Structure call for a qualified opinion but do not justify an unfavourable opinion for all the expenditure concerned:

Based on the examination referred to above, it is my opinion that the final statement of expenditure presents fairly, in all material respects, the expenditure paid under the operational programme, that the application for payment of the final balance of the IPA contribution to this programme is valid and that the underlying transactions covered by the final statement of expenditure are legal and regular, except with regard to the matters referred to at point 2 and/or to the observations at point 3 regarding the error rates and cases of irregularity and the way they have been dealt with by the Operating Structure, the impact of which is quantified above. I estimate the impact of these qualifications to be xxx of the total expenditure declared. The IPA contribution affected is thus xxx.

Or

(Adverse opinion)

If there were major limitations on the scope of the examination error rates and cases of irregularity and the way they have been dealt with by the Operating Structure such that no conclusion can be reached on the reliability of the final statement of expenditure without considerable further work:

Based on the examination referred to above, and in particular in view of the matters referred to at point 2 and/or the error rates and cases of irregularity and the fact that they have not been dealt with satisfactorily by the Operating Structure as reported at point 3, it is my opinion that the final statement of expenditure does not present fairly, in all material respects, the expenditure paid under the operational programme, that, as a consequence, the application for payment of the final balance of the IPA contribution to this programme is not valid and that the underlying transactions covered by the final statement of expenditure are not legal and regular.

Date Signature

... ..

ANNEX XVIII

Guidelines for the completion of the standard form for quarterly communications of irregularities



EUROPEAN COMMISSION
EUROPEAN ANTI-FRAUD OFFICE (OLAF)

Operational & Policy Support
Fraud Prevention & Intelligence

WORKING DOCUMENT

Guidelines for the completion of the standard form for quarterly communications of irregularities in connection with the Instrument for Pre- Accession Assistance (IPA)

GUIDELINES FOR THE COMPLETION OF THE STANDARD FORM FOR QUARTERLY COMMUNICATIONS OF IRREGULARITIES IN CONNECTION WITH THE INSTRUMENT FOR PRE- ACCESSION ASSISTANCE (IPA)

INTRODUCTION

In accordance with Article 28 of the Framework Agreements¹ between Candidate Countries and Potential Candidate Countries benefiting from pre-accession assistance a control and reporting mechanism concerning irregularities² shall be organised according to the provisions set out by Commission Regulation No. 1828/2006, Section 4 Irregularities (Articles 27-36)³. Consequently, Beneficiary Countries are equally required to report quarterly to the Commission the irregularities detected in IPA funded projects. In order to facilitate this task and to ensure the uniform recording of cases in the appropriate database, the Commission has developed a standard form (Annex I) based on the above regulation.

These guidelines are used when the "paper version" of the standard form is filled. An electronic system is in the process of being developed.

GUIDELINES

Preliminary remarks:

1. Within two months following the end of each quarter Beneficiary Countries shall report to the Commission any irregularities which have been the subject of a primary administrative or judicial finding. Irregularities have to be reported in English.
2. It is recommended that Beneficiary Countries designate a competent national body responsible for reporting irregularities to the Commission.
3. All irregularities should be reported using the standard form and accompanied by an explanatory letter sent to the following address:
European Commission
OLAF – European Anti-Fraud Office
Directorate C
Rue Joseph II 30
B-1049 Brussels
Belgium
The irregularity reports should also be forwarded in copy to the DGs in charge of a given component. Please, see the list of DGs in Annex II.
4. The cover letter should contain the following information: which component it relates to, the quarter it refers to, and the various irregularity reports should be attached (separating new reports from updates). In case of a combined cover letter for more than one component, the numbers should be given separately for each component.

¹ Implementing Article 18 of Council Regulation (EC) No 1085/2006 and Article 19 of Commission Regulation (EC) No 718/2007

² As defined in Article 2(7) of Council Regulation (EC) 1083/2006 (see also point 5.1 of the Guidelines).

³ Commission Regulation (EC) No 1828/2006, OJ L371, 27.12.2006, p. 27-32.

5. Please note that Beneficiary Countries are obliged to inform the Commission if no irregularities have occurred in a given quarter. This should be done by letter, stating clearly which quarter the letter refers to.
6. Please note there are different ways of completing the standard form depending on whether the form refers to a communication relating to Article 28 of Commission Regulation (EC) No 1828/2006 (first communication) or Article 30 (an update). In the case of an **Article 28 communication, all currently available information at the time of completion** of the form should be submitted. In the case of an **Article 30 communication, information on important changes resulting from the instituted procedures with respect to irregularities previously notified** should be presented. If no new facts concerning an irregularity have occurred, there is no need to send an update. Updates should be sent to the Commission only if new information concerning the case has become known.
7. Where a Beneficiary Country considers that an amount cannot be recovered or is not expected to be recovered, in accordance with Article 30 (2), it shall inform the Commission, in a special report with sufficiently detailed information to allow the Commission to take the decision on apportionment of the loss. The provisions on Special report are **not** applicable to Component V – IPARD.
8. In order to fill the sections concerning the manner in which the irregularity was discovered and the type of irregularity, as well as the actions taken by the Beneficiary Country and sanctions applied, the non-exhaustive lists included should be used. If the issue is not included on the list, please indicate it in point 22. Suggestions on what should be added to the lists will be taken into account.
9. The following cases need not be reported:
- (a) cases where the irregularity consists solely in the failure to execute, in whole or in part, an operation included in the co-financed operational programme owing to the bankruptcy of the beneficiary. Bankruptcy has to be officially established by the competent national authorities. The relevant proceedings are listed in the Council Regulation (EC) No 1346/2000;
 - (b) cases brought to the attention of the Operating structure and the National Fund by the beneficiary voluntarily and before detection by either of them, whether before or after the payment of the public contribution;
 - (c) cases which are detected and corrected by the Operating structure and the National Fund before any payment to the beneficiary of the public contribution and before inclusion of the expenditure concerned in a statement of expenditure submitted to the Commission.

However, irregularities preceding a bankruptcy and cases of suspected fraud must be reported⁴.

⁴ Commission Regulation (EC) No 1828/2006, Art. 28 (2), OJ L371, 27.12.2006, p. 28-29.

10. Irregularities relating to operational programmes under Component II - Cross border cooperation shall be reported by the Participating Country ('shall mean Member State or beneficiary countries, i.e. candidate or potential candidate countries') in which the expenditure is paid by the beneficiary in implementing the operation. The Participating Country shall at the same time inform the managing authority, the certifying authority and the audit authority⁵ (in case of cross border cooperation programmes between Beneficiary Countries and Member States) and the competent Accrediting Officer, the National Authorizing Officer and the audit authority (in case of cross border programmes between Non Member States Beneficiary Countries).
11. For cases where there is no obligation to communicate irregularities because the amount involved does not exceed threshold of € 10 000, Beneficiary Countries are obliged to register and undertake recovery proceedings but, unless the Commission explicitly requests information, need not inform the Commission⁶. However, Beneficiary Countries are obliged to inform the Commission (see Annex II) in the framework of the closure report of the programme about follow up activities concerning all the irregularities detected, irrespective of the reporting threshold.

⁵ Commission Regulation (EC) No 1828/2006, Art. 28 (4), OJ L371, 27.12.2006, p. 29.

⁶ Commission Regulation (EC) No 1828/2006, Art. 36 (1), OJ L371, 27.12.2006, p. 32.

IDENTIFICATION OF COMMUNICATION

Beneficiary Country: TURKEY

Format: Free text in capitals.

Example: CROATIA

Case N°: The number of the case has to be indicated by the Member State on each page of the form.

Format: XX¹/9999²/999³/XX⁴/9⁵, X = capital letter, 9 = figure from 0 to 9

Examples: HR/2004/001/CB/0 TR/2005/003/HR/2

1. Beneficiary Country's initials: two letters; the initials to be used are:

AL – Albania

BA – Bosnia and Herzegovina

HR – Croatia

KS – Kosovo under UNSCR 1244

MK – The Former Yugoslav Republic of Macedonia

ME – Montenegro

RS – Serbia

TR – Turkey

2. Year: four digits: 2008, 2009, etc.

3. The number of the case: three digits: 001, 002, etc.

NB. Numbering is consecutive and corresponds to each component and to each year separately.

ATTENTION: The initial number of the case stays the same throughout the years only the version number changes!

4. The abbreviation identifying the component which the communication relates to. It is compulsory to use the abbreviations. The abbreviations for the components to be used are as follows:

TA for Transition Assistance and Institution Building

CB for Cross-Border Cooperation

RE for Regional Development

HR for Human Resources Development

RD for Rural Development

5. New cases or updates of cases already communicated - one digit: 1 for a new case, 2 for a first update, 3 for a second update, etc.

For example: Initial Communication: TR/2008/003/TA/1

Follow-up Communication: TR/2008/003/TA/2

Next Follow-up Communication: TR/2008/003/TA/3

NB. The reference number is unique to the specific case and is attributed when initial communication is sent (Art 28 of Commission Regulation (EC) No

1828/2006). When an update has to be reported (article 30 communication), the same reference number must be used. If by mistake a new one is inserted, this will be considered as a notification of a new case and, consequently, a duplication of the irregularity will occur.

Quarter:

Please indicate the quarter of the year in question.

For updates of existing cases, please tick the current reporting quarter.

Date sent:

The date sent is the date of communication to the Commission. This will normally be a date in the two months following each quarter.

Format: DD/MM/YYYY, Year month day.

Example: **13/12/2004**

NB. This rule is valid for all other dates!

Administrative Department in the Beneficiary Country:

Please indicate the administrative, national and/or regional department(s) responsible for the administration of the irregularity.

Format: Description in block capitals.

Example: **MIN. OF AGRICULTURE, FISHERIES AND FOOD**

Format in case of an addition to the list: Free text uninterrupted (without blank lines!).

Example: **MINISTRY OF ECONOMIC AFFAIRS**

Address: ...

Contact Point:

Please, specify the details of a contact person, within the administrative department responsible for reporting, who can be contacted in case additional information or clarification is required.

Format: Free text in the given fields.

DETAILS OF IRREGULARITY

1. Description of operation

1.1. Name of programme:

Please quote the name of the annual or multiannual operational programme under one of IPA components, or the form of assistance.

Format: Free text uninterrupted (without blank lines).

Examples: **RD – Multiannual ‘Environmental’ Operational Programme for Croatia**

1.2. Identification number:

Please quote the programme identification number.

Format: Free text uninterrupted (without blank lines).

1.3. Commission decision approving the programme:

Please quote the number and date of the EC Decision by virtue based on which the assistance was granted.

Format: Free text, date DD/MM/YYYY.

Example: **C/2007/6565-1, 13/12/2007.**

1.4. Name of measure and title of project:

Please give the number and the title of the priority axis together with the title of a project.

Measure

Format: Free text.

Example: **Priority 1: Developing Waste Management Infrastructure for Establishing and Integrated Waste Management System in Croatia**

Title of project

Format: Free text.

Example: **Regional Waste Management Centre for the County of Istria**

1.5. Beneficiary Country's project number:

If the operation was allocated a national reference number, please quote it.

Format: Free text.

2. Provisions infringed:

Please specify which Community or national (including contractual provisions) legislation has been infringed.

Format: Free text.

Example: **Article X of the Penal Code**

3. Date of first information leading to suspicion of irregularity:

Please indicate the date on which the first information leading to the suspicion of an irregularity was received. For example in the case of reporting by phone, the date of the telephone conversation should be given.

Format: DD/MM/YYYY

Example: **25/06/2008**

3.1. Source of first information leading to suspicion of irregularity:

Please indicate how you first became aware of the existence of the irregularity.

Format: Free text.

Example: **Informant, press report, audit, etc.**

4. Manner in which the irregularity was detected

4.1. Who detected the irregularity?

Please select from the list below a relevant authority which detected the irregularity

Format: Number and the authority.

Example: **10 – National administration**

List of authorities:

- 10 – National administration
- 20 – European Commission
- 30 – Court of Auditors
- 90 – Other

4.2. How was the irregularity detected?

Please select from the list below a relevant method of detection of the irregularity

Format: Number and method.

Example: **10 – Audit**

List of methods of detection:

- 10 – Audit
- 20 – Bankruptcy
- 30 – Control of products
- 40 – Control of documents ex-ante
- 45 – Control of documents ex-post
- 50 – On the spot control
- 60 – Informant
- 70 – Media
- 80 – Analysis
- 90 – Other

5. Type of irregularity:

Please select from the list below a relevant type of irregularity.

Format: Number and type.

Example: **102 - Incorrect accounts**

List of types of irregularity:

- 102 - Incorrect accounts
- 103 - Falsified accounts
- 104 - Accounts not presented
- 201 - Missing/incorrect /incomplete documents
- 213 - Falsified supporting documents
- 299 - Other cases of irregular documents
- 325 - Non-eligible expenditure
- 402 - Non-existing operator
- 405 - Irregular termination, sale or reduction
- 408 - Operator/beneficiary not having the required quality
- 601 - Failure to respect deadlines
- 608 - Refusal of control
- 609 - Refusal of payment
- 610 - Absence or incompatibility of contract
- 611 - Several requests for the same object
- 612 - Failure to respect other regulations/contract conditions
- 614 - Infringement of rules concerning public procurement
- 741 - Failure to fulfil commitments entered into
- 810 - Action not implemented
- 812 - Action not carried out in accordance with rules
- 822 - Expenditure incurred outside the contracting period
- 832 - Infringement with regard to the co-financing system
- 840 - Undeclared revenue
- 850 - Corruption
- 860 - Conflict of interest
- 999 - Other irregularities (to be specified)

5.1. Qualification of irregularity

Please qualify case as an irregularity or suspected fraud.

irregularity⁷ - means any infringement of a provision of Community law resulting from an act or omission by an economic operator which has, or would have, the effect of prejudicing the general budget of the European Union by charging an unjustified item of expenditure to the general budget;

suspected fraud⁸ - means an irregularity giving rise to the initiation of administrative and/or judicial proceedings at national level in order to establish the presence of intentional behavior, in particular fraud, such as is referred to in Article 1(1), point (a), of the Convention on the protection of the European Communities' financial interests;

⁷ Council Regulation (EC) No 1083/2006, Art. 2 (7), OJ L 210, 31.07.2006, p.26.

⁸ Commission Regulation (EC) No 1828/2006, Art. 27 (c), OJ L 371, 27.12.2006, p.27.

established fraud – means ‘suspected fraud’ which has been the subject of a judgment which has the force of res judicata for fraud or any other illegal activity detrimental to the Communities' financial interests;

no irregularity – means that in the course of an administrative and/or judicial proceedings allegations of irregularity or fraud have not been confirmed;

NB: The case can not be qualified as no irregularity in the initial communication!

5.2. Practices employed in committing the irregularity:

Describe the practice employed (modus operandi).

Format: Free text.

Example: **Falsification of invoices by altering the original amounts.**

5.3. Are these practices considered new? Yes (), No (), Not known ()

Please tick as appropriate. It is up to the Beneficiary Country to decide whether the practices employed are new or not.

6. Are other countries involved: Yes () No () Not known ()

This heading applies to cases involving cross-border operations (participation in the programme by more than one State), or cases where the beneficiary is an international firm participating in actions such as investment projects or training courses in more than one State.

Format: Please tick as appropriate. See point 5.3; Free text in block capitals.

Example: **HUNGARY.**

6.1. If yes, has notification been sent? Yes (), date and references: , No (), Not known ()

Please tick as appropriate. If the answer is yes, please give the date and references of the communication.

Format: date DD/MM/YYYY; for the references: free text.

Example: **Yes (X) Date and reference: 26/05/2008 detailed information sent to Hungarian authorities.**

7. Period of irregularity

Indicate the date(s) on which, or between which, the irregularity was committed.

Format for the date: DD/MM/YYYY.

Example: **25/11/2008**

For the period: date of the beginning of the irregularity/ date of the end of the irregularity.

Format: DD/MM/YYYY – DD/MM/YYYY

Example: **13/05/2008 – 12/06/2008**

If this information is not known, please indicate this by using the first day of the month, the first month of the quarter (01, 03, 06, 09), the first day and month of the year if only the year is known

Example: **01/01/2008**

8. Date of Primary administrative or judicial finding:

“Primary administrative or judicial finding” means a first written assessment by a competent authority, either administrative or judicial, concluding on the basis of specific facts that an irregularity has been committed, without prejudice to the possibility that this conclusion may subsequently have to be revised or withdrawn as a result of developments in the course of the administrative or judicial procedure⁹.

Format: DD/MM/YYYY

9. Authorities or bodies.

9.1. Authorities or bodies which drew up the Primary administrative or judicial finding:

Please name the authority or body which acted upon the initial discovery and drew up the official report using block capitals.

Format: Free text in block capitals, uninterrupted (without blank lines!!).

Example: **MINISTRY OF JUSTICE**

Address: ...

9.2. Authorities or bodies responsible for administrative or judicial follow-up:

Please name the authority or body which is responsible for the administrative or judicial follow-up using block capitals.

Format and example: see 9.1.

10. Name and address of natural and legal persons involved

10.1. Natural persons:

Please give the name, address, etc., of the person(s) involved in the irregularity.

Format: Text, but strict rules have to be followed.

A. surnames and first names have to be given in block capitals

B. special characters are to be avoided (e.g., \$, &);

C. indications like M, Mr, Mrs, etc., are to be avoided;

D. addresses have to be given in small print except for the first letter.

⁹ Definition from Art 27 Commission Regulation (EC) No 1828/2006 OJ L 371, 27.12.2006, p.27.

Example: -Name: ABON

-First name: PIOTR

-Address: Kurica 25

-Postal code: 2435

-City: Rijeka

-Country: CROATIA

-Function: Administrator

10.2. Legal persons:

Please give the name, address, etc. of the legal person involved in the irregularity.

Format: Text, but strict rules have to be followed:

A. names are to be given in block capitals

B. special characters are to be avoided (e.g., \$,&);

C. legal abbreviations like Ltd, Co, N.V, etc. are to be given in small print, after the name;

D. addresses are to be given in small print except for the first letter;

E. the same applies to references to cities or countries in the name of the firm (e.g. IBM ANKARA,)

Example: -Name: TALKER Ltd

-Registered Office: Wallstreet 900

-Postal code: 1529

-City: Medias

-Country: BOSNIA AND HERZEGOVINA

The name and address required are those of the company. If individuals working for the company are involved in the irregularity, this information should be entered under point 10.1.

If more names are to be provided as foreseen on page 3 of the form, please copy and paste fields under points 10.1 and 10.2.

NB. In order to comply with rules guaranteeing confidentiality of personal data, please do not refer to the names of physical or legal persons other than under points 10.1 and 10.2.

FINANCIAL ASPECTS

11. Total amount and distribution between sources of financing

11.1. Total amount of the operation:

Please indicate the total amount contracted in the operation. The amount mentioned has to equal the sum of points 11.2 and 11.3 ("11.1"="11.2"+"11.3").

The amount has to be in Euro throughout the whole Financial Aspects Section.

Amounts in national currency shall be converted into Euro using the monthly accounting exchange rate of the Commission in the month during which the expenditure was registered in the accounts of the Operating structure of the programme concerned¹⁰.

Where the expenditure has not been registered in the accounts of the, Operating structure the most recent accounting exchange rate published electronically by the Commission shall be used¹¹.

Commission's monthly accounting rate can be found at:

<http://ec.europa.eu/budget/inforeuro/>

Format: 999999999999 currency. Do not separate the figures and do not use decimals. Leave space after the last figure, and then add the currency

Example: **22345000 EUR**

11.2. Community financing:

Please give the share of the amount financed by the Community.

Format: See point 11.1.

11.3. Beneficiary Country financing:

Please give the share of the amount financed by the Beneficiary Country. It should not include the private contribution.

Format: See point 11.1.

12. Nature of the irregular amount:

Please indicate the nature of the irregular amount found irregular.

Format: Free text.

Examples: **Salaries, computer equipment, funding of studies.**

13. Amount of the irregularity

13.1. Total irregular amount:

Please indicate the total amount **considered to be irregular**. The amount mentioned has to equal the sum of points 13.2, 13.3 ("13.1"="13.2"+"13.3")

Format: See point 11.1.

13.2. Community irregular amount:

Please give the Community share of the total irregular amount.

Format: See point 11.1.

¹⁰ See Art. 81(3) of the Council Regulation (EC) No 1083/2006, OJ L 210, 31.07.2006, p.61.

¹¹ See Art 36(2) of the Commission Regulation (EC) No 1828/2006, OJ L 317, 27.12.2007, p.32.

13.3. Beneficiary Country irregular amount:

Please give the Beneficiary Country share of the total irregular amount.

Format: See point 11.1.

14. Financial consequences

14.1. Irregular amount under 13.1 already paid:

Please give the irregular amount that has been unduly paid to the beneficiary. The amount mentioned has to equal the sum of points 14.2 and 14.3 ("14.1"="14.2"+"14.3")

14.2. Community irregular amount under 13.2 already paid:

Please give the Community share of the irregular amount paid to the beneficiary.

Format: See point 11.1.

14.3. Beneficiary Country irregular amount under 13.3 already paid:

Please give the Beneficiary Country share of the irregular amount paid to the beneficiary.

Format: See point 11.1.

15. Irregular amount not yet paid

15.1. Irregular amount under 13.1 not yet paid:

Please give the irregular amount **not yet paid** to the beneficiary. The amount mentioned has to equal the sum of points 15.2 and 15.3 ("15.1"="15.2"+"15.3").

Format: See point 11.1.

15.2. Community irregular amount under 13.2 not yet paid:

Please state the Community share of the irregular amount **not yet paid** to the beneficiary.

15.3. Beneficiary Country irregular amount under 13.3 not yet paid:

Please state the Beneficiary Country share of the irregular amount **not yet paid** to the beneficiary. Format: See point 11.1.

15.4. Has the payment been suspended? Yes () No () Not Applicable ()

Please tick as appropriate.

16. Possibility of recovery:

Please give an assessment of the likelihood of recovery of the funds and state as far as possible the underlying reasons.

Format: Free text.

Example: **Possible** or **Not possible due to bankruptcy.**

17 Amount recovered

17.1. Total amount recovered:

Please state the amount recovered. The amount mentioned has to equal the sum of points 17.2 and 17.3 (" $17.1 = 17.2 + 17.3$ ").

Format: See point 11.1.

Interest rates, penalties, etc. should be specified in the brackets and not included in the basic amount.

17.2. Community amount recovered:

Please state the Community share of the recovered amount.

Format: See point 11.1.

17.3. Beneficiary Country amount recovered:

Please state the Beneficiary Country share of the recovered amount.

Format: See point 11.1.

18. Amount to be recovered

18.1. Total amount to be recovered:

Please state the total amount to be recovered. The amount mentioned has to equal the sum of points 18.2 and 18.3 (" $18.1 = 18.2 + 18.3$ ").

Format: See point 11.1.

Interest rates, penalties, etc. should be specified in the brackets and not included in the basic amount.

18.2. Community amount to be recovered:

Please state the community share of the amount to be recovered.

Format: See point 11.1.

18.3. Beneficiary Country amount to be recovered:

Please state the Beneficiary Country share of the amount to be recovered.

Format: See point 11.1.

NB: Total Irregular amount should equal the sum of amount not yet paid, total amount recovered and total amount to be recovered " $13.1 = 15.1 + 17.1 + 18.1$ ". The amount unduly paid equals to the amount recovered and to be recovered " $14.1 = 17.1 + 18.1$ ". If due to exchange rates differences the sum is not equal, please, indicate that including exchange rate.

STAGE OF PROCEDURES

19. Action by Beneficiary Country:

Please select from the list below a relevant action taken following the detection of irregularity.

Format: Number and the name of action from the list.

Example: **20 – Judicial proceedings**

List of actions taken:

10 – Administrative proceedings is selected when a normal administrative recovery procedure is ongoing. If a concurrent judicial or penal procedure is on the way, the judicial/penal procedure prevails and is the one to be indicated.

20 – Judicial proceedings shows that the case is currently in front of a non-penal Court. If a concurrent administrative procedure is on the way, the judicial procedure prevails and is the one to be indicated.

30 – Special procedure is used when the amount affected by irregularity turns out to be irrecoverable and the Commission has been informed by means of a special report as required in Art 30 (2) of the Commission Regulation (EC) No 1828/2006.

40 – Penal proceedings is selected when the case is referred to a Penal Court. If a concurrent administrative procedure is on the way, the penal procedure prevails and is the one to be indicated.

50 – Procedures closed is selected when all recovery and related procedures are completed. This means also when the whole procedure is finalised and no irregularity is established or when the outcome of the procedure is that no amount has to be recovered.

20. Has the recovery procedure been abandoned? Yes () No () Not Applicable()

Please tick as appropriate.

21. Have criminal proceedings been abandoned?: Yes () No () Not Applicable()

Please tick as appropriate.

22. Sanction applied (administrative and/or judicial):

Please select from the list below a relevant sanction applied.

Format: Number and the name of a sanction from the list.

Example: **600 - National administrative sanction**

List of sanctions applied:

500 – No sanction imposed

550 – Sanction to be imposed

600 – National administrative sanction

640 – Removal of national subsidies

650 – Exclusion from future national subsidy

660 – Limitation of access to public procurement

740 – Exclusion from future Community subsidies

810 – Fine under penal law

820 – Imprisonment

890 – Other penal sanctions

900 – Other sanctions, to be specified

23. Additional observations:

Please give any additional information/comments which you consider relevant and which has not been covered in the above points.

24. Final communication: Yes () No ()

Please indicate 'Yes' if all administrative and/or judicial proceedings have been finalised and irregular amount has been recovered or declared irrecoverable. No further actions concerning communicated irregularity are foreseen.

In case of any questions on filling the form, please, do not hesitate to contact the following persons.

Auste Savickiene
e-mail: Auste.Savickiene@ec.europa.eu
tel: +32-2-295.36.56

Andrea Bordoni
e-mail: Andrea.Bordoni@ec.europa.eu
tel: +32-2-296.77.37

fax: +32-2-295.97.59

OLAF – European Anti-Fraud Office
Directorate C – Operational and Policy Support
Unit C.2– Fraud Prevention and Intelligence
Rue Joseph II 30,
B-1049 Brussels
Belgium

ANNEX I - Irregularity report

CONFIDENTIAL

Case No: XX/9999/999/X/9

QUARTERLY COMMUNICATION OF IRREGULARITIES IN CONNECTION WITH THE INSTRUMENT FOR PRE-ACCESSION ASSISTANCE (IPA)

IDENTIFICATION OF COMMUNICATION

Beneficiary Country:

Case Number: XX/9999/999/X/9

Quarter:

(a) Quarter I ()

(b) Quarter II ()

(c) Quarter III ()

(d) Quarter IV ()

Date Sent: DD/MM/YYYY

Administrative Department in Beneficiary Country:

Contact Point: Name:

Phone:

Fax:

E-mail:

DETAILS OF IRREGULARITY

1. Description of Operation

1.1. Name of programme:

1.2 Identification number:

1.3. Commission decision approving the programme:

1.4. Name of measure and title of project:

1.5. Beneficiary Country's project number:

2. Provision Infringed:

3. Date of first information leading to suspicion of irregularity:

3.1. Source of first information leading to suspicion of irregularity:

4. Manner in which irregularity was detected

4.1. Who detected the irregularity?

4.2. How was the irregularity detected?

5. Type of irregularity:

5.1. Qualification of Irregularity:

- (a) No irregularity ()
- (b) Irregularity ()
- (c) Suspected Fraud ()
- (d) Established Fraud ()

5.2. Practices employed in committing the irregularity:

5.3. Are these practices considered new? Yes () No () Not known ()

6. Are other countries involved? Yes () No () Not Known ()

6.1. If yes, has notification been sent?

Yes () Date and reference: No () Not known ()

7. Period of irregularity:

8. Date of primary administrative or judicial finding:

9. Authorities or bodies

9.1. Authorities or bodies which drew up the Primary administrative or judicial finding:

9.2. Authorities or bodies responsible for administrative or judicial follow-up:

10. Name and address of natural and legal persons involved

10.1. Natural persons:

- Name:
- First Name:
- Address:
- Postal Code:
- City:
- Country:
- Function:

10.2. Legal persons:

- Name:
- Registered Office:
- Postal Code:
- Country:

FINANCIAL ASPECTS

11. Total amount and distribution between sources of financing

11.1. Total amount of the operation:

11.2. Community financing:

11.3. Beneficiary Country financing:

12. Nature of the irregular amount:

13. Amount of the irregularity

13.1. Total irregular amount:

13.2. Community irregular amount:

13.3. Beneficiary Country irregular amount:

14. Financial consequences

14.1. Irregular amount under 13.1.already paid:

14.2. Community irregular amount under 13.2.already paid:

14.3. Beneficiary Country irregular amount under 13.3 already paid:

15.1. Irregular amount under 13.1 not yet paid:

15.2. Community irregular amount under 13.2 not yet paid:

15.3. Beneficiary Country irregular amount under 13.4 not yet paid:

15.4. Has the payment been suspended? Yes () No () N/A ()

16. Possibility of recovery:

17. Amount recovered

17.1. Total amount recovered:

17.2. Community amount recovered:

17.3. Beneficiary Country amount recovered:

18. Amount to be recovered

18.1. Total amount to be recovered:

18.2. Community amount to be recovered:

18.3. Beneficiary Country amount to be recovered:

STAGE OF PROCEDURES

19. Action by Beneficiary Country:

20. Has the recovery procedure been abandoned? Yes () No () N/A ()

21. Have criminal proceedings been abandoned? Yes () No () N/A ()

22. Sanction applied (administrative and/or judicial):

23. Additional observations:

24. Final communication: Yes () No ()

ANNEX II – List of responsible DGs

COMPONENT I - THE TRANSITION ASSISTANCE AND INSTITUTION BUILDING

European Commission
Directorate-General for Enlargement
Rue de la Loi 170
B – 1049 Brussels
Belgium

COMPONENT II - CROSS-BORDER COOPERATION

European Commission
Directorate-General for Regional Policy
Rue Pere de Deken 23
B-1040 Brussels
Belgium

COMPONENT III – REGIONAL DEVELOPMENT

European Commission
Directorate-General for Regional Policy
Rue Pere de Deken 23
B-1040 Brussels
Belgium

COMPONENT IV - HUMAN RESOURCES DEVELOPMENT

Directorate-General for Employment, Social Affaires and Equal Opportunities
Rue Joseph II 54
B-1000 Brussels
Belgium

COMPONENT V – RURAL DEVELOPMENT

European Commission
Directorate-General for Agriculture and Rural Development
Rue de la Loi 130
B – 1049 Brussels
Belgium

ANNEX XIX

a) The operational programme



REPUBLIC OF TURKEY

MINISTRY OF ENVIRONMENT AND FORESTRY



**ENVIRONMENT
OPERATIONAL PROGRAM**

(CCI No: 2007 TR 16 I PO 001)

**Ankara
September 2007**

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ABBREVIATIONS

AA	Audit Authority
Barcelona Convention	The Convention on the Protection of the Marine Environment and the Coastal Region of the Mediterranean
Basel Convention	The Convention on the Control of Trans boundary Movements of Hazardous Wastes and Their Disposal
Bucharest Convention	Convention on the Protection of the Black Sea Against Pollution
CAO	Competent Accreditation Officer
CAP	Communication Action Plan
CARDS	Community Assistance for Reconstruction Development and Stability in the Balkans
CBA	Cost Benefit Analysis
CF	EU Cohesion Fund
CFCU	The Central Finance and Contracts Unit
CIF	Cost Insurance Freight
CLC' 92 Convention	International Convention on Civil Liability for Oil Pollution Damage, 1992
CSF	Community Strategic Framework, 2007-2013: Council Regulations 1080/2006/EC; 1081/2006/EC; 1082/2006/EC; 1083/2006/EC and 1084/2006/EC
CSG	Community Strategic Guidelines on Cohesion, 2007-2013 (Directive 2006/702/EC)
ÇEVKO	Environmental Protection and Packaging Waste Recovery and Recycling Trust
DABLAS	Danube and Black Sea Region Task Force, set up in November 2001
DGs	Directors General
DG ELARG	General Directorate for Enlargement

DG EMPL	General Directorate for Employment
DG ENV	General Directorate for Environment
DG REGIO	General Directorate for Regional Development
dWTP	Drinking Water Treatment Plant
DSI	General Directorate of State Hydraulic Works
DSIP	Directive-Specific Investment Plan (also referred to as EHCIP)
EC	European Commission
ECD	European Commission Delegation
EEA	European Environmental Agency
EHCIP	Environmental Heavy-Cost Investment Planning
EIA	Environmental Impact Assessment (EU Directive 85/337/EEC amended by Directive 97/11/EEC)
EOP	Environment Operational Programme for 2007-2009
ERDF	European Regional Development Fund
ESC	Economic and Social Cohesion
ESF	European Structural Funds
EU	European Union
EUR	Euro
EUROSTAT	European Statistical Institution
EUSG	Ministry of Foreign Affairs Secretariat General for European Union Affairs
FCB	Financial Co-operation Board
FCC	Financial Co-operation Committee
FIDIC	The International Federation of Consulting Engineers
FUND' 92 Convention	International Oil Pollution Compensation Fund, 1992

GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
IA	Implementation Agreement
ICPDR	International Commission for the Protection of the Danube River
IFIs	International Financing Institutions
IPA	Instrument for Pre-Accession
IPPC Directive	Integrated Pollution Prevention and Control Directive
ISPA	Instrument for Structural Policies for Pre-Accession
İSTAÇ	Istanbul Metropolitan Municipality Environmental Protection and Waste Materials Valuation Industry and Trade Company
İZAYDAŞ	Izmit Metropolitan Municipality Waste and Residue Treatment, Incineration and Recycling Company Incorporated
MARA	Ministry of Agriculture and Rural Affairs
MARPOL 73/78 Convention	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
MIFF	Multi-annual Indicative Financial Framework, 2008-2010
MIPD	Multi-annual Indicative Planning Document, 2007-2009
MIS	Management Information System
MoEF	Ministry of Environment and Forestry
MoH	Ministry of Health
MRF	Material Recovery Facility
9 th NDP	9 th National Development Plan, 2007-2013
NAO	National Authorising Officer
NEF	National Environmental Fund
NF	National Fund

NGOs	Non-governmental Organisations
NIPAC	National IPA Co-ordinator
NSRF	National Strategic Reference Framework
NUTS	Nomenclature of Territorial Units for Statistics
O&M	Operations & Maintenance
OP	Operational Programme
OPRC Convention	International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990
OS	Operating Structure (of the EOP)
pdf	Portable Document Format
p.e.	Population Equivalent
PEPA	Priority Environmental Projects for Accession
PET	Polyethylene Three Phthalate
PHARE	Poland Hungary: Action for Restructuring of Economies
PIU	Project Implementation Unit
PPP	Public Private Partnership
PRAG	Practical Guide to Contract Procedures for EC External Actions
PSC	Project Selection Committee
PSP	Private Sector Participation
REC	Regional Environmental Centre
SAPARD	Special Accession Programme for Agriculture and Rural Development
SC	Steering Committee
SCF	Strategic Coherence Framework, 2007-2013 (prepared by the SPO)
SKI	Directorates for Water and Sewerage

SMC	Sectoral Monitoring Committee
SPO	Prime Ministry Under-Secretariat of the State Planning Organisation, Republic of Turkey
SWOT Analysis	Strengths, Weaknesses, Opportunities and Threats Analysis
TA	Technical Assistance
The Bank of Provinces	İller Bank
TIU	Technical Implementation Unit
ToR	Terms of Reference
TURKSTAT	Prime Ministry Turkish Statistical Institute
TÜBİTAK	Scientific & Technological Research Council of Turkey
UÇES	Turkish abbreviation for the 'EU Integrated Environmental Approximation Strategy, 2007-2023' prepared by the MoEF, 2006.
WWTP	Wastewater Treatment Plant

EXECUTIVE SUMMARY

1. The Environment Operational Programme for 2007-2009 (EOP) is one of the basic planning and action documents which will help Turkey to enhance the performance of the environmental sector, in line with European Union (EU) principles and policies. It has been formulated and developed by the Ministry of Environment and Forestry (MoEF) in close consultation with the European Commission (EC) for final approval by way of a Commission Decision under Article 8(1) of the Instrument for Pre-Accession (IPA) Regulation. It is also one of four (4) programmes from the Strategic Coherence Framework, 2007-2013 (SCF)¹ which are being elaborated with the aim of utilising EU funds for the period 2007-2013 in line with the Multi-annual Indicative Planning Document, 2007-2009 (MIPD)². In addition, it is defined as a document for approval by the EC indicating the priority areas for the country in regard to the environmental sector, including medium-term measures.
2. The overall objectives of the EOP are **(a)** to improve environmental protection, **(b)** to improve living standards for the population, **(c)** to improve access to drinking water, wastewater treatment and integrated solid waste services, **(d)** to strengthen capacity and governance.
3. The EOP is divided into five (5) Chapters:
 - **Chapter A.** - gives an overview of the consultation process followed by a review of the current environmental situation regarding water and wastewater as well as solid waste management;
 - **Chapter B.** - highlights the strengths, weaknesses, opportunities and threats identified in the environmental sector, and then describes the chosen strategic priorities and overall programme implementation;
 - **Chapter C.** - gives information on the priority axes, the related measures and their specific targets, with an account of the coherence and consistency of the EOP in relative to national and EU perspectives;

¹ General Directorate for Regional Development (DG REGIO) Letter of 28 June 2007 (Ref: 06473) confirming the acceptance of the SCF in meeting Article 154 of the Implementation Requirements.

² EC General Directorate for Enlargement (DG ENLARG) Letter of 4 October 2006, Ref ENLARG B/jor/PM/D(2006) 105600.

- **Chapter D.** - develops a financing schedule for each year covered by the applicable Multi-annual Indicative Financial Framework, 2008-2010 (MIFF) and for each priority axes with its related measure, - the total contributions being allocated between national and EC sources;
 - **Chapter E.** - provides a description of the relevant structures and authorities for the management of the EOP. It further provides implementation timetables including monitoring and evaluation indicators and modalities as well as indicative evaluation activities and timing.
4. The EOP focuses on improving and developing basic environmental infrastructure especially for water, wastewater and solid waste management. It will be implemented by reference to priorities and measures as follows:
- Priority 1: Improved water supply, sewerage and wastewater treatment services.
 - √ Measure 1.1: Improving the quality of the drinking water supply;
 - √ Measure 1.2: Improving the quality of receiving water bodies.
 - Priority 2: Improved integrated solid waste management.
 - √ Measure 2.1: Increasing the quantity of recycled waste and improving final disposal.
 - Priority 3: Technical Assistance (TA).
 - √ Measure 3.1: Enhancing management of the EOP;
 - √ Measure 3.2: Enhancing beneficiary planning capacity.
5. The EOP accords with the environmental priorities of the EU as described in the 6th Community Environment Action Programme. Moreover, its implementation fully supports:
- The achievement of the general strategic objective of the country in the environmental sector, which is 'to create a healthy living environment considering the economic and social conditions of the country, implementing projects according to the EU Environmental Acquis' and SCF, 2007-2013;
 - The strategic vision for Turkey as set by the 9th National Development Plan, 2007-2013 (NDP) namely 'a country which grows in stability, shares its income equitably, has global competitiveness, has transformed into an information society and completed its harmonisation process for EU membership'.

6. This EOP is one of four (4) Operational Programmes (OPs) under the IPA Components III & IV for the period 2007-2009. The other OPs are OP Regional Competitiveness, OP Transport and OP Human Resources Development.
7. The implementation of the EOP will be financed by IPA resources totalling EUR 204.1 million and also by national resources to a total of EUR 68.033 million.
8. The contribution from the IPA was calculated on the basis of the maximum standard rate of 75% of the total public eligible cost for environmental infrastructure and the TA priority axes activities. The national co-financing concerns, therefore, investment operations provided under priority axes and the measures. All national co-financing will be provided in accordance with the IPA Financial Agreement.
9. The main beneficiaries of the EOP are the MoEF, municipalities, regional associations, water supply and sewerage companies, and non-governmental organisations. Implementation of the EOP will also contribute to improving the quality of life for the entire population of Turkey.
10. The Operating Structure (OS) under the MoEF is the key authority responsible for the planning, implementation and management of the EOP in accord with Article 21 of IPA Implementing Regulation 718/2007³. Implementation will be monitored by the Sectoral Monitoring Committee (SMC) established for this purpose, in compliance with Article 59 of IPA Implementing Regulation 718/2007. A Project Selection Committee (PSC) will be set up by the OS for **(a)** ensuring that projects are selected for funding and approved in accordance with the criteria and mechanisms applicable to the programme, **(b)** assessing the projects from the point of view of territorial and sectoral co-ordination.
11. The SMC will consist of representatives from the National IPA Co-ordinator (NIPAC), Prime Ministry Under-Secretariat of the State Planning Organisation (SPO) (Strategic Co-ordinator for Components III & IV), The Bank of Provinces (İller Bank), representatives from civil society and socio-economic partners, regional or national organisations of relevance for the EOP, National Authorising Officer (NAO) and a representative of the National Fund (NF).

³ Commission Regulation (EC) No. 718/2007 of 12 June 2007 Implementing Council Regulation (EC) No. 1085/2006 establishing an instrument for pre-accession assistance (IPA).

12. The following authorities also play an important role in the overall co-ordination, management and audit of the EOP:
 - NIPAC, Ministry of Foreign Affairs Secretariat General for EU Affairs, will ensure the overall co-ordination of assistance under the IPA Regulation;
 - The Sectoral Co-ordinator for Regional Development (and the Human Resources Development) is the SPO which is responsible for the overall co-ordination and co-operation with NIPAC;
 - The Audit Authority (AA) which has the overall responsibility for verifying the effective and sound functioning of the management and control systems (according to Article 29 of IPA Implementing Regulation 718/2007).
13. This EOP has been prepared in compliance with the partnership principle, actively involving all the relevant administrative socio-economic partners and NGOs. It has been framed as a 'stand-alone' document and thus contains more background information and statistical data than would normally be expected from an OP. However, it is hoped that this document will contribute to a greater understanding of the complex aspects of environmental protection that urgently need to be addressed in Turkey within both a national and regional context.
14. Implementation of this EOP will also stimulate economic activities in the regions and promote new employment opportunities like recycling, innovative energy production, tourism and recreation. In this way crucial, environmental protection goes as going hand-in-hand with sustainable development in addition to creating a healthier and safer future.

INTRODUCTION

In order to improve the delivery of EC External Aid, a new 'Instrument Programme' has been designed. It covers co-operation between developing and industrialised countries with the EU, the EU neighbourhood policy, enlargement and other specific themes. Amongst the new legislation, the IPA has been designed as a 'simple, clear and concise regulation' replacing the previous Poland Hungary: Action for Restructuring of Economies (PHARE), Instrument for Structural Policies for Pre-Accession (ISPA), Special Accession Programme for Agriculture and Rural Development (SAPARD), Turkey Instrument and Community Assistance for Reconstruction Development and Stability in the Balkans (CARDS) Programmes. The new Instrument Programme was presented by the EC to the European Parliament and Council Regulation 1085/2006/EC establishing an IPA was adopted on 17th July 2006.

The IPA is thus one of the general instruments directly supporting external aid policies. The need to facilitate coherence and improve consistency with the EU, as well as achieving better results and a higher impact with the resources available, led the EC to propose a simplified framework for external actions over the 2007-2013 period. At the junction between external assistance and internal policies, the IPA Regulation aims at providing targeted assistance to candidate and potential candidate countries for membership to the EU.

Moreover, this IPA constitutes a framework defining the objectives and main principles for pre-accession assistance under five (5) components. The purpose of the-EOP is to meet the requirements of Component III which is specifically targeted for 'Regional Development'. It supports countries in policy development and prepares them for implementation and management of the EC's cohesion policy and in particular, their access to the European Regional Development Fund (ERDF) and Cohesion Fund (CF).

Assistance will be implemented through the EOP. This has been formulated and developed by the MoEF in close consultation with the EC for final approval through a Commission Decision in accordance with Article 8(1) of the IPA Regulation. The main emphasis for the environmental measures relates to **(1)** water supply, urban wastewater and integrated solid waste management, **(2)** rehabilitation and closure of old dumpsites and **(3)** areas related to sustainable development which generate environmental benefits.

The EOP is the basic planning and scheduling document which will help Turkey to enhance performance in the environmental sector, in line with EU principles and policies. It is based upon documentation drafted by the relevant Turkish authorities and the EC. It is also one of four (4) programmes from the SCF¹ which is being elaborated with the aim of utilising EU funds for the period 2007-2013 in accord with the MIPD².

In addition, it is defined as a document for approval by the EC indicating the priority areas for the country with regard to the environmental sector, including medium-term measures.

The EOP also specifies the objectives, fields of intervention, expected results, management procedures and total financing planned for the environmental sector over the period 2007-2009. It contains a summary of the type of operations to be financed, an indication of the amounts allocated for each type of operation and an overall proposed implementation timetable.

It should be noted that this EOP deals only with the environmental sector and is presented in five (5) chapters:

Chapter A. - gives an overview of the consultation process and the relevant documentation used for the preparation of the EOP. This is followed by a review of the current environmental situation regarding water and wastewater as well as solid waste management. There then follows a summary of the recommendations from the ex-ante evaluation⁴ which, among others, identifies and appraises the disparities, gaps and potential for development, the goals to be achieved, and the coherence of the strategy proposed. The recommendations from this ex-ante evaluation have since been reviewed and incorporated into the present EOP.

Chapter B. - highlights the strengths, weaknesses, opportunities and threats identified in the environmental sector. There is then a description of the chosen strategic priorities and overall programme implementation with regard to the SCF, MIPD and sectoral mechanisms.

Chapter C. - gives information on the priority axes, the related measures and their specific targets. These targets have been quantified, where appropriate, using a limited but realistic number of output and result indicators. These indicators will determine the progress in implementing the selected measures, including the effectiveness of the identified selected targets. There is also an identification for each proposed measure of the final beneficiaries, the expected modalities and the specific criteria for the selection of projects. There then follows a discussion of the coherence and consistency of the EOP defined through an analysis of both national and EU perspectives.

Chapter D. - provides a financing table for each year covered by the applicable MIFF and for each priority axes with its related measure. The total contributions from both national and EC sources have also been defined.

⁴ Referred to in Article 57(4) and 166 of the IPA Regulation.

Chapter E. - provides a description of the relevant structures and authorities for the management of the EOP in accordance with Articles 21-26, 28, 29 and 31 of the IPA Regulation. It also details implementation timetables including monitoring and evaluation indicators and modalities as well as indicative evaluation activities and timing.

In summary, the EOP has been prepared in compliance with the partnership principle, actively involving all the relevant administrative and socio-economic partners. The entire programming process has been organised by the OS under the MoEF and includes the Department of Foreign Relations and the EU. It has been drawn up as a 'stand-alone' document and, thus, contains more background information and statistical data than would normally be expected from an OP. In this way, it is hoped that this document will contribute to a realistic understanding of the complex aspects of environmental protection that are urgently in need of remedy in Turkey within both a national and regional context.

A. CONTEXT, CONSULTATION AND COORDINATION

This EOP has been prepared after extensive discussions, meetings and consultations involving several dedicated working groups representing relevant stakeholders as well as senior management and staff of the MoEF. These included representatives of line Ministries, Prime Ministry Under-Secretariat of the State Planning Organisation (SPO), Ministry of Foreign Affairs Secretariat General for EU Affairs (EUSG), The Bank of Provinces (İller Bank), the Turkish Statistical Institute (TURKSTAT), the National Association of Turkish Municipalities, as well as representatives from the Chamber of Commerce, Non-governmental Organisations (NGOs), Universities and relevant institutes. It also took into account and the following key documents as directional references:

- 9th National Development Plan (NDP), 2007-2013;
- EU Integrated Environmental Approximation Strategy (UÇES), 2007-2023;
- Strategic Coherence Framework (SCF), 2007-2013 prepared by the SPO;
- Law on Environment No. 5491 dated 26 April 2006;
- 6th EU Environmental Action Programme, 2001-2010;
- IPA Multi-annual Indicative Planning Document (MIPD), 2007-2009;
- IPA Multi-annual Indicative Financial Framework (MIFF), 2008-2010;
- Council Regulation (EC) No. 1085/2006 establishing an IPA;
- Council Decision of 23 January 2006 on the principles, priorities and conditions contained in the Accession Partnership with Turkey (2006/35/EC);
- Community Strategic Guidelines on Cohesion (CSG), 2007-2013 (Directive 2006/702/EC);
- Community Strategic Framework (CSF), 2007-2013: Council Regulations 1080/2006/EC; 1081/2006/EC; 1082/2006/EC; 1083/2006/EC and 1084/2006/EC.

Several working documents as well as EC Directives and guidance documents were also used as references including "Directive-Specific Investment Plans (DSIPs)"⁵, "Integrated Pollution Prevention and Control (IPPC) Directive"⁶ as well as the "Water Framework Directive"⁷ and "Landfill Directive"⁸.

It is important to note that, while the EOP centres on what can realistically be achieved through the direct projected investment in the period 2007-2009 concentrated on the identified environmental priorities of the drinking water, wastewater and solid waste sectors, important horizontal and cross-cutting issues, e.g., bio-diversity, equal rights and civil society will also benefit from the implementation of the EOP.

A.1. NATIONAL POLICY AND SOCIO-ECONOMIC CONTEXT

The data used are taken from the latest available statistics provided by the Turkish Statistical Institute (TURKSTAT)⁹ and European Statistical Institution (EUROSTAT). They make a distinction between the three broad sectors of municipalities, manufacturing industries and energy production. Statistics given below are based upon municipal populations. The total municipal population in 2005 was in the order of 54 million whereas the national population amounted to some 73.9 million (TURKSTAT 2005).

A.1.1. WATER SECTOR

(a) Water resources

Turkey as a whole is not plentiful in water resources. Some catchments areas are also located far from population centres and, thus, accessibility requires heavy investment. Because precipitation and snowfall is limited to 5 or 6 months per year and most of the land mass is situated in a semi-arid region, it is predicted that Turkey is at risk of becoming a 'water-stressed' country by 2030 (1954-2005, General Directorate of State Hydraulic Works-DSİ, 2005). Thus, in order to draw on water resources on a year round basis, Turkey must have storage facilities such as dams and reservoirs. The dams built over the last 50 years regulate river flow, prevent flooding and provide safe drinking

⁵ Also referred to as Environmental Heavy-Cost Investment Planning (EHCIP) documents.

⁶ Council Directive 96/61/EC of 24 September 1996 concerning Integrated Pollution Prevention and Control

⁷ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for the Community action in the field of water policy.

⁸ Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, as amended by Regulation (EC) 1882/2003.

⁹ This means that the Turkish data quoted is up to 2004 unless otherwise mentioned.

water. Coupled to hydro-power generation plants, water resources have significantly contributed to the overall socio-economic development of the country¹⁰.

The effective management of surface and groundwater, however, represents a constant challenge, particularly in terms of effective protection. Factors which contribute to the deterioration of surface and groundwater quality include:

- discharge of untreated domestic and industrial wastewater at source;
- urban wastewater discharged into surface waters with or without partial treatment;
- leakages from sewerage systems and run off from uncontrolled solid waste dumpsites;
- excessive groundwater abstraction;
- extensive use of pesticides and fertilisers in agriculture;
- deforestation and inadequate agricultural practices accelerating erosion, and creating accumulation of sediment in natural lakes and artificial dams.

The balanced use of surface and groundwater also needs to be managed in a more sustainable manner. Turkey should improve planning and reduce system leakages whilst ensuring all investments are appropriate and implemented in a timely fashion. The water resources also need to be more efficiently used.

(b) Water supply and water consumption

A total amount of 8.76 billion m³ of water was extracted by municipalities, manufacturing industry and energy production facilities in 2004. Some 4.96 billion m³ (57%) of this was used by municipalities for distribution through their network systems. Of this volume, 40% was abstracted from dams, 28% from wells, 27% from springs, 3% from rivers and 2% from lakes and artificial lakes (see Table A.1.).

¹⁰ These are the overall conclusions of Environmental Impact Assessment (EIA) Reports which have been prepared since 7 February 1993 when the By-Law on EIA was enacted. Since then 44 dam projects have been evaluated in the scope of Annex 1 of the By-Law (Source, MoEF).

Table A.1. Municipal water abstraction by resources for 2004 (1000 m³/year)

Water resources	(Municipalities, manufacturing industry and energy producers)	Municipalities
Sea	3 153 096	----
Dam	2 115 362	1 986 882
Spring	1 393 813	1 363 360
Well	1 650 601	1 375 737
River	218 640	143 064
Lakes & artificial lakes	111 385	87 394
Others	118 365	----
Total	8 761 262	4 956 437

Source TURKSTAT, 2004

In 2004, out of the total of 3213 municipalities surveyed, 3159 municipalities replied that they had drinking water supply systems. This is 67 additional municipalities compared with 2001 (3092). They also serve 99% of the population compared with 95% in 2001 (see Table A.2.).

Again, in 2004, the number of municipalities with drinking water treatment plants was 304, compared with 236 in 2001. During 2001, only 1.66 billion m³ of water was treated whilst in 2004, the volume increased by 25% to 2.08 billion m³. There was also a corresponding increase in population served by drinking water treatment plants, rising from 35% to 42% between 2001 and 2004. The number of treatment plants amounted to 140 in 2004 (chlorination and filtration or coagulation, flocculation, sedimentation, filtration, chlorination), compared to 113 in 2001. (see also Table A.2.). Where there are no plants, chlorination systems along the networks have been put in place. Raw water collected from springs, mainly in rural areas, is mostly distributed without treatment.

Table A.2. Comparison of water supply data of 2001 & 2004

Statistics on water supply	Year	
	2001	2004
Number of municipalities responding	3215	3213
Number of municipalities served by drinking water supply systems	3092	3159
Number of municipalities served by dWTP*	236	304
Number of dWTPs	113	140
Rate of population served by drinking water supply networks in total municipal population (%)	95	99
Rate of population served by dWTP in total municipal population (%)	35	42
Municipal water abstraction (billion m ³ /year)	4.66	4.96
Amount of drinking water treated (billion m ³ /year)	1.66	2.08

* : Drinking Water Treatment Plant

Source TURKSTAT, 2001& 2004

The water supply systems are characterised by high losses which have been estimated at around 55% of the available supply. There are two main reasons for this **(1)** water losses during transportation to the final consumers due to pipe leakages; the volume lost being a function of the age and the type of pipes as well as the pressure in the network, and **(2)** non-payments of bills, illegal connections and deficient meters.

The water quality varies from city to city and region to region. According to water quality data obtained from the Ministry of Health (MoH) (latest 2002 data), **(1)** in those provincial centres where 80% of the population are served by drinking water services, some 13% of the samples do not comply with national standards¹¹, **(2)** where 60% of the population have such services, only 5% of the samples fail to comply, but **(3)** where 90% of the population are served, 14% of the samples do not comply. The data for non-compliance are given as 23% due to microbiological parameters (total faecal coliforms), 21% to chemical parameters and 10% to physical parameters. As these values demonstrate,

¹¹ Particularly relating to Turkish Standard (TS) 266.

the issues related to water quality are primarily caused by microbiological and chemical pollution.

In Turkey, water consumption is increasing due to population growth, urbanisation and industrialisation. These trends continue to lead to a reduction in renewable water resources. As mentioned in the water resources section, the quality of these resources is also decreasing.

However, in most of Turkey, water volume and quality can be substantially improved if networks were rehabilitated.

Environmental infrastructure investments will thus be targeted towards remediation:

(c) Wastewater

There have been important developments regarding the control and management of wastewater discharge within the larger municipalities in Turkey during recent years. However, a lack of financial and technical resources for the smaller but nevertheless important regions means that this is not the case nationwide.

In 2004, a total of 6.03 billion m³ of wastewater were discharged to the environment from municipalities (48%), manufacturing industry (11%) and energy production (41%). Of this total volume, 92% was discharged into the sea and the rivers (66% to the sea and 26% to the rivers, respectively).

Only 2.92 billion m³ (48%) of this wastewater was discharged through network systems either into rivers (47%), into the sea (40%), into dams (3%), into lakes and artificial lakes (2%), to land (2%) and 6% into other receiving bodies (**see Table A.3.**).

Table A.3. Sectoral wastewater discharge according to receiving bodies for 2004 (1000 m³/year)

Receiving body	(Municipalities, manufacturing industry and energy producers)	Municipalities
Sea	3 997 960	1 178 001
Rivers	1 549 283	1 380 519
Lake - Artificial lake	46 805	43 006
Dams	103 107	99 550
Land	63 418	40 007
Others	272 398	181 701
Total	6 032 971	2 922 784

Source TURKSTAT, 2004

Out of the total of 3213 municipalities surveyed in 2004, 2226 municipalities had sewerage networks, an increase of 10% compared with the year 2001 figure of just 2003. Also in 2004, 86% of the population was connected to sewerage networks, which is an increase of 5% compared with 2001 which was just 81% (see Table A.4.).

For EU comparison purposes, the figure for Bulgaria is 69% (EUROSTAT, 2002) and for Poland 57% (EUROSTAT, 2003).

The number of municipalities with wastewater treatment facilities increased from 238 in 2001 to 319 in 2004. This means that in 2004, 45% of households were connected to a wastewater treatment facility, an increase of 10% compared with 2001 (35%) (see Table A.4.).

In 2004, 65% of wastewater collected was directed to wastewater treatment facilities corresponding to 1.90 billion m³ out of 2.92 billion m³ collected by sewerage systems. This is an increase of 13% compared with the 2001 situation when 52% of the wastewater collected was treated (1.19 billion m³ out of 2.30 billion m³) - see Table A.4.

In addition, in 2004 there were 172 wastewater treatment plants which is an increase of 37% compared with 2001 (126 plants), with 133 plants having secondary (biological) treatment facilities and 4 having both secondary (biological) and tertiary treatment facilities. The remaining 35 plants had only a preliminary treatment facility (see also Table A.4.).

Table A.4. Comparison of wastewater data of 2001 & 2004

Statistics on wastewater		Year	
		2001	2004
Number of municipalities responding		3215	3213
Number of municipalities served by sewerage networks		2003	2226
Number of municipalities served by WWTP*		238	319
Number of WWTPs		126	172
Primary Treatment		25	35
Secondary Treatment		98	133
Tertiary Treatment		3	4
Rate of population served by sewerage network in total municipal population (%)		81	86
Rate of population served by WWTP in total municipal population (%)		35	45
Sewerage network ended with a WWTP	Percentage (%)	52	65
	Volume (billion m ³ /year)	1.19	1.90

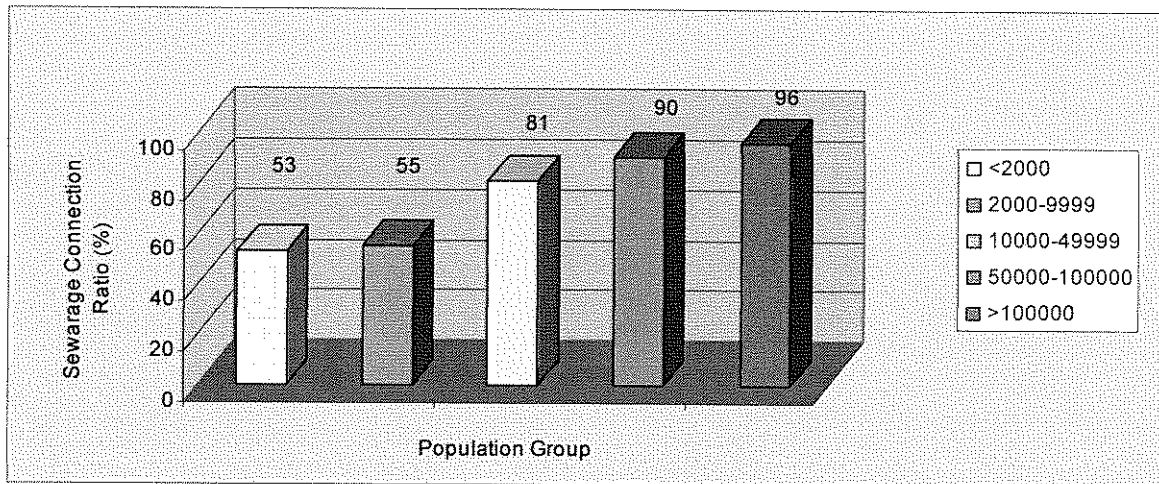
* : Wastewater Treatment Plant

Source TURKSTAT, 2001 & 2004

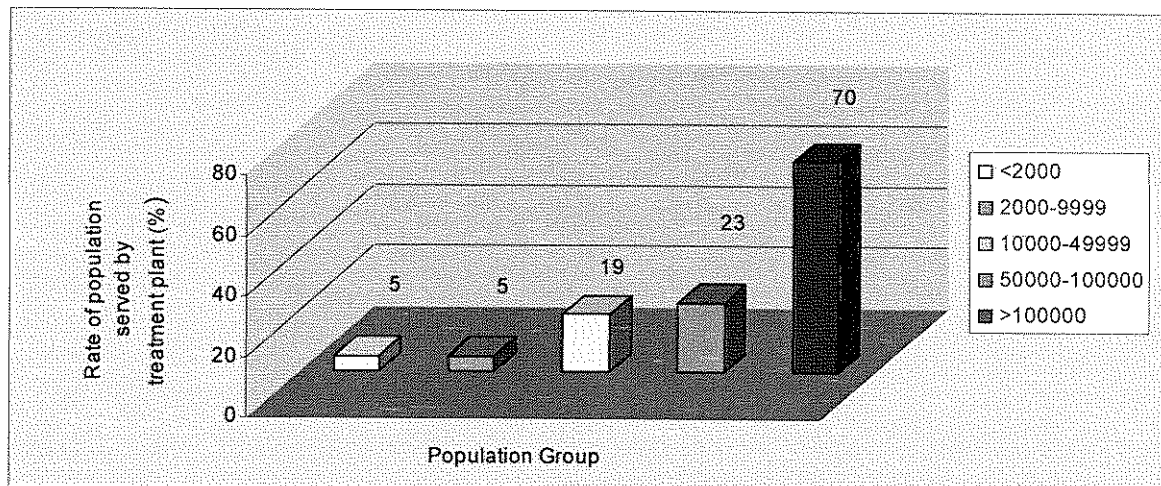
The sewerage systems are, for the most part, characterised by a high proportion of low quality pipe work. This means that (1) during the dry season, only part of the wastewater collected is directed to the treatment plant, the rest leaking and creating groundwater pollution, and (2) during the wet season, rainwater overflows the sewerage systems which causes problems for plant operations and is responsible for reduced performance and pollution of the receiving bodies.

The distribution regarding (1) the connection percentage, and (2) the population percentage served by a treatment plant according to settlement areas and based upon population groups in 2004 were as follows:

Graph A.1. Sewerage connection ratio according to settlements size for 2004



Graph A.2. Rate of population served by treatment plant according to settlements size for 2004



Source TURKSTAT, 2004

Technical studies (Scientific & Technological Research Council of Turkey/TÜBİTAK and Istanbul Technical University) are in progress for the delineation of agglomerations in line with EU requirements and for the eventual publication of a detailed list based upon population equivalent (p.e.).

In order to protect the water resources, greater effort is needed for the treatment of industrial and domestic wastewater, taking into account the relevant EC Directives. This means a rational wastewater management implementation system is required to include collection, treatment, discharge from domestic and industrial sources and disposal of the treatment sludge according to the legislation and utilisation of the treated water in accordance with the sustainability principles.

Environmental infrastructure investments will thus be targeted towards remediation:

(d) Management of sludge from wastewater treatment plants

Currently, more than 80% of sludge from municipal wastewater treatment plants is produced by facilities owned by the metropolitan municipalities. The percentage used for agriculture is about 3-4% which represents around 30 000-40 000 tonnes per annum.

The use of sludge in agriculture is encouraged using 'best practices' and applying the "Sewage Sludge Directive"¹². This holds out immediate benefits for farmers but important investments are necessary in order to construct adequate storage and transportation facilities.

¹² Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment and in particular of the soil, when sewage sludge is used in agriculture.

(e) Regional disparities

Table A.5. Statistics on water supply at Statistical Regions Level II, for 2004

STATISTICAL REGIONS LEVEL II	PROVINCES IN THE REGION	Rate of population served by drinking water supply systems in total municipal population (%)	Rate of population served by dWTP in total municipal population (%)
TRA2	Ağrı, Kars, Iğdır, Ardahan	100	0
TRB2	Van, Muş, Bitlis, Hakkari	97	0
TRC3	Mardin, Batman, Şırnak, Siirt	97	0.8
TRA1	Erzurum, Erzincan, Bayburt	100	0
TRC2	Şanlıurfa, Diyarbakır	99	48
TRC1	Gaziantep, Adıyaman, Kilis	100	22
TR72	Kayseri, Sivas, Yozgat	99	0.8
TR90	Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane	86	26
TRB1	Malatya, Elazığ, Bingöl, Tunceli	99	0.5
TR82	Kastamonu, Çankırı, Sinop	98	8
TR83	Samsun, Tokat, Çorum, Amasya	99	32
TR63	Hatay, Kahramanmaraş, Osmaniye	99	0
TR52	Konya, Karaman	99	17
TR71	Kırıkkale, Aksaray, Niğde, Nevşehir, Kırşehir	98	27
TR33	Manisa, Afyon, Kütahya, Uşak	99	2
TR61	Antalya, Isparta, Burdur	100	7
TR22	Balıkesir, Çanakkale	98	42
TR81	Zonguldak, Karabük, Bartın	98	42
TR62	Adana, Mersin	99	48
TR32	Aydın, Denizli, Muğla	98	7
TR41	Bursa, Eskişehir, Bilecik	100	63
TR21	Tekirdağ, Edirne, Kırklareli	100	19
TR51	Ankara	100	85
TR10	İstanbul	100	98
TR31	İzmir	99	26
TR42	Kocaeli, Sakarya, Düzce, Bolu, Yalova	100	71

EUROSTAT format, Data source: TURKSTAT

Table A.6. Statistics on wastewater at Statistical Regions Level II, for 2004

STATISTICAL REGIONS LEVEL II	PROVINCES IN THE REGION	Rate of population served by sewerage network in total municipal population (%)	Rate of population served by WWTP in total municipal population (%)
TRA2	Ağrı, Kars, Iğdır, Ardahan	68	9
TRB2	Van, Muş, Bitlis, Hakkari	52	22
TRC3	Mardin, Batman, Şırnak, Siirt	81	0
TRA1	Erzurum, Erzincan, Bayburt	89	12
TRC2	Şanlıurfa, Diyarbakır	89	55
TRC1	Gaziantep, Adıyaman, Kilis	94	61
TR72	Kayseri, Sivas, Yozgat	86	31
TR90	Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane	71	18
TRB1	Malatya, Elazığ, Bingöl, Tunceli	88	54
TR82	Kastamonu, Çankırı, Sinop	89	2
TR83	Samsun, Tokat, Çorum, Amasya	92	13
TR63	Hatay, Kahramanmaraş, Osmaniye	61	15
TR52	Konya, Karaman	73	8
TR71	Kırıkkale, Aksaray, Niğde, Nevşehir, Kırşehir	71	10
TR33	Manisa, Afyon, Kütahya, Uşak	92	28
TR61	Antalya, Isparta, Burdur	54	31
TR22	Balıkesir, Çanakkale	90	9
TR81	Zonguldak, Karabük, Bartın	88	33
TR62	Adana, Mersin	82	44
TR32	Aydın, Denizli, Muğla	70	28
TR41	Bursa, Eskişehir, Bilecik	89	62
TR21	Tekirdağ, Edirne, Kırklareli	91	11
TR51	Ankara	98	87
TR10	İstanbul	97	72
TR31	İzmir	95	76
TR42	Kocaeli, Sakarya, Düzce, Bolu, Yalova	93	71

EUROSTAT format, Data source: TURKSTAT

A.1.2. WASTE MANAGEMENT

(a) Municipal solid waste generation

Solid Waste Management plays a crucial role in terms of community health and protecting the environment and is vitally important for the country. Increasing solid waste volumes due to population growth, technological development, industrialisation and urbanisation have become a major environmental problem.

In 2004, the amount of municipal solid waste per capita was 1.30 kg/day, equivalent to 474.5 kg/capita/year.

By comparison the EU average for 25 countries was 525 kg/capita/year (EUROSTAT, 2004).

Since separate collection is only implemented in a limited number of pilot urban centres, only a small proportion of waste is recycled and most of the wastes generated are landfilled.

(b) Municipal solid waste collection (including separate collection)

In 2004, out of the total of 3213 municipalities surveyed, 3028 municipalities were identified as providing solid waste management services. This represents an increase of 113 municipalities compared with 2001 (2915 municipalities).

The percentage of the total population receiving solid waste services was 97% in 2004, compared with 95% in 2001. Proper collection, transfer and disposal of solid waste to appropriate facilities and its destruction without threat to the environment are priorities especially for residential zones and neighbourhoods.

From the total municipal solid waste generated, around 25%-30% is estimated to be recyclable and recoverable as it is non-hazardous. Currently, separate collection is being implemented by several municipalities in 18 provinces.

In 2004, 578 municipalities, out of 3213 municipalities, provided separate collection services for medical waste. This represented a total of 146 additional municipalities over the number in 2001 (420 municipalities) - **see Table A.7.**

Table A.7. Comparison of municipal solid waste data for 2001 & 2004

Statistics on waste	Year	
	2001	2004
Number of municipalities responding	3215	3213
Number of municipalities receiving SWM* services	2915	3028
Number of municipalities receiving separate collection service for medical waste	420	578
Rate of population receiving SWM services in total municipal population (%)	95	97

* : Solid Waste Management

Source TURKSTAT, 2001 & 2004

(c) Municipal solid waste recovery, treatment and disposal

General

In Turkey, uncontrolled and unsafe dumping of solid waste tends to be common practice. Existing dump sites generate even greater risks for the environment and public health because they are often located close to residential areas. Consequently, the implementation of integrated waste management services at regional level is considered to be a major priority on which urgent remedial action is required. Necessary actions includes the planning of waste services, collection, transfer, recycling and biological treatment (composting), possible interim storage and disposal of waste as well as the operation of handling and treatment facilities, in both industrialised and highly populated areas, as required by law.

It is also a priority to re-assess existing dump sites in terms of location, design, monitoring and maintenance. Those not meeting the national or EU standards should be closed or ameliorated, and investments will be needed for their reformation as landfill sites and in compliance with applicable legislation. In this way, the risks to the environment and public health will be either eliminated or significantly minimised.

In 2001, out of 25.13 million tonnes of solid waste collected by municipalities, 58% was disposed in municipal dump sites, 33% was landfilled in 12 controlled landfill sites, 1.9% was disposed by burial, 0.87% was composted in 3 composting facilities, 0.40% was disposed of into lakes and rivers, 1.37% was disposed by burning in an open area and 4.45% was disposed by 'other' methods.

For comparison, in 2004 out of 25.01 million tonnes of solid waste collected by municipalities, 65.7% was disposed in municipal dump sites, 28% was landfilled in 16 controlled landfill sites, 1.7% was disposed by burial, 1.4% was composted in 5 composting plants, 0.4% was disposed of into lakes and rivers, 0.3% was disposed of by burning in an open area and 2.25% was disposed of by 'other' methods (see Table A.8.)

Table A.8. Comparison of treatment and disposal of municipal solid waste data, 2001 & 2004 (1000 tonnes/year)

Statistics on treatment and disposal of solid waste	Year	
	2001	2004
Number of composting facilities in operation	3	5
Number of controlled landfill site	12	16
Total treatment or recovery operations	218	351
Composting	218	351
Total final disposal	24 916	24 663
Landfill	24 471	24 407
Of which - controlled landfill	8 304	7 002
Of which - uncontrolled landfill*	16 167	17 405
Disposal in lakes and rivers	101	155
Disposal/burnt in open areas	344	101
Total	25 134	25 014

* Disposed of in municipal dump sites, by burial or by 'other' methods

Source TURKSTAT, 2001 & 2004