ENVIRONMENTAL PROTECTION AND INFRASTRUCTURE OPERATIONAL PROGRAMME

2004-2006
Republic of Hungary

CCI Nº: 2003 HU 16 1 PO 003

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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>BILC</td>
<td>Budapest Intermodal Logistics Centre</td>
</tr>
<tr>
<td>CBC</td>
<td>Cross-border co-operation in the framework of the PHARE programme</td>
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<td>DMR</td>
<td>Danube-Maine-Rhone channel</td>
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<tr>
<td>EAGGF</td>
<td>European Agricultural Guidance and Guarantee Fund</td>
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<tr>
<td>EC</td>
<td>European Community</td>
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<tr>
<td>ECOP</td>
<td>Economic Competitiveness Operational Programme</td>
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<tr>
<td>EEC</td>
<td>European Economic Community</td>
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<tr>
<td>EIB</td>
<td>European Investment Bank</td>
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<tr>
<td>EIMA</td>
<td>EIOP Managing Authority</td>
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<tr>
<td>EIOP</td>
<td>Environmental Protection and Infrastructure Operational Programme</td>
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<tr>
<td>ERDF</td>
<td>European Regional Development Fund</td>
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<tr>
<td>ESDP</td>
<td>European Spatial Development Plan</td>
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<tr>
<td>ESF</td>
<td>European Social Fund</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>EWC</td>
<td>European Waste Catalogue</td>
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<td>FIFG</td>
<td>Financial Instrument for Fisheries Guidance</td>
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<td>FKTB</td>
<td>Inter-ministerial Committee for the Co-ordination of Development Policies</td>
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<td>GEF</td>
<td>Global Environmental Fund</td>
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<td>HAWIS</td>
<td>Hazardous Waste Information System</td>
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<td>HRDOP</td>
<td>Human Resource Development Operational Programme</td>
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<td>IB</td>
<td>Intermediate Body</td>
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<td>ISPA</td>
<td>Instrument for Structural Policies for Pre-accession</td>
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<td>LSIF</td>
<td>Large Scale Infrastructure Facility</td>
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<td>MA</td>
<td>Management Authority</td>
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<td>MÁV</td>
<td>Hungarian Railways</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>MoE</td>
<td>Ministry of Economy (until 2002 June)</td>
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<td>MoET</td>
<td>Ministry of Economy and Transport (after 2002 June)</td>
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<tr>
<td>MoEW</td>
<td>Ministry of Environment and Water (after 2002 June)</td>
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<tr>
<td>MoTWM</td>
<td>Ministry of Transport and Water Management (until 2002 June)</td>
</tr>
<tr>
<td>NATURA 2000</td>
<td>Ecological network of highly protected areas related to the Habitat and Bird Directive</td>
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<tr>
<td>NERP</td>
<td>National Environmental Remediation Programme (abbreviation in Hungarian is OKKP)</td>
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<td>NDP</td>
<td>National Development Plan</td>
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<td>NDPO</td>
<td>National Development Plan Office</td>
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<td>NEP</td>
<td>National Environmental Program</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>OGY</td>
<td>Hungarian Parliament</td>
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<td>OPARD</td>
<td>Operational Programme of Agricultural and Rural Development</td>
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<td>OP</td>
<td>Operational Programme</td>
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<tr>
<td>PHARE</td>
<td>EU support programme for countries in Central and Eastern Europe (pre-accession fund)</td>
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<tr>
<td>PEEN</td>
<td>Pan-European Ecology Network</td>
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<tr>
<td>ROP</td>
<td>Regional Operational Programme (also known as OPRD)</td>
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<td>SF</td>
<td>Structural Funds</td>
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<tr>
<td>TEN</td>
<td>Trans-European Network</td>
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<tr>
<td>TINA</td>
<td>Transport Infrastructure Needs Assessment</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UN-ECE</td>
<td>UN Economic Commission for Europe</td>
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<td>UNDP</td>
<td>UN Development Programme</td>
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EXECUTIVE SUMMARY

The Environmental Protection and Infrastructure Operational Programme (EIOP) is linked to the comprehensive national objectives of the strategy laid down in the National Development Plan (NDP), which takes into consideration the European Union’s supporting principles and practices. It is designed to lay the foundation and be a catalyst for a more competitive economy, a better environment and more balanced regional development. The EIOP continues and builds for the future, on national environment and infrastructure development programmes, and takes into consideration the facilities and development projects of the pre-accession assistance programmes (Phare and ISPA). The EIOP is based fully on the goals and priorities of the European Union’s environment and infrastructure policies and reflects Hungary’s international obligations as well as her specific national interests.

The EIOP’s total budget for the 2004-2006 programming period is 440.3 million euro, which corresponds to the 13.3% of the financial sources of the NDP. Of this, 327.2 million euro is community support, more than 113 million euro comes from the national budget. The community sources are ensured from the European Regional Development Fund.

The Environmental Protection and Infrastructure Operational Programme (EIOP) will contribute directly to achieving the third specific objective and implement mainly priority 3 of the CSF, i.e. improving transport infrastructure and protecting the environment. The investments supported by the EIOP will, however, also contribute significantly to the first and fourth specific objectives of the CSF through creating the basic conditions for an improved and more balanced regional economic competitiveness.

The contribution of the EIOP will be complementary to the large contribution of the Cohesion Fund to the two main sectors covered by this Programme, the environment and the transport sectors.

The EIOP aims to reduce the infrastructure gap that exists between the European Union and Hungary both in terms of quantity and quality. This should result in more effective and efficient services, while taking fully into account Sustainable Development and the polluter pays principle.

The EIOP’s specific objectives are to:

1. the protection and improvement of the environment: (a) the quality and coverage of environmental services and utilities, (b) nature conservation and (c) energy initiatives
2. the improvement of the transport network through investments in upgrading the national transport infrastructure.

These twin objectives of the **EIOP** are translated into two specific priorities:

1. Environmental Protection
2. Transport Infrastructure Development.

A third priority, Technical Assistance (TA) will assist in the implementation and monitoring of the programme. TA is expected to contribute significantly to achieving these objectives.
The EIOP covers the period of 2004-2006, but its objectives also look forward to Hungary’s development needs beyond 2006. It will contribute to Hungary meeting her EU obligations to the Environment and Transport sectors, particularly in less developed parts of country.

The starting point for the EIOP is the analysis of the current situation of the environment and infrastructure in Hungary. It is followed by the SWOT analysis, on which the development strategy is built. The EIOP also contains a short description of the measures, but the details of their contents and implementation provisions are in the EIOP’s Programme Complement.

The elaboration of the EIOP was supervised by the Ministry of Economy and Transport (MoET) with close co-operation with the Ministry of Environment and Water (MoEW). The implementation of the programme is the responsibility of the Managing Authority (EIMA), which was set up within the Titular State Secretariat of the MoET. In order to carry out the programme more efficiently, the EIMA delegates some of its tasks to Intermediate Bodies (IBs). The IBs are the MoEW’s Development Directorate, Energy Centre Non-Profit Company, and the Hungarian Treasury.

The EIOP was prepared with particular respect to, among others, the No. 1260/1999/EC Regulation laying down general provisions on the Structural Funds, and the Vademecum on the programme documents. The EIOP’s measures are in line with the No. 1783/1999/EC Regulation of the European Parliament and of the Council on the European Regional Development Fund.
CONDITIONS OF ELABORATING THE ENVIRONMENTAL PROTECTION AND INFRASTRUCTURE DEVELOPMENT PROGRAMME

1. GENERAL INTRODUCTION

The Environmental Protection and Infrastructure Operational Programme (EIOP) is one of the five comprehensive programmes of the Hungarian National Development Plan (NDP) for the EU programming period of 2004-2006. The EIOP contains essential elements for the successful implementation of the NDP including environmental protection and infrastructure development; its basic aim is to promote environmentally friendly development.

The long-term objective of the NDP is to improve the quality of life with an overall objective to reduce the income gap relative to the European Union average.

The EIOP will contribute directly to achieving the third specific objective and implement mainly priority 3 of the CSF, i.e. improving transport infrastructure and protecting the environment. The investments supported by the EIOP will, however, also contribute significantly to the first and fourth specific objectives of the CSF through creating the basic conditions for an improved and more balanced regional economic competitiveness.

The EIOP will contribute to these objectives by:

- Strengthening environmental protection in its contribution to improving the quality of life,
- Developing infrastructure in such a way as to respect the environment as a basis for economic transition,
- Developing infrastructure networks so enabling disadvantaged areas to develop economically.

The two main components of the EIOP, environmental protection and transport, will greatly improve the quality of Hungarian infrastructure. These components are strategically linked to other Operational Programmes, and they strengthen the synergies between the Programmes through the:

- Preservation and careful development of the environmental and natural systems are some of the basic conditions for improving human life quality; therefore they are dominant factors in sustainable economic and social development.
• Effective operation of the transport system is essential for economic development, with the EIOP connecting domestic networks with European transport corridors and integrating regions into Europe’s circulatory processes.

• The EIOP was developed in line with Council Regulation (EC) No. 1260/1999 laying down general provisions on the Structural Funds and the Vademecum on the plans and programming documents of the Structural Funds. The areas to be supported comply with the provisions set forth in Regulation (EC) No. 1783/1999 of the European Parliament and of the Council on the European Regional Development Fund. A number of Hungarian and EU regulations as well as plans and programme documents were also used in the course of preparing the Operational Programme.\(^1\)

2. EX-ANTE EVALUATION

An ex ante evaluation of the Operational Programme (OP) has been carried out in accordance with Section 41 of the Council Regulation on Structural Funds\(^2\) and the relevant Commission Guidelines on Structural Fund Programming.\(^3\)
The ex ante evaluation was undertaken by independent evaluators appointed by the Ministry of Economy and Transport (MoET) was led by KPMG Belgium, the winning team also included, KPMG Consulting, Budapest, Fitzpatrick Associates, Economic Consultants, Dublin, and local independent experts managed by KPMG Budapest, under the independent leadership of Colin Stutt Consulting from Northern Ireland.

Terms of Reference

In accordance with the Commission guidelines, the Terms of Reference asked the ex ante evaluation to address eight aspects of the Programmes:

(1) The analysis of the current situation and SWOT;
(2) Assessment to the rationale for the strategy and its overall consistency;
(3) Quantification of the objectives;
(4) Evaluation of expected impacts and justification of the policy mix;
(5) Quality of the implementation and monitoring mechanisms;
(6) Employment strategy and Equal Opportunities;
(7) Environment;
(8) Evaluation of the Measures of the Programme Complement.

This Chapter deals with Items (1) – (7), and the following sections deal with each of these in turn.


Work Programme

As required under the Guidelines, the ex ante evaluation has been carried out on an interactive basis between the consultancy team and the National Authorities. Over the period March-October 2003 it has involved a series of meetings, workshops and other interaction, iterative exchanges and working papers. It has also involved production of a series of formal Technical Interim Reports (TIR), each dealing with one or more aspects of OP as per the Terms of Reference. TIR No. 1 (June 2003) dealt with items (1) and (2), and TIR No. 2 (September 2003) dealt with Items (3) – (7). Both reports relate to the OP as submitted by the Hungarian Government at end-April 2003. TIR No. 3 (November 2003) will deal with the Programme Complement.

Based on the earlier findings as documented in the First and Second Technical Interim Reports and taking into consideration subsequent changes in the EIOP, as well as results from the consultation with the Commission and the national authorities, the Evaluators made this summary evaluation in early-October. The evaluation includes overall and specific comments on the OP, and considerations on how previous proposals have been taken into account by the authorities.

3. Partnership Consultation

Partnership requirements are based on Council Regulation 1260/1999/EC (Chapter IV Article 8) and Commission Regulation 1159/2000/EC. Consequently, the MoET, in its capacity as the EIMA, is responsible for expressing the objectives and contents of partnership and co-ordination.

In the course of developing the EIOP, intensive consultations took place with social partners and Regional Development Councils; consultations were first managed by the Ministry of Transport and Water Management (MoTWM), then from June 2002 by the MoET, which is responsible – according to government resolutions – for the co-ordination of the compilation of the programme on the basis of government resolutions. Consultations took place during the meetings of Development Policy Co-ordination Inter-Ministerial Committee and its operative agencies and also in special on-site meetings. The individual chapters of the EIOP were presented at these meetings and a consensus reached to integrating the comments and proposals made by the partners into the draft of the EIOP.

The previous MoTWM contracted several research institutions (academic, university, and reputable independent research institutes) to conduct various studies for the EIOP that were also taken into account. Within those – in the areas of environmental protection, energy, and transport – the experiences of surveys analysing our readiness for the European Union provided considerable assistance in the elaboration of the EIOP.

On behalf of the Government, the MoTWM elaborated several development programmes (for example, the Széchenyi Plan), on the basis of which the entire NDP and the individual Operational Programmes were planned.

The Infrastructure Task Force, chaired by the MoTWM and, from June 2002, the MoET, is in charge of the planning of the EIOP. During its regular meetings, the EIOP drafts were
discussed, and the next tasks and responsibilities were identified. The following organisations participate in the Task Force:

- Ministry of Economy and Transport (MoET)
- Department of National Development Plan and Operational Programmes
- Regional Development Department
- Transport Policy Department
- Environmental Policy Department
- Energy Management Department
- Grant Co-ordination and Financing Department
- Ministry of Environment and Water (MoEW)
- Prime Minister’s Office, National Development Plan and EU Support Office
- Prime Minister’s Office, National Office for Regional Development
- Ministry of Finance
- Reconciliation Council of Regional Development Regions
- Ministry of Agriculture and Rural Development
- Energy Centre Public Utility Company

In planning and setting up the implementation institutions, the EIMA is assisted by long-term and short-term experts from the PHARE SPP II Project.

At its session on October 22nd, 2002 the Hungarian Government discussed the EIOP and launched it for social discussion. The EIOP, modified in the course of discussions, was adopted by the Government at its meeting on the 19th December, 2002 to serve as a basis for further work.

As a first step, the objective of the social discussion of the EIOP is to make available for review the documents of the Programme for the wide public. Consultation is aimed at three target groups:

Social, economic and professional organisations,
- Regional and local actors, and
- The general public.

Concerning the method, partnership discussions took place at three parallel forums.

First, the EIOP documentation was sent to economic and social organisations related to the MoET and involved in the compilation of the EIOP for review and dissemination. Second, the EIOP was presented at regional conferences, meetings of Regional Development Councils and other professional events. Third, the EIOP was made electronically available for all citizens on the homepages of the MoET and the Prime Minister’s Office National Development Plan and EU Support Office (PMO NDO). It is also available on the homepage of several regional agencies. Organisations can also continuously monitor the stations of partnership discussions and their detailed documents on the MoET homepage.
The media used in the discussion of the EIOP include both traditional and electronic communication. Partner organisations and regions have received the EIOP both electronically and by mail. In addition, opinions and views could be expressed at various events and conferences, and they were recorded in the memos of the minutes.

The various line ministries responsible for the EIOP carried out discussions with social partners; this lead to the preparation of the EIOP’s priorities based on the EIMA’s guidelines. As a first step, priority stakeholders compiled a list of all social and business organisations, whose members are most affected by the measures included in the programme, and which could provide opinions on horizontal issues such as sustainable development, and integration of environmental aspects into the plan, or equal opportunities.

As a second step, the ministries responsible for each priority sent the EIOP for discussion to the designated partners. Co-ordination with major national partner organisations was performed directly by the EIMA.

EIMA, in co-operation with the ministries, answered the partner’s observations as necessary. The ministry responsible for planning the area concerned decided on which observations to integrate or reject. Most partner organisations consulted forwarded their opinions to the sector ministries and the EIMA.

The EIOP was presented / discussed at several conferences, including a number of conferences organised by Regional Development Agencies, Councils, special organisations, and associations, as well as the EIOP Employers’ Conference organised by EIMA.

In the autumn of 2002, two major conferences were organised by the Ministry of Environment and Water and the MoET, with the participation of municipalities and NGOs. The main observations from the national and regional levels were:

- In some cases, the appropriate limit values / ratios are missing.
- As regards environment protection, protection against inland waters should also be focussed on besides flood protection.
- The importance of low-traffic railway lines is not sufficiently emphasised.
- Proper protection of water bases should be ensured.
- Environmentally conscious education at schools is of importance.
- Prevention of waste generation should also be ensured besides treatment of the waste generated.
- In the energy sector, hydroelectric energy is not taken sufficiently into consideration.
- Town planning programmes should be re-considered.
- Partnership communication, correspondence, forums, and remarks at conferences were all processed in the course of developing the EIOP. Opinions on the NDP strategy and those more closely concerning EIOP were processed and integrated into NDP process (status survey, strategy, operational programmes).
- In general, the EIOP was received favourably; partners agreed with the objectives and principles, supporting, rather that criticising its main directions.
Partners will continue to be involved; without them, the EIOP will not be effective. Partners are united in the common objectives of continuing to work effectively to implement the strategies at both the national and the regional levels.
1. DESCRIPTION OF THE CURRENT SITUATION

1. ASSESSMENT OF THE SITUATION

1.1 EFFORTS TO PROTECT THE ENVIRONMENT

Hungary’s natural assets will be a valuable addition to the European Union. Although the territory of Hungary makes up less than 1% of EU territory, the EU’s natural heritage will be enriched by a region constituting an individual bio-geographical unit, the Pannon region (Pannonicum). The country also has a valuable proportion of original habitats, greater than some Member States. A snapshot of Hungary’s environment is shown in the box below.

<table>
<thead>
<tr>
<th>High-priority environmental aspects:</th>
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<tbody>
<tr>
<td>• 96% of surface waters originate from cross-border areas;</td>
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<td>• Underground waters cater for 90% of drinking water supply, but 66% of water bases are vulnerable;</td>
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<tr>
<td>• The quality limit values for arsenic, boron, fluoride, nitrite and ammonium in the drinking water supply are exceeded in 877 settlements effecting 2,750,000 residents</td>
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<td>• 56.1% of homes are connected (in 2002) to the public sewerage systems.</td>
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<tr>
<td>• 61% of all the collected sewage goes under biological treatment.</td>
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<td>• 68.7 million tons of waste were generated in 2000 (5% hazardous waste, 31% industrial waste, 41% from agriculture and food industry 85% of agricultural and food industry waste is biomass);</td>
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<tr>
<td>• Only 27% of the total waste (except biomass) is reused, while 52% is dumped and 21% is incinerated.</td>
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<tr>
<td>• 53.2 % of hazardous waste without red sludge is of mineral origin, 42.2 % originate from chemical transformation. 15.1 % are from vegetable and animal origin, 9.7 % originates from settlement and institutions, 0.3 % from hospitals and 1.3 % are metal waste.</td>
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<td>• There are 40,000 sources of pollution contaminating and endangering drinking water supply;</td>
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<td>• 25% of the territory of Hungary, responsible for 30% of the GDP, is prone to flooding (i.e. 2.5 million residents in 700 settlements);</td>
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<td>• 15% of the total area of the country is unspoiled from nature protection point of view</td>
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<td>• Renewable energy resources make up 3.6 % of all energy sources</td>
</tr>
<tr>
<td>• 70% of Hungary’s energy resources are imported.</td>
</tr>
</tbody>
</table>
The sustainable use of natural resources and values is a key issue for Hungary, as an objective this can only be achieved by integrating environmental protection and nature conservation into sectoral policies. Integration is extremely important in areas such as land utilisation, rural development, sustainable use of waters, waste management and environmental safety, as well as regional and settlement development and physical planning.

1.1.1. Water

In Hungary, practically all settlements have mains water supply with 98% of the population supplied with water. However, the quality of more than 42% of the drinking water supplies does not fully meet some of the limit values contained in the EC directive\(^4\) and the Hungarian government decree published in 2001. Only 58% of the population live in settlements where the quality of drinking water meets quality standards.

In accordance with the provisions of a new Hungarian legal regulation (Government Decree No. 201/2001 (X. 25)) adopted in the framework of EU harmonisation, the parameters exceeding limit values of the supplied drinking water and directly affecting health (arsenic, nitrite, boron, fluoride and ammonium) have a negative impact on 27.4% of the population (see box above). Therefore, it is necessary to improve drinking water in the Northern Hungary, Southern Great Plain, Northern Great Plain and Southern Transdanubia. Table 1.1 shows the number of inhabitants without adequate drinking water; the highlighted rows are those with the greatest need.

\[\text{Table 1.1 Inhabitants without adequate drinking water (number & % in region, 2000)}\]

<table>
<thead>
<tr>
<th>Region</th>
<th>County</th>
<th>Drinking Water Quality Arsenic (concentration above 0.03 mg/l), boron, nitrite, fluoride above threshold limit (to be solved before 2006)</th>
<th>Drinking water Quality Arsenic (concentration between 0.01-0.03 mg/l), ammonium above threshold limit (to be solved before 2009)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inhabitants in number</td>
<td>%</td>
<td>Inhabitants in number</td>
<td>%</td>
</tr>
<tr>
<td>Southern Great Plain</td>
<td>Bács-Kiskun</td>
<td></td>
<td>Csongrád</td>
<td>114,041</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Békés</td>
<td></td>
</tr>
<tr>
<td>Northern Great Plain</td>
<td>Szabolcs-Szatmár-Bereg</td>
<td>136,519</td>
<td>9.0</td>
<td>Hajdú-Bihar</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jász-Nagy kun-Szolnok</td>
<td></td>
</tr>
<tr>
<td>Central Hungary</td>
<td>Pest county</td>
<td>3,701</td>
<td>0.4</td>
<td>Budapest</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Transdanubia</td>
<td>Fejér</td>
<td>5,529</td>
<td>0.5</td>
<td>Komárom</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Veszprém</td>
<td></td>
</tr>
<tr>
<td>Western Transdanubia</td>
<td>Győr-Moson-Sopron</td>
<td>1,506</td>
<td>0.2</td>
<td></td>
</tr>
</tbody>
</table>

\(^4\) 98/83 /EC directive about the quality of drinking water
Drinking Water Quality
Arsenic (concentration above 0.03 mg/l), boron, nitrite, fluoride above threshold limit (to be solved before 2006)

Drinking water Quality
Arsenic (concentration between 0.01-0.03 mg/l), ammonium above threshold limit (to be solved before 2009)

<table>
<thead>
<tr>
<th>Region</th>
<th>County</th>
<th>Drinking Water Quality</th>
<th>Drinking water Quality</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Inhabitants in number</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inhabitants in number</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vas</td>
<td></td>
<td>38,761</td>
<td>4.0</td>
<td>243,544</td>
</tr>
<tr>
<td>Zala</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somogy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolna</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baranya</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vas</td>
<td></td>
<td>38,761</td>
<td>4.0</td>
<td>243,544</td>
</tr>
<tr>
<td>Somogy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolna</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baranya</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borsod-Abaúj-Zemplén</td>
<td></td>
<td>32,479</td>
<td>2.6</td>
<td>125,255</td>
</tr>
<tr>
<td>Heves</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nógrád</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (Budapest included)</td>
<td></td>
<td>332,536</td>
<td>3.3</td>
<td>2,417,500</td>
</tr>
</tbody>
</table>

The drinking water supply has high iron and manganese content covering 14.6% of the population (1,674,000 people are affected in 545 settlements), but this is not directly harmful to human health.

At the moment, more than 350 service providers operate water utilities.

Hungary is rich in water resources, particularly surface waters; however, 96% of surface waters originate from neighbouring countries. More than 90% of public drinking water supply comes from aquifers or other groundwater resources. Surface water pollution, either indigenous or originating abroad, may result in environmental problems in the ecosystem, aquifers and groundwater. Hungary’s ground water stocks are important natural resources, but they do not regenerate naturally and without costly treatment will remain polluted for a long time.

Of these groundwaters 66% are in a vulnerable geological environment, where surface pollutants can permeate down to water bearing layers, which are therefore vulnerable to pollution. In 1997, the long-term Drinking Water Base Protection Programme was launched; its purposes are to survey drinking water resources in vulnerable geological areas, to establish their status and establish water protection zones to protect ground water supplies.

The scale of the contaminated land problem in Hungary is a legacy of past industrial and military activities and is immense. The MoEW (in the framework of the Hungarian National Environmental Remediation Programme) surveys and identifies past contamination accumulated in the soil, sub-soils and underground waters over the last hundred years. It identifies the pollutants and proposes plans to eliminate them, as well as to prevent fresh contamination. There are still approximately 30,000-40,000 potential polluting sources and polluted areas. MoEW is compiling a geographical information system that records the location of the sites; half of the known sites, approximately 16,000 areas, are now registered.

In spite of considerable developments taking place recently, Hungary is still seriously lagging behind in terms of sewerage and wastewater treatment. The current water consumption figures are much lower than the EU average; consequently, waste water discharge is also lower, but it is also more concentrated in pollutants.
In Hungary, the number of homes connected to the sewerage system was only 56.1% by the end of the year 2002, despite intensive developments since 1993. In 2002, the public utility gap was 36.9%, which means that waste water collection considerably lags behind public utility water supply (see Figure 1.1). This lack of, and in many cases improper, waste water collection endangers potential drinking water resources. In the period between 1994 and 2000, the length of the sewerage network increased by approximately 7,500 km to 22,300 km. By the end of the year 2002, the ratio of biologically treated communal waste water increased to 61%, and 32% of biologically treated waste water (19.5% of the total waste water) underwent tertiary treatment.

**Figure 1.1**

The proportion of homes connected to the water drainage and the public sewage system from 1980-2002

![Graph showing proportion of homes connected to water drainage and public sewage system from 1980 to 2002.]

Source: Ministry of Environment Protection and Transport

The following tables (Table 1.2, 1.3) present the existing significant differences between the regions in the field of waste water collection and treatment. Table 1.2 shows that Central-Hungary, Northern Hungary and the two Great Plain Regions are underdeveloped in terms of wastewater collection and/or treatment.

**Table 1.2 Wastewater load as expressed in population equivalent by regions 2000.december 31.**

<table>
<thead>
<tr>
<th>Region</th>
<th>Total wastewater load p.e</th>
<th>Collecting systems</th>
<th>Treatment plants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total load p.e</td>
<td>Loading ratio %</td>
</tr>
<tr>
<td>Central-Hungary</td>
<td>3,888,949</td>
<td>3,042,977</td>
<td>78.2</td>
</tr>
<tr>
<td>Central-Transdanubia</td>
<td>1,500,346</td>
<td>1,007,326</td>
<td>67.1</td>
</tr>
<tr>
<td>Western Transdanubia</td>
<td>1,488,146</td>
<td>1,110,067</td>
<td>74.6</td>
</tr>
<tr>
<td>Southern-Transdanubia</td>
<td>1,143,009</td>
<td>720,801</td>
<td>63.0</td>
</tr>
<tr>
<td>Northern Hungary</td>
<td>1,342,580</td>
<td>611,798</td>
<td>45.6</td>
</tr>
<tr>
<td>Northern Great Plain</td>
<td>2,049,119</td>
<td>972,992</td>
<td>47.5</td>
</tr>
<tr>
<td>Southern Great Plain</td>
<td>1,834,507</td>
<td>877,143</td>
<td>47.8</td>
</tr>
<tr>
<td>Total</td>
<td>13,246,656</td>
<td>8,343,104</td>
<td>63.0</td>
</tr>
</tbody>
</table>

Table 1.3  Load ratio of wastewater treatment plants 2000.

<table>
<thead>
<tr>
<th>Region</th>
<th>Below 2000</th>
<th>2000 ≤ pe ≤ 10000</th>
<th>10000 ≤ pe ≤ 15000</th>
<th>15000 ≤ pe ≤ 150000</th>
<th>Above 150000</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central-Hungary</td>
<td>26.7%</td>
<td>13.0%</td>
<td>45.0%</td>
<td>42.8%</td>
<td>9.0%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Central-Transdanubia</td>
<td>17.7%</td>
<td>25.3%</td>
<td>62.3%</td>
<td>70.2%</td>
<td>87.6%</td>
<td>60.5%</td>
</tr>
<tr>
<td>Western Transdanubia</td>
<td>16.9%</td>
<td>43.0%</td>
<td>43.4%</td>
<td>74.5%</td>
<td>87.5%</td>
<td>70.7%</td>
</tr>
<tr>
<td>Southern-Transdanubia</td>
<td>2.7%</td>
<td>30.0%</td>
<td>20.6%</td>
<td>75.8%</td>
<td>87.4%</td>
<td>62.8%</td>
</tr>
<tr>
<td>Northern Hungary</td>
<td>6.4%</td>
<td>13.4%</td>
<td>29.1%</td>
<td>55.8%</td>
<td>82.9%</td>
<td>45.5%</td>
</tr>
<tr>
<td>Northern Great Plain</td>
<td>0.0%</td>
<td>8.0%</td>
<td>31.4%</td>
<td>39.2%</td>
<td>81.9%</td>
<td>47.3%</td>
</tr>
<tr>
<td>Southern Great Plain</td>
<td>0.0%</td>
<td>8.5%</td>
<td>17.5%</td>
<td>46.5%</td>
<td>46.7%</td>
<td>33.9%</td>
</tr>
<tr>
<td>Total</td>
<td>7.3%</td>
<td>16.3%</td>
<td>33.7%</td>
<td>58.6%</td>
<td>42.8%</td>
<td>41.7%</td>
</tr>
</tbody>
</table>

Many public utility network and wastewater treatment facilities are obsolete or worn out. Consequently, the capacity of wastewater treatment plants and the efficiency of treatment technologies do not comply with basic criteria at many locations in Hungary. Most facilities need refurbishment, and many need complete replacement of infrastructure.

As regards smaller-sized settlements, it is more economical to introduce individual environmentally sound procedures and to spread small wastewater treatment / disposal facilities to ensure environmentally sound, neutralised disposal.

Hungary is located at the lowest part of one of the most enclosed basins on Earth, with a considerable proportion of surface waters with no outlet, or prone to inundation. As a consequence of climatic conditions, there are extreme fluctuations in water flow, resulting in regular floods and temporary lakes at one extreme, and droughts at the other. Hungary has the greatest area requiring flood protection in Europe, with nearly 25% of the territory of the occupying the flood planes, which includes one third of the total cultivation area, 32% of railways, 15% of public roads, and 30% of the GDP production. The property value at risk is valued at over 5,000 billion HUF (see Table 1.5). This includes the gross value of properties and investments in industry, agriculture, the construction industry, tourism, retail trade, catering, accommodation, municipal and treasury properties and the value of houses.

Table 1.4  Distribution of property value at risk

<table>
<thead>
<tr>
<th>Municipal property values at risk; HUF billion, at 1996 prices</th>
<th>Danube Valley</th>
<th>Tisza Valley</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total:</td>
<td>2 181.86</td>
<td>2 924.13</td>
<td>5 105.99</td>
</tr>
</tbody>
</table>

Source: Ministry of Environment and Water

On the basis of statistical averages, areas prone to flooding will experience minor or average floods every 2 to 3 years, major floods occur every 5 to 6 years, and extraordinary floods can be expected every 10 to 12 years. On the upper sections of rivers, major floods typically last 5 to 10 days, while on the middle and lower sections with little slopes floods may even last for 50 to 120 days. For example, there were a series of abnormally high floods along the River Tisza since 1998 that had adverse social and political impacts.
Construction of the current flood defence system began in the middle of the last century and was completed recently in order to provide protection against damage by floods. In the whole of the country, the total length of primary protection lines reaches 4,181 km, out of which the length of man-made flood control works, dikes and flood protection walls, is 4,003 km, while 178 km are levees. The 96 flood plain bays of the River Tisza are protected against damage by floods by 2,951 km of defences.

The incidence of natural environmental incidents such as extreme floods and drought is growing, as is the impact of environmental contamination/pollution. Flooding in the Tisza valley could have beneficial economic and ecological effect on its regional development by generating tourist income from new eco-parks in the wetlands; however to achieve this it is necessary to control the flooding and improve conditions for its inhabitants through infrastructure development and environmental protection and sympathetic land using changes, in accord with the EU requirements.

1.1.2. Waste Management

Waste management is an important component of any environmental strategy. The National Waste Management Plan has been prepared after a detailed situation analysis; it was approved by the Parliament in November 2002.

It established that:

the ratio of waste generation is high;

- recycling levels are low for most types of waste;
- the extent of depositing is high;
- in numerous cases waste management is inadequate;
- consequently, there are significant health and environmental hazards and risks.

Nearly 70 million tons of waste was generated in 2000 in Hungary, this includes all the waste generated in production and distribution, and in consumption including plant remains and biomass originating from agriculture, and used and recycled in agriculture. Nearly 5% of this is hazardous waste, while from the non hazardous waste amounting to 95.05%, inert waste (part of construction and demolition waste and the waste from mining for building material purposes) amounts to nearly 10%.

Nearly 90% of industrial wastes is made up of slag from power stations and metallurgical plants, mining refuse and industrial waste water sludge or sludge from water treatment. The remaining amount includes the waste similar to industrial waste, originating from distributive industries (trade, services). The non-hazardous waste generated by businesses not using municipal waste treatment public utility services is classified as municipal waste. The quantity of waste removed from public sources increased by 30% between 1992 and 2000; therefore, the collection and disposal of approximately 4.6 million tons of municipal solid waste is a high priority. In 2000, over 90% of municipal solid waste was collected, only about 3% of which was recycled, 14% incinerated, and the vast majority (83%) was deposited. In 2000, there was no organised waste collection for 4% of the population.
In 2001, municipal solid waste was neutralised in 665 registered landfill sites. There are 1,284 small landfill sites of between 300 and 500 m³, of which only 291 had an operating license in 2001. It is estimated that there are a further 2000 abandoned, closed or illegally used landfill sites in the country, 1,323 of which began operation after 1950 but are now abandoned and containing between 300 to 500 m³ of waste. This means that a considerable proportion of waste is returned to the environment with no sufficient neutralisation, resulting in increased environmental loads.

Present waste management practice means, that construction and demolition waste takes up significant capacities in the landfills. The majority of construction and demolition waste is non-hazardous inert waste, except for e.g. paint and glue residues, asbestos and bitumen waste containing tar and wood waste treated with preservatives. Special attention needs to be paid to inert waste containing asbestos.

**Table 1.5 Treatment of waste generated in 2000 [%]**

<table>
<thead>
<tr>
<th>Type of waste</th>
<th>Recycled</th>
<th>Deposited</th>
<th>Incinerated; otherwise neutralised</th>
</tr>
</thead>
<tbody>
<tr>
<td>From agriculture and food industry; non-hazardous</td>
<td>35%</td>
<td>55%</td>
<td>10%</td>
</tr>
<tr>
<td>From industry and other businesses, non-hazardous</td>
<td>29%</td>
<td>60%</td>
<td>11%</td>
</tr>
<tr>
<td>Solid communal</td>
<td>3%</td>
<td>83%</td>
<td>14%</td>
</tr>
<tr>
<td>Fluid communal (waste water slurry excluded)*</td>
<td>30%</td>
<td>22%</td>
<td>48%</td>
</tr>
<tr>
<td>Communal waste water slurry</td>
<td>40%</td>
<td>50%</td>
<td>10%</td>
</tr>
<tr>
<td>Hazardous</td>
<td>20%</td>
<td>74%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27%</strong></td>
<td><strong>52%</strong></td>
<td><strong>21%</strong></td>
</tr>
<tr>
<td><strong>Biomass</strong></td>
<td><strong>85%</strong></td>
<td><strong>13%</strong></td>
<td><strong>2%</strong></td>
</tr>
<tr>
<td><strong>Sum total</strong></td>
<td><strong>48%</strong></td>
<td><strong>38%</strong></td>
<td><strong>14%</strong></td>
</tr>
</tbody>
</table>

*Quantity collected  
**Agricultural and forestry waste recycled nearly totally to biological cycle  
Source: Ministry of Environment and Water, National Waste Management Plan  

8.3% of the total waste (3.4m metric tons) excluding biomass is hazardous and 25% of this is red mud from aluminium production. Excluding red mud, 2.5m tons of hazardous waste is generated annually. Nearly 1.5 million metric tons of this hazardous waste originate from manufacturing, and a further nearly 1 million tons represent combustion waste from power plants and waste incinerators. Approximately 10% of the hazardous waste is of plant or animal origin, and about 0.7 to 1.0 % of municipal solid waste is classified as hazardous. Between 1996 and 2001 the hazardous waste, excluding red mud, decreased by 18.5%, with red mud decreasing by 6%.

The waste recycling rate is lower than 30%, excluding the recycling of agricultural plant remains (see Table 1.6). The recent capacity of collecting systems and utilisation possibilities do not meet the requirements. Some special waste streams (health care waste, animal waste, construction and demolition waste and also batteries, accumulators, electronic devices, used oil, scrapped vehicles) are not properly collected, recycled or disposed.
Table 1.6 Hazardous Waste Generated in 2000 by origin (red mud excluded)

<table>
<thead>
<tr>
<th>Name</th>
<th>Quantity [t]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total plant and animal waste</td>
<td>386,628</td>
</tr>
<tr>
<td>Food and luxury goods production waste</td>
<td>130</td>
</tr>
<tr>
<td>Waste from plant and animal fat products</td>
<td>16,946</td>
</tr>
<tr>
<td>Animal husbandry and slaughter-house waste</td>
<td>349,832</td>
</tr>
<tr>
<td>Waste from raw hide and leather-dressing</td>
<td>13,199</td>
</tr>
<tr>
<td>Timbering waste *</td>
<td>2,314</td>
</tr>
<tr>
<td>Cellulose, paper, and cardboard waste *</td>
<td>3,931</td>
</tr>
<tr>
<td>Other plant and animal waste</td>
<td>276</td>
</tr>
<tr>
<td>Mineral waste (metal waste excluded)</td>
<td>1,360,541</td>
</tr>
<tr>
<td>Metal waste</td>
<td>34,138</td>
</tr>
<tr>
<td>Waste from chemical transformation</td>
<td>517,796</td>
</tr>
<tr>
<td>Municipal and institutional waste (hospital waste excluded)</td>
<td>247,398</td>
</tr>
<tr>
<td>Other special waste (hospital waste)</td>
<td>7,652</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>2,554,153</strong></td>
</tr>
</tbody>
</table>

* polluted with hazardous substances (National Statistical Office-HAWIS) Source: National Waste Management Plan

Note: In 2000, hazardous waste categorisation was determined by Government Decree No. 102/1996. (VII. 12.), representing a more extensive range than the hazardous waste categories by EWC.

Animal waste and hospital (health care) waste, as parts of special waste streams, have to be treated as a special matter of public health. And in 2001, 389 thousand tons of animal waste was generated (~10% of total hazardous waste). Table 1.8 below shows its regional division.

Table 1.7 Animal waste (of livestock husbandry and slaughterhouses) generated by Regions in 2001

<table>
<thead>
<tr>
<th>Region</th>
<th>Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central-Hungary</td>
<td>46,673,244</td>
</tr>
<tr>
<td>Central-Transdanubia</td>
<td>18,659,555</td>
</tr>
<tr>
<td>Western Transdanubia</td>
<td>82,710,125</td>
</tr>
<tr>
<td>Southern-Transdanubia</td>
<td>17,098,780</td>
</tr>
<tr>
<td>Northern Hungary</td>
<td>16,442,233</td>
</tr>
<tr>
<td>Northern Great Plain</td>
<td>61,711,547</td>
</tr>
<tr>
<td>Southern Great Plain</td>
<td>145,958,565</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>389,852,895</strong></td>
</tr>
</tbody>
</table>

On-line environmental database by IEM (Institute for Environment Management)

According to the domestic regulations animal carcasses and hazardous wastes from slaughterhouses, due to their potential risk of infection, are considered as hazardous waste; however, the waste must be treated in accordance with the animal health regulations. The majority of the waste is received and treated by ATEV Rt. The number of functioning dead animal pits and sites operated by the municipalities and by the animal farms is estimated to be around 650. Assuming on average 500 tons capacity and 50% filling rate, 10,000 tons of accumulated animal waste is estimated in these sites, the majority of which is animal carcasses. The dumping sites of sites processing animal waste receive a larger quantity of animal waste than the municipal dead animal pits. In the functioning dumping sites up to now about 125 thousand tons of animal waste has been dumped.

In hospitals and surgeries a total of 8,300 tons of infectious waste, 1000 tons of other hazardous waste and nearly 400 thousand m³ non-hazardous waste similar to domestic waste
is generated annually. Old medicines contribute about 0.1% of the municipal waste stream. The increased use of disposable products results in the 1-2% increase in the quantity of infectious waste. This needs to be neutralised either by incineration or treatment as solid waste after disinfection. However some counties do not have a regional incinerator; hospital incinerators and disinfection facilities generally do not comply with the relevant criteria. The most effected regions can be seen in Table 1.9.

Table 1.8 Hospital waste generated by Regions in 2001

<table>
<thead>
<tr>
<th>Region</th>
<th>Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central-Hungary</td>
<td>4,564,085</td>
</tr>
<tr>
<td>Central-Transdanubia</td>
<td>491,782</td>
</tr>
<tr>
<td>Western Transdanubia</td>
<td>735,760</td>
</tr>
<tr>
<td>Southern-Transdanubia</td>
<td>659,306</td>
</tr>
<tr>
<td>Northern Hungary</td>
<td>755,207</td>
</tr>
<tr>
<td>Northern Great Plain</td>
<td>1,177,752</td>
</tr>
<tr>
<td>Southern Great Plain</td>
<td>928,662</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,312,554</strong></td>
</tr>
</tbody>
</table>

Source: On-line environmental database by IEM (Institute for Environment Management)

The majority of hospitals, about 95%, employ the selective collection of hazardous wastes. 84% of the hospitals use their own system (operating by contracted outside service firms) for the treatment (collection, disinfecting, incineration, etc.) of hazardous waste, or after disinfecting disposal as municipal waste. Due to the reduction of the biodegradable organic material content according to the landfill guidelines; this disposal method should be.

1.1.3 Air Pollution and Noise

In Hungary, changes in the course of the last ten years, including economic restructuring, changes in fuel use (changeover from coal to natural gas), a considerable temporary decline in industrial output, modernisation of combustion plant, vehicle developments, introduction of environmental measures, and the termination of leaded petrol production have resulted in a reduction in air pollution. An environment protection assessment in 2000, estimated that nearly 40% of the population of the country lived in polluted areas and in areas with moderate pollution. The situation is the worst in Central Hungary, where 86% of the population live in air-polluted settlements.

The emissions of pollutants declined significantly between 1996 and 2001 for sulphur dioxide by 41%, for nitrogen oxides by 7%, for dust by 13% and for carbon dioxide by 4% (for regional aspects see Figure 1.2).
Air quality has obviously benefited from the decline in heavy polluting industry. However, air quality has deteriorated in a number of areas heavily affected by transport, primarily alongside busy routes in settlements. The concentration of NO\textsubscript{x} and particulates is really high and exceeds the limit value for health protection temporarily. Transport also makes a significant contribution to the emission of greenhouse gases (17.5\% of CO\textsubscript{2} emissions come from transport in 2000).

A transitional arrangement was granted on the basis of Council Directive 88/609/EEC of 24\textsuperscript{th} November 1988 on the limitation of emissions of certain pollutants into the air from large combustion plants (LCPs). This Directive shall be repealed by Directive 2001/80/EC. Hungary's position paper to the Accession Conference of 18\textsuperscript{th} October 2002 (CONF-HU 38/02), Directive 2001/80/EC has been transposed by Ministerial Decree No. 10/2003 (VII. 11.) KvVM on LCPs, which came into force on 19\textsuperscript{th} August 2003. The power plants and other proprietors possessing and operating LCPs prepared implementation plants must meet the requirements of the Decree by 31\textsuperscript{st} December 2004; this is in line with Hungary’s agreed position.
For waste incineration, Directive 2000/76/EC, which covers Directive 94/67/EC shall be repealed by Directive 2000/76/EC as from 28th December 2005, has been transposed by Ministerial Decree 3/2002. (II. 22.) KöM, which came into force on 23rd April 2002. Hungary’s transitional arrangement is not affected by this new Directive. The proprietors of incinerators have prepared implementation plans in line with Hungary’s position paper to meet requirements by 30th June 2005; by this time there will be a significantly reduction of emissions into the air from large combustion plants and waste incinerators.

In Hungary there are two types of measuring networks to control ambient air quality. The manual network serves for long-term assessment of air pollution (SO₂ NO₂ and dust) and has been operating in nearly 100 settlements since 1974. The network consists of 52 monitoring stations. Six stations are operated as background stations, sited far from directly polluting sources, the other stations are established to monitor pollutants from industrial sources and from the traffic in the settlements. After issuing the new Hungarian air quality regime in 2001 the reconstruction of the whole network has started with the installation of additional monitoring stations and equipment; this will increase the coverage of monitoring to additional pollutants such as PM₁₀, benzene, toluene, xylene, ozone and carbon monoxide.

The monitoring network is capable of the continuous on-line measurement of SO₂, NO/NOₓ, CO, VOC, O₃ and PM₁₀. In 5 densely populated cities monitoring stations operate as a local network, where smog alert systems have been operating in three big cities; in a further 13 city centres monitoring stations were established as individual measuring points during the 1990s. The data of the whole network is collected and processed by the National Air Quality Data Centre, which evaluates and assesses the data and publishes it on the local screens, and in daily, monthly and yearly publications. The national data centre contributes data for the international data centres. A uniform system of quality assurance/quality control of air quality management was introduced in 2002. A Reference Centre was established in 1996 to manage the air quality issues for the whole measuring networks; it is developing a uniform national QA/QC system.

In Hungary, the highest amount of noise emissions is from road traffic; it is estimated that in the entire country, 50 to 55% of the population, and 60 to 65% of large towns are affected, and railway noise effects disturbs 8 to 10% of the population. More than 80% of settlements along main railway lines experience night-time noise levels higher than the allowable limit; this indicator is about 37% for side lines. Noise loads from air traffic are restricted to certain areas in the vicinity of airports and airfields. About 30% of controlled industrial operations produce noise emissions higher than the allowable limit.

The 12 Regional Environmental Inspectorates (KOFEs) make approximately 50 - 60 annual measurements. Besides the inspectorates, local government and those, who are responsible for road traffic, also examine sometimes the noise emission along the busiest roads. The inspectorates do not have any equipment suitable for long-term measurements and analyses.

1.1.4 Nature protection

Hungary’s characteristic natural geographic features gave way to the creation of variegated landscapes, valuable geological and surface geographical assets, and rich natural flora and fauna. Hungary’s natural assets are an extremely valuable resource. However, relatively unspoiled areas in the country have declined to 15% of the total area and formerly contiguous habitats with gradual transitions became significantly fragmented as a consequence of land
use for a thousand years. A number of plant communities and about 20-25% of animal species in Hungary have become endangered. As a result of economic revival, the number and extension of greenfield investments is further growing and there is a boost in the construction of new roads and motorways.

695 plant species and 965 animal species are protected by law, 63 plant and 137 animal species out of which are under increased protection. In 2002, 9.9% of the area of the country was protected as nature conservation areas, including 1.2% under increased protection as nature conservation areas. By 2008, legal protection will extend to 11-12% of the area of the country.

As part of the *Pan-European Ecological Network* (PEEN) programme, initiated by the Council of Europe, Hungary designated its National Ecological Network in 1999.

The EU nature conservation directives the Birds Directive (79/409/EEC) and the Habitats Directive (92/43/EEC) have mostly been adopted by Hungarian legislation. Based on the requirements of these directives Member States have to designate Special Protection Areas (SPA) (see figure 1.3) for the protection of species listed in Annex I of the Birds Directive and propose a list of sites of community interest (pSCI) (see figure 1.3) for the protection of habitats listed in Annex I and species listed in Annex II of the Habitats Directive. The national list of proposed pSCI will shortly be submitted to the European Commission for consideration. Bigoeographical seminars will decide whether a proposed site can be a Special Area of Conservation (SAC). Together, SPAs and SACs build up the Natura 2000 network.

**Figure 1.3**
Hungary will designate SPAs as required by the Birds Directive. SPAs are nominated mainly for the protection of the most rare and endangered bird species at the European level, including migratory bird species. Once the SPAs (see figure 1.4) are designated, they are directly included into the NATURA 2000 network.

The main objective of the Habitats Directive is to preserve and maintain biodiversity in Europe conserving habitats and species of community interest. The habitats and species on the Annexes of the Habitats Directive are either threatened, or have small distribution areas, or they are characteristic for a biogeographical region.

Natura 2000 is a network of such SPAs, which are not include the whole ecosystem, designed to guarantee the preservation of species of community importance, their sites and some other special types of habitats. In Natura 2000 sites Member States are obliged to the preservation of habitats (e.g. via treatment plans) of species caused the selection of the area, prevention of disturbance of these species, exploration and examination of possible impacts of investments and programs with effect to the site (via impact assessments). Permission is issued only in the case, if the investment is not endanger the unity and intact of these sites. If infrastructure and activity has not endangered the nominated species and biospheres, even hunting, fishing and extensive farming can be allowed. The Natura 2000 network is based not only on command and control, but the system of treatment plans, (prevention and compensation) contracts.

Preliminary evaluations show that about 15 % of Hungary’s territory will be proposed into the Natura 2000 network by the day of accession. This means that a further 7-8 % of Hungary’s territory will be designated to nature conservation status. However, the European level of protection is not equivalent to the Hungarian nature conservation categories; so the national system will be amended to account for Natura 2000, but this will not diminish Hungary’s conservation process.
1.1.5 Energy Management

Between 1994 and 2000 energy consumption in Hungary more or less stagnated and amounted to 1 054.7 PJ in 2001. In order to generate one unit of GDP calculated at purchasing power parity, the Hungarian economy uses more than 1.5 times as much energy as developed EU member states. According to some expectations, the currently projected annual 5% economic growth can be achieved by a 1 to 1.5% energy consumption increase in the next few years, resulting in an annual 3.5 to 4% energy efficiency increase. The permanent and dynamic energy consumption growth in the transport sector is expected to continue and as incomes rise, a continuous increase is also expected in the energy consumption of the residential sector.

In 2001, total electricity consumption amounted to 33,677 GWh, 50% out of which was used in production and 33% was consumed by households. The current 10.6% share of electricity in total energy consumption is expected to increase (the average of European countries is 13.4%).

The electricity and gas supply companies and, except for two, traditional thermal power plants were also acquired by strategic investors in 1995 to 1996.

In 2001, the dependence of the country on energy imports was rated at 72.6%; the energy imports of the country exceeded HUF 792.2 billion at 2001 prices. Due to the exhaustion of economically exploitable fossil fuel reserves and an expected increase in energy demand, Hungary’s dependence on energy imports is to grow in the next few years.

The EU and the OECD (through extensive regulations on environment protection), as well as the UN and other organisations (through applying a broad range of conventions) make considerable efforts to mitigate the detrimental effects of energy consumption and generation on the environment. Hungary has to meet obligations set forth in a number of international agreements in the field of protecting air purity. The decline in energy demand following the economic recession made it easier to fulfil the earlier undertakings (SO₂, and NOₓ). The fulfilment of later undertakings (Sulphur II, CO₂ restrictions) is subject to effective energy savings and a quick shift to the increased utilisation of renewable energy resources.

Air quality limit values were reviewed and Hungary adopted the air quality limit values specified in the EU directive on large combustion plant. With the adoption of the new Act on Electricity in 2001, the country took a significant step towards joining the EU’s internal energy market, by fulfilling the EU requirement on market liberalisation as regards electricity.

There are possibilities yet unexploited for improving the energy efficiency of energy production, especially in the fields of heating technology, district heating, co-generation and agriculture. The energy efficiency of the processing industry shows an improving trend, but the buildings, including residential buildings, are outdated and waste energy. The bad state of repair of certain components of district heating systems represents a particular problem, which causes district heating to be not competitive in respect of price and reliability.

The ten-year energy savings programme specified in Government Resolution No. 1107/1999 (X. 8.) embraces a range of energy efficiency programmes to be implemented in the business, household and municipality sectors and pays adequate attention to promoting the additional use of renewable energy resources. The Government has provided significant resources for all
It is necessary to develop the utilisation of renewable energy resources, paying particular attention to the utilisation of renewables in power generation in order to reduce dependence on imports and environmental damage in line with the EU objective according to which the proportion of renewable energy resources in the total use of primary energy resources should be increased to 12% by 2010. In relation to the Directive 2001/77/EC on the promotion of electricity from renewable energy sources, Hungary has agreed to achieve a 3.6% proportion of renewable energy electricity by 2010 (national indicative target).

In respect of renewable energy resources, Hungary's properties in general are lagging behind those of the Member States of the European Union. Hungary's greatest opportunities lie in the utilisation of biomass-based (including biofuels for transport, biogas from agriculture, municipal biodegradable waste and wood-based biomass) and geothermal energy, but there has been a favourable shift in the field of using wind and solar energy over the recent period. Currently, the proportion of renewable resources out of the total energy consumption is 3.6% (EU average: 5.7%), and 0.84% out of power generation.

The spread of renewable energy resources in Hungary requires significant investment support as well as much higher purchase prices guaranteed in the long run as compared to traditional energy resources in the renewables technologies and inform dissemination related to utilisation of renewables. In order to ensure sustainable development, it is especially important to enforce environmental requirements for both existing power generation and consumer equipment and for future developments.

### 1.2. Transport Situation

Owing to Hungary's favourable situation in terms of transport geography, East-West and North-South commercial routes cross the country. Three main corridors out of the large European transit routes (IV, V, and VII) cross the country as part of the TEN network, a fourth is the Danube and three further corridor branches (V/B, V/C, and X/B) start here as well. (See Appendices)

<table>
<thead>
<tr>
<th>Key issues for transport:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 3 Helsinki corridors cross the country</td>
</tr>
<tr>
<td>- Not enough motorways connect to the TEN-corridors</td>
</tr>
<tr>
<td>- 28% of the total length of main roads crosses human habitats</td>
</tr>
<tr>
<td>- Road passenger transport and transport of goods grow annually by 5-7%</td>
</tr>
<tr>
<td>- Main roads’ capacity for transit traffic is not adequate</td>
</tr>
<tr>
<td>- Axle-load capacity doesn’t meet EU’s requirements</td>
</tr>
<tr>
<td>- Necessity of intermodal junctions’ and logistics centers’ development</td>
</tr>
<tr>
<td>- Lack of ports’ basic infrastructure</td>
</tr>
</tbody>
</table>
The importance of these routes keeps increasing as the European integration process develops contributing to regional development. Therefore, it is essential to improve connections with West European transport axes as soon as possible and to accelerate network development because leading through transit traffic more rapidly and in a more controlled manner boosts integration to global economic and trade processes.

Due to their role as a backbone network, the Hungarian sections of these corridors promote the development of the areas concerned; adequate network density can enhance nearly identical rates of development in regions. In the course of the development of integrated transport infrastructure, i.e., road, rail, water or air transport, the specific social and economic development levels of the areas concerned as well as ecology aspects should also be taken into account.

The current transport network is characterised by underdevelopment, poor technical parameters, low proportion of expressways and missing connecting roads. In combination these deficiencies significantly hinder economic and social development in some areas, and certain disadvantaged areas are relatively isolated with poor access to regional centres.

Accessibility analysis shows that the low density of transport infrastructure negatively affects the standard of living of the population. Most settlements are geographically close to their neighbours, but due to the lack of a direct road connection, some of them can only be accessed after lengthy detours. In many cases it also takes a long time to access rail connections. Therefore, one key objective of economic development is the improvement of accessibility.

In terms of planning the work distribution between the various sub-sectors of transport has changed significantly in both passenger and freight transport; this trend, which has continued over the last few decades, has been taken into account in the preparation of the EIOP. While the performance of railway transport is falling and there have been hardly any changes in the performance of water transport, the share of air and road transport have increased dynamically.

Illustrations of changes in transport mode structure are presented in the following tables:

**Table 1.9 Goods' transport performances by transport division (internal and international)**

<table>
<thead>
<tr>
<th>Years</th>
<th>Total</th>
<th>Railway</th>
<th>% of total</th>
<th>Road</th>
<th>% of total</th>
<th>Water-way</th>
<th>% of total</th>
<th>Pipe</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>23 675</td>
<td>8 422</td>
<td>35,6</td>
<td>9 955</td>
<td>42,0</td>
<td>1 338</td>
<td>5,7</td>
<td>3 925</td>
<td>16,6</td>
</tr>
<tr>
<td>1996</td>
<td>24 874</td>
<td>7 634</td>
<td>30,7</td>
<td>10 182</td>
<td>40,9</td>
<td>2 482</td>
<td>10,0</td>
<td>4 532</td>
<td>18,2</td>
</tr>
<tr>
<td>1997</td>
<td>24 789</td>
<td>8 149</td>
<td>32,9</td>
<td>10 430</td>
<td>42,1</td>
<td>1 644</td>
<td>6,6</td>
<td>4 516</td>
<td>18,2</td>
</tr>
<tr>
<td>1998</td>
<td>27 144</td>
<td>8 150</td>
<td>30,0</td>
<td>12 592</td>
<td>46,4</td>
<td>1 561</td>
<td>5,8</td>
<td>4 799</td>
<td>17,7</td>
</tr>
<tr>
<td>1999</td>
<td>26 340</td>
<td>7 734</td>
<td>29,4</td>
<td>13 155</td>
<td>49,9</td>
<td>958</td>
<td>3,6</td>
<td>4 457</td>
<td>16,9</td>
</tr>
<tr>
<td>2000</td>
<td>26 398</td>
<td>8 095</td>
<td>30,7</td>
<td>13 329</td>
<td>50,5</td>
<td>891</td>
<td>3,4</td>
<td>4 024</td>
<td>15,2</td>
</tr>
<tr>
<td>2001</td>
<td>26 241</td>
<td>7 731</td>
<td>29,5</td>
<td>12 500</td>
<td>47,6</td>
<td>1 055</td>
<td>4,0</td>
<td>4 904</td>
<td>18,7</td>
</tr>
<tr>
<td>2002</td>
<td>26 402</td>
<td>7 609</td>
<td>28,8</td>
<td>13 086</td>
<td>49,6</td>
<td>1 107</td>
<td>4,2</td>
<td>4 567</td>
<td>17,3</td>
</tr>
</tbody>
</table>

Change compared to 1995 in %

|       | 11,5 | -9,7 | 31,5 | -17,3 | 16,4 |

Source: National Statistical Office
Table 1.10. Interurban passenger transport performances

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Railway</th>
<th>% in total</th>
<th>Road</th>
<th>% in total</th>
<th>Waterway</th>
<th>% in total</th>
<th>Air</th>
<th>% in total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>20,4</td>
<td>8,5</td>
<td>41,7</td>
<td>9,5</td>
<td>46,6</td>
<td>0,05</td>
<td>0,2</td>
<td>2,3</td>
<td>11,3</td>
</tr>
<tr>
<td>1996</td>
<td>21,1</td>
<td>8,6</td>
<td>40,8</td>
<td>9,8</td>
<td>46,4</td>
<td>0,04</td>
<td>0,2</td>
<td>2,7</td>
<td>12,8</td>
</tr>
<tr>
<td>1997</td>
<td>21,9</td>
<td>8,7</td>
<td>39,7</td>
<td>10,2</td>
<td>46,6</td>
<td>0,04</td>
<td>0,2</td>
<td>3,0</td>
<td>13,7</td>
</tr>
<tr>
<td>1998</td>
<td>22,5</td>
<td>8,8</td>
<td>39,1</td>
<td>10,7</td>
<td>47,6</td>
<td>0,04</td>
<td>0,2</td>
<td>3,0</td>
<td>13,3</td>
</tr>
<tr>
<td>1999</td>
<td>24,3</td>
<td>9,6</td>
<td>39,5</td>
<td>11,2</td>
<td>46,1</td>
<td>0,04</td>
<td>0,2</td>
<td>3,5</td>
<td>14,4</td>
</tr>
<tr>
<td>2000</td>
<td>25,5</td>
<td>9,9</td>
<td>38,8</td>
<td>12,1</td>
<td>47,5</td>
<td>0,04</td>
<td>0,2</td>
<td>3,5</td>
<td>13,7</td>
</tr>
<tr>
<td>2001</td>
<td>25,4</td>
<td>10,0</td>
<td>39,4</td>
<td>12,0</td>
<td>47,2</td>
<td>0,04</td>
<td>0,2</td>
<td>3,4</td>
<td>13,4</td>
</tr>
<tr>
<td>2002</td>
<td>26,1</td>
<td>10,6</td>
<td>40,6</td>
<td>12,1</td>
<td>46,4</td>
<td>0,03</td>
<td>0,1</td>
<td>3,4</td>
<td>13,0</td>
</tr>
</tbody>
</table>

Change compared to 1995 in %

| %    | 27,9 | 24,7 | 27,4 | -40,0 | 47,8 |

Source: National Statistical Office

Table 1.11 National stock of road motor vehicles (thousands)

<table>
<thead>
<tr>
<th>Years</th>
<th>Total</th>
<th>Passenger cars</th>
<th>Buses</th>
<th>Motor-cycles</th>
<th>Lorries</th>
<th>Road tractors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>2 749,4</td>
<td>2 245,4</td>
<td>20,2</td>
<td>159,1</td>
<td>292,1</td>
<td>32,6</td>
</tr>
<tr>
<td>1996</td>
<td>2 766,3</td>
<td>2 264,1</td>
<td>19,1</td>
<td>150,9</td>
<td>303,1</td>
<td>29,1</td>
</tr>
<tr>
<td>1997</td>
<td>2 795,8</td>
<td>2 297,1</td>
<td>18,6</td>
<td>137,9</td>
<td>315,2</td>
<td>27,0</td>
</tr>
<tr>
<td>1998</td>
<td>2 670,3</td>
<td>2 218,0</td>
<td>18,5</td>
<td>97,0</td>
<td>312,2</td>
<td>24,6</td>
</tr>
<tr>
<td>1999</td>
<td>2 706,4</td>
<td>2 255,5</td>
<td>17,7</td>
<td>87,6</td>
<td>322,1</td>
<td>23,5</td>
</tr>
<tr>
<td>2000</td>
<td>2 840,0</td>
<td>2 364,7</td>
<td>17,8</td>
<td>91,1</td>
<td>342,0</td>
<td>24,4</td>
</tr>
<tr>
<td>2001</td>
<td>2 974,1</td>
<td>2 482,8</td>
<td>17,8</td>
<td>93,1</td>
<td>355,2</td>
<td>25,2</td>
</tr>
<tr>
<td>2002</td>
<td>3 140,9</td>
<td>2 629,5</td>
<td>17,8</td>
<td>97,6</td>
<td>369,3</td>
<td>26,7</td>
</tr>
</tbody>
</table>

Change of stock compared to 1995 in %

| %    | 14,2 | 17,1 | -11,9 | -38,7 | 26,4 | -18,1 |

Source: National Statistical Office

1.2.1 Road Transport

The European tendency whereby increased mobilisation demands require an increase in the performance and safe operation of networks also prevails in transport in Hungary. Traffic bottlenecks, where the pace of traffic growth is faster than capacity expansion, should be relieved; this will also reduce environmental damage.

Among the infrastructure conditions for the economic growth of a given region, besides the quality of the environment, the territorial resources and the geographical location, the accessibility has a determining role, which is mainly defined by the level of development of the transport infrastructure. The increase of transport that goes together with the development of the internal market significantly raises the importance of the accessibility in the small
regions as well. The road network that is well constructed and has appropriate capacity can be even regarded as a means for growth because it has been witnessed in practice that the economically developed centers and the areas with the best accessibility is going hand in hand.

The density of the road network is 1.46 km/km², equalling to 88% of the EU average. The 30,300 km long national main road network caters for about 70% of total road traffic. This network includes only 655 km of expressways, which is only a 40% of the Western European average of the share of motorways. Only one of the expressways under construction reaches the border.

Hungary’s road network has a radial structure, with Budapest as its centre. Its main characteristic features include the shortage of river bridges and a lack of transversal connections. Apart from this other considerable problems also arise from radial road network. Upgrading the main road network is necessary, because these roads mean the dominant commercial /economic connections at present and in the future.

The increase in the number of vehicles as well as a dynamic growth of public road traffic indicates permanent insufficiencies in road capacity around cities and larger settlements. This is a consequence of the approximation of the level of motorisation in Hungary to the level within EU Member States and of an annual 5 to 7% increase in transit traffic. In 2000, the number of passenger cars in Hungary reached half of the average for the European Union at a rate of 235 passenger cars/1,000 inhabitants. By 2015, it is expected to go to 320 passenger cars/1,000 inhabitants. The current value of 34 lorries/1,000 inhabitants for road freight transport vehicles is expected to increase to 40 and in the long-term to 48 lorries/1,000 inhabitants.

This is resulting in excessive environmental loads, frequent traffic jams, worse access indicators, and inefficient vehicle operation, which are detrimental to liveability. This problem particularly affects large towns and their agglomerations, primarily in peak hours. The bypass road construction programme in progress will provide solutions for diverting transit traffic only for few of the settlements, since 28% of the total length of the double lane trunk roads crosses human habitats and some hundred towns would need bypasses.

Taking into account the position of Hungary from the point of view of transit charge, most of the problems appear at the western versus eastern direction, because most double-lane trunk main roads carry heavy traffic. The lack of the elements connecting the peripheral and underdeveloped regions as well as the unfavorable network structure are all factors that limit the regional and county cooperation and hinder the efforts for catching-up. It is necessary to increase the capacity of these double-lane trunk main roads, making overtaking safer; this will allow a higher average speed and would improve the traffic safety. One of the results of the changes in the economic structure after 1990 was that the role of the roads significantly increased. The national road network was not prepared for the suddenly increased traffic of the heavy goods vehicles, therefore the deterioration process of the roads accelerated.

The EU’s regulation concerning the maximum allowed axle-load of the heavy goods vehicles with its value of 11.5 tons is less strict than the Hungarian regulation that was previously in force (10 tons). The deadline for introducing the regulation with the required uniform value of 11.5 tons after Hungary’s accession is December 31st, 2008, until which the transitionally unchanged regulation is governed by the derogation set in the accession contract.
The traffic of the vehicles with axle-loads between 10-11.5 tons would only accelerate the deterioration processes of the road network wrestling with significant load-bearing problems therefore it is a special economic interest to strengthen the pavement of network sections participating in the transit traffic before the derogation expires. A comprehensive strengthening program for pavement strengthening works, covering the length of the main network of 7,414 km, has been with support from ISPA pre-accession instruments

**Table 1.13. National Public Roads by surface type, 2001**

<table>
<thead>
<tr>
<th>Region</th>
<th>Concrete, stone tiles and asphalt (%)</th>
<th>Macadam stones (%)</th>
<th>Ratio of dirt roads (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Hungary</td>
<td>89.4</td>
<td>8.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Central Transdanubia</td>
<td>98.5</td>
<td>0.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Western Transdanubia</td>
<td>84.6</td>
<td>5.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Southern Transdanubia</td>
<td>82.2</td>
<td>6.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Northern Hungary</td>
<td>98.5</td>
<td>1.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Northern Great Plane</td>
<td>99.1</td>
<td>0.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Southern Great plane</td>
<td>84.5</td>
<td>13.0</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>94.0</td>
<td>5.0</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Source: Central Statistics Office, 2002

**Table 1.14. National public roads by ranking, 2001**

<table>
<thead>
<tr>
<th>Region</th>
<th>Highways (km)</th>
<th>Other national public roads</th>
<th>Total</th>
<th>Total national roads per 100 km²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Motor-ways, dual carriage-ways</td>
<td>Primary</td>
<td>Secondary</td>
<td>Total</td>
</tr>
<tr>
<td>Central Hungary</td>
<td>158</td>
<td>293</td>
<td>247</td>
<td>1 908</td>
</tr>
<tr>
<td>Central Transdanubia</td>
<td>138</td>
<td>359</td>
<td>563</td>
<td>2 905</td>
</tr>
<tr>
<td>West Transdanubia</td>
<td>72</td>
<td>239</td>
<td>782</td>
<td>3 756</td>
</tr>
<tr>
<td>South Transdanubia</td>
<td>18</td>
<td>274</td>
<td>704</td>
<td>3 338</td>
</tr>
<tr>
<td>North Hungary</td>
<td>64</td>
<td>299</td>
<td>516</td>
<td>3 777</td>
</tr>
<tr>
<td>North Great Plane</td>
<td>0</td>
<td>418</td>
<td>738</td>
<td>3 749</td>
</tr>
<tr>
<td>South Great Plane</td>
<td>56</td>
<td>291</td>
<td>782</td>
<td>3 881</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>505</strong></td>
<td><strong>2173</strong></td>
<td><strong>4331</strong></td>
<td><strong>23 313</strong></td>
</tr>
</tbody>
</table>

Source: National Statistical Office, 2002

1.2.2 Rail transport

**Rail network**

The 7,800 km long railway network, which used to have a dominant share in transport until the most recent decades also has a radial structure with Budapest as its centre. Railways continue to play an important part, with a 40.6 % share in interurban passenger transport and 28.8 % in freight transport.

However, the role of railways has been gradually declining through the years as a result of changes in road transport and transport requirements, a lack of comprehensive railway developments, and operations concentrating only on the most urgent maintenance works.
Deteriorated technical conditions and other factors affecting traffic, such as track speed, aged and outdated rolling stock, and the continued operation of branches with little traffic, impedes efficient and competitive railway operation.

The supply indicator of the network is 83 km/1,000 km², which is significantly higher than the 65 km/1000 km² European average, but there is a speed limit on nearly 40% of the lines due to the technical conditions of the tracks, representing nearly 3,500 km of tracks. The general 100 km/h speed is allowed only on main lines. The internationally accepted 140 to 160 km/h speed limit is in effect in certain sections of the Budapest-Hegyeshalom (-Vienna) route. This is again feasible by implementing a reconstruction and investment project to be financed partly by the EU. This is due, besides the extremely bad state of repair, to 16% of railway lines have more than one track and 33% are electrified, compared to the 41% and 48% EU indicators.

In accordance with EU Directive 91/440/EEC, public owned railways is being “unbundled” and being divided in individual business units. One of the new organisations, with a separate accounting system, will be involved with the railroad network and tracks, while the other commercial company will provide passenger and freight transport services. The division of the lines of the railway company to national and local lines will be initiated in the mid-term in order to enhance the financial and budgetary transparency of the organisation.

The demands for modern railroad freight transport are to be more highly satisfied by on-going line reconstruction and electrification with EU ISPA and PHARE support as well as developing terminals operating on large railway border crossing stations. At the same time rail security and traffic control structures are also being modernised. Developments are all intended for environment protection, improved accessibility, and better organised railway transit turnover; they also significantly contribute to effective co-operation with the railway network of the EU.

Suburban Rail Transport

Budapest is the most important economic, cultural, social and administrative centre. However, increasing costs of living, motorization, mobility coupled with the desire to improve the quality of life, there is an increasing trend for people to move to the suburbs. 20% of the Hungarian inhabitants live within the Budapest conurbation. The population density in Central Hungary Region is 411 persons/ km² but within the conurbation the population density is 3450 persons/ km²; a large proportion of these people are commuters, which puts a great strain upon suburban transport systems.

The daily public transport usage in the capital conurbation is 3.798 million journeys / day that almost reaches the top capacity at the present technical condition. Several hundred thousand people come and go to and from Budapest every day: 160 000 people arrive and leave by train, 110 000 of them on a daily basis. At present there are increasing demand for having adequate railway transport for long-distance and suburban or local transport as well. However, since 1970 the railway has been in a disadvantageous position in the traditional transport market, but stabilisation of this situation started in 2000.

Road transport is getting more and more difficult due to congestion at peak hours and the condition of the environment that is gradually worsened by noise and air-pollution: as a result more and more people are using suburban transport systems, which are in turn becoming
congested. The situation is particularly bad along the Budapest – Esztergom railway line where a new university was also built and the Budapest – Érd suburban railway line. On the former line travelling a 25 km distance takes the same time as one hundred years ago (55 minutes).

1.2.3 Air transport

Hungary has three airports of international standards at Budapest, Balaton-West and Debrecen. The turnover at Budapest Airport and temporary airports is gradually increasing in accordance with international tendencies. Between 1991 and 2002, Hungarian air traffic increased more than two and a half fold. Passenger traffic at the Budapest Airport, experienced increases in passenger traffic from 1.8 million in 1991 to 5.5 million in 2002. There was an exceptionally large increase in traffic in the Hungarian airspace due, to a large extent, to the war in Yugoslavia. With this significant development of the air transport volume the ratio of air traffic within passenger transport in Hungary may increase by 5% in terms of passenger kilometres by 2010 (by 15 % in terms of public transport).

Although the presently available airport facility capabilities are sufficient for increasing passenger traffic and ensure sufficient service standards, they will also need to be developed in the medium term. The largest-volume investments are required for the expansion of the passenger service and other related facilities at Budapest Airport (along with effective and profitable operations) and for the fast train service to provide a link to the capital city.

If this growth tendency continues, one possible solution could be to transform the present airport to a ”hub” airport in order to serve transit flights to Eastern Europe and the Middle East. The developments required for border clearance corresponding to the requirements of the Schengen Agreement should be implemented at airports that conduct international traffic as part of the national system of border crossings.

At present, regional airports are on average at a 200 km distance from each other in the European Union. In Hungary, the regional airport development programme included in the transport strategy represents a step towards realignment with the level of supply in the EU. However, there is no scheduled domestic air traffic within Hungary at present. Regional airports, except for Airport Debrecen and Balaton-West Airport, can only receive small and medium-sized planes safely, and can be used for occasional sight-seeing, sports, and business flights. The development of regional airports could significantly improve the accessibility indicators of underdeveloped regions. Consequently, the economy boosting impact on the area will be especially important. Infrastructure investments are beginning at other airports and aerodromes to raise the quality of airport services.

1.2.4 Water transport

There is currently about 1,600 km of navigable waterways in Hungary. Most commercial traffic is on the Rivers Danube and Tisza; and there is occasional crop transport on the Körös river. The tendency in the 1990s was that traffic on the upper section of the Danube increased with the inauguration of the Danube-Maine canal and increasing importance of European integration, while trade on the section of the Danube lower of the Budapest stagnated, as are sult of the Yugoslav crisis. In the last three years the volume of international freight transport has increased on both the upper and the lower section of the Danube. Despite this, the share of river navigation in the division of transport tasks is around 5%, which barely exceeds 7% when taken together with transit transport. In 2002, the share of water transport was 4.2%
calculated in freight ton-km, which is low compared with the EU member states bordering the Danube.

The technical parameters of the Danube section in Hungary, as part of the Helsinki Corridor, (the Hungarian TINA network incorporates a 378 km section of the Danube and six ports) do not meet the requirements for the traffic of EU self-propellant pusher crafts and pushed trains of crafts. As a consequence, the possibilities offered by the Danube-Main-Rhine (DMR) channel may be exploited only to a limited extent. Ship capacities may be utilised only up to 60 to 70% in the Hungarian section, as opposed to the 80 to 100% utilisation rate in Europe; this limits the availability of the transport opportunities offered by the DMR channel. Hungary’s river development objective is to create an international waterway along the Danube on the Hungarian section and common Hungarian-Slovak section of the Danube and below Budapest in a way so that vessels with a draught of 2.5 m may navigate without immersion restrictions 300 days a year.

As a consequence of extreme water level fluctuations, as well as locally and periodically unfavourable navigation path parameters, there is no considerable traffic on the river Tisza; further development is limited by the absence of modern ports. To create the conditions of Tisza, Kőrös, Bodrog waterways suitable for the undisturbed traffic of freighters carrying 400 to 600 tonnes, is very important for the purposes of the regional development of the eastern part of the country.

In order to improve the competitiveness of Hungarian river transport it is necessary to provide basic infrastructure at National Public Ports. The lack of road and railroad connections are part of the underdeveloped port infrastructure consequently ports do not meet the requirements for EU-conform inter-modal terminals. The low density of ports also adversely affects water transport; on average port density along the DMR channel is 50 km/port, it is less than 150 km/port in Hungary. It will also be important to invest in the development of border ports to Schengen standards, as well as of creation of additional border crossings on the inland waterways.

1.2.5 Intermodal traffic – logistics centres

Intermodal (Ro-La) traffic was introduced in Hungary in 1992. In the first year 16,180 trucks (accompanied) passed along the rail network. In 2002, the number of trucks carried on rail reached 107,000. Today 8-9% of the total transit traffic uses the rail network; this is constrained by only having 50 railway carriages suitable for carrying trucks.

In 2002, the quantity of goods carried as unaccompanied traffic was 3.32 million tons; this is almost four times more than that in 1992, which represents 11% of MÁV Rt.’s international traffic. At present 65 combined trains are operated weekly in three routes. Ro-Ro traffic was 1,800 units in 1992 and 13,200 units in 2002. This dynamic development of intermodal transport shows that there is significant demand for this kind of combined transport by international freighters.

At present, there are two Ro-La terminals (railway / road) in Hungary, one in Szeged-Kiskundorozsma on the Serbia-Montenegro border and the other at Sopron on the Austrian border. The former one handles trucks to and from Austria and Italy; the latter is the logistics centre of Ro-La traffic towards central Austria.
In Hungary combining various modes of transport (rail, road and water) will play an even more important role both in environment protection and economic development in the future. An important area of transport infrastructure development is the establishment of more logistic centres in multimodal transport nodes by introducing state-of-the-art transport and loading technologies.

The Hungarian government intends to develop several more logistics centres in the country. These centres will make it possible to relieve congestion on Hungarian roads caused by transit traffic (between Eastern Europe and Austria, Italy and Germany) that strongly deteriorates the environment. A feasibility study identified 11 such potential centres throughout Hungary. These centres were identified by the network development plan, representing part of the National Regional Development Concept, and included in Parliament Resolution No. 35/1998 (II.20), in districts of major regional importance, which will be established gradually. In addition to BILC they are I - West Transdanubia district – Sopron, II - North Transdanubia district (Győr – Gönyű), III - Central Transdanubia District (Székesfehérvár – Dunaújváros), IV - South Transdanubia district (Baja – Mohács), V - Budapest district (South Pest, South Buda, Csepel), VI - Central Great Plain district (Szolnok), VII - South Great Plain district (Szeged – Kisszállás), VIII - North-East district (Miskolc, Tiszavasvári), IX - North Tiszántúl district (Záhony), X - North Great Plain district (Debrecen). Investments have been going on in these centres in accordance with the development concept; however, they are not sufficient for the completion of the complex function, therefore further developments are required.

Besides further developing BILC other future objectives are the enlargement of the railway carriage park capable to carry trucks and unaccompanied traffic and purchasing ships suitable for Ro-Ro traffic on the Danube.

2. EXPERIENCE FROM PREVIOUS HUNGARIAN PROGRAMMES AND PRE-ACCESSION INSTRUMENTS

2.1. FINDINGS RELATED TO PREVIOUS HUNGARIAN PROGRAMMES AND THE PRE-ACCESSION INSTRUMENTS IN ENVIRONMENT PROTECTION

National Environmental Policy

The basis of the Hungarian national environmental policy is the National Environmental Program (NEP). The ground was laid for the preparation and implementation of the NEP by § 40 of Act No. LIII, 1995 on the general rules of environmental protection. According to this Act the Ministry for Environment and Regional Policy drafted the first NEP (1997-2002) in 1996. It was drafted in co-operation with the ministries concerned, public institutions and NGOs. The first draft NEP, the General Implementation Plan and other documents that form the basis of the Program were approved by the government in 1996, and by the National Assembly (Parliament) in 1997. Annual Action Plans, based on the first NEP, are compiled in conformity with the actual budget. Among others the following national policy plans and programmes were taken into consideration during the preparation of the first NEP:
• the National Nature Conservation Master Plan
• the Hungarian Environmental Health Action Plan
• the Hungarian Environmental Remediation (Clean-Up) Programme and
• Guiding Principles for Hungary’s Municipal Sewage Disposal and Purification Programme.

The first Hungarian National Environmental Program (NEP 1) was an intervention system plan for six years, valid from 1997 to 2002. One of its main tasks was to create a framework for harmonising economic development and environmental interests, that tried to ensure the balance between economic development and environmental protection. The fundament of the Program is the integration of environmental issues into economic and sectoral policies.

NEP 1 was based on the Modernisation Programme of the government. It is directly related to the Short and Medium-Term Environment Protection Action Plan adopted in 1991. Several goals of this Action Plan are included in the NEP 1. It was also directly related to National Environmental and Nature Conservation Policy Concept adopted in 1994. It was developed taking several scenarios such as the economic development scenario of the government available at the time into account. These scenarios were mainly scientific and research documents developed to support policy papers and programmes. However, NEP 1 didn’t present any comprehensive scenarios for development, but this was not its purpose.

NEP 1 mainly focused on the environmental dimension of sustainable development, dealing with the state and protection of environmental media, settlements and the built environment, flora and fauna and with special environmental issues such as waste. More specifically it advocated the preservation of natural resources for the future generations.

The social dimension of sustainable development was covered to a certain extent. The link between environmental quality and human health and quality of life was emphasized throughout NEP 1 and it is directly related to the Hungarian National Environmental Health Action Plan.

In NEP 1, the economic dimension of sustainable development was dealt with mainly in terms of the integration of environmental considerations into sectoral policies and programmes, but also under the proposals for economic instruments to encourage environmental protection and use it as an opportunity for economic development. The role of local government, the decentralization of environmental protection activities on the institutional level, the linkage of environmental protection with regional development and the advocacy of public participation were further important elements of sustainable development.

The NEP 1 was based on the following principles:
• Sustainable development
• Precautionary principle
• Principle of prevention
• Partnership
• “Owner” attitude
• Subsidiarity
The NEP 1 approach developed between 1995 and 1996 was at the time innovative; causes, impacts ⇒ the state of the environment ⇒ problem ⇒ goal ⇒ solutions ⇒ tasks corresponded with the OECD approach: pressure ⇒ state ⇒ response approach. Today the Hungarian model seems closer to the European Environment Agency’s approach: driving forces ⇒ pressures ⇒ state ⇒ impacts ⇒ responses model than to any other model.

The most important international agreements for the NEP 1 were the Environmental Action Programme for Central and Eastern Europe (EAP for CEE), the Fifth Environmental Action Programme of the European Union and Agenda 21. These documents laid out the environmental requirements to be met in order to become an EU Member State and an OECD member country. Since the introduction of the NEP 1 Hungary has become a member of the OECD and of NATO. NEP 1 was also related to various international conventions to which Hungary is a party. These conventions are outlined in an Annex to the NEP 1.

NEP 1 created the foundation for a future balance between the three pillars of sustainable development and the conformity with the EU requirements. As to accession negotiations, after the first screening stage surveys and studies were launched and completed by July 1999 when the Hungarian negotiating position on environment was submitted to the EU. At the same time, the National Programme for the Adoption of the Acquis was also prepared indicating the tasks needed to be completed before accession; these are linked to the NEP 1.

An interministerial expert group has been co-ordinating the governmental approximation process, the independent National Environmental Council addresses all relevant drafts and reports related to approximation, and a series of consultation with the business sector, municipalities and professional circles offer opportunities for a dialogue between their representatives and those of the ministries. Transposition of the acquis has been accelerated, Directive specific implementation plans have been prepared, and four “derogation” requests have been agreed upon by the EU. Negotiation on environment has transitionally been closed. A monitoring programme has been prepared for meeting objectives set in related documents.

The NEP 1 creates a framework for improving environmental protection, resource management and health conditions in Hungary. The main instruments for implementing the NEP 1 are dealt with under the following topics:

- Basic issues of planning, regulation and financing
- Research and development
- Environmental information system
- Institutional system
- Public participation and awareness-raising
- International co-operation

Planning and regulation dealt mainly with creating the framework within which local government can take responsibility for regional and environmental development and planning. NEP 1 stressed the need for regulation which is stable, predictable, enforceable and allowing time for compliance with legislation; this is particularly important in view of the accession process. It was also essential that environmental regulation weighs the economic costs and the environmental benefits. The financing of environmental programmes and measures was a key issue. One example of what has been done in the context of the NEP 1 is the introduction of product fees. These fees applied to environmentally unfriendly products such as car batteries. Companies that produce these products must pay certain fees. The fees
have gone to the State Environmental Fund and are used for the development of more environmentally friendly alternatives and for recycling and reuse.

A further instrument for facilitating the implementation of the NEP 1 was research and development. Of particular note is the proposal for research into the relationship between environment, economy and society and the social conditions necessary to realise harmonious environmental management. This includes public participation mechanisms.

Since the NEP 1 was adopted by the Hungarian National Assembly a yearly action plan has been put forward for the implementation of the NEP 1. The approaches for implementing the NEP 1 and achieving its objectives and targets were defined partially in the yearly Action Plans which was a Governmental task according to No. 83/1997. (IX. 26.) National Assembly Resolution. The most important limits on the process of implementing the NEP 1 were:

- the lack of public awareness of environmental issues
- economic restraints and
- lack of financial resources.

The process of achieving political consensus on the means of implementing the NEP 1 is a slow one and as such is a limit to the rate of progress of the NEP 1.

Experience with the NEP 1 shows that a more sustainable NEPs can only be achieved by a better integration of environmental issues into other sectoral policies. Increased use of environmental policy tools which promote pollution prevention is also an important step to a more sustainable NEPs.

**Evaluation of EU Phare Assistance**

The annual National Phare Programmes have implemented successive environment protection projects. One of the pivotal tasks in managing international subsidies was the concurrent management of the seven various implementation phases of the annual Phare programmes (1994, 1995, 1998, 1999, 2000, 2001, and 2002). The 1998 programme involved six investment projects, which were successfully completed in autumn 2001. In the 1998, 1999, 2000, 2001, and 2002 Phare programmes, support focussed on law approximation and institutional development in the environment protection sector. Support was provided particularly for the procurement of missing assets required for adopting certain directives of EU legislation and for the implementation of other directives.

The results and sustainability of the Phare program, according to independent EC experts’ evaluation, is a high and important contributing factor to the adoption of the *acquis*.

The effect of the widespread use of institution development is outstanding, but the numerous investment projects also helped law approximation to the *acquis*. Of high importance among the Phare HU980702 is the institution building programme, which strengthened the Central Environmental Protection Fund (now the Environmental Protection Fund Guidance –EPFG). The EPFG project develops institutional capacity necessary for the implementation; and provides co-financing possibilities for waste water and solid waste management according to EU standards. EPFG’s procedures and its operation provide the basis to accomplish environmental remediation and certain investments for the processing of special waste streams according to EIOP.
The Phare environmental protection programmes have significantly contributed to learning programming procedure. They have also contributed to the adoption and application of EU “acquis”.

**Evaluation of EU ISPA Assistance**

Since 2000, Hungary has been eligible for an annual EUR 44 million of ISPA pre-accession support from the European Union for environment protection purposes. The programming of ISPA has been concluded more or less on time by the Hungarian authorities. The ISPA programming framework has been set by the environmental strategy drawn up by the Hungarian authorities in agreement with the Commission.

Following this, the Commission evaluated and approved 19 projects (7 of which are investments in wastewater treatment and 12 in waste management) and 5 Technical Assistance projects between 2000-2003, amounting to a total 332 Million Euro over 2000-2006.

The seven wastewater collection and treatment projects aim to manage the sewerage and wastewater treatment of the cities and towns of county rights and their agglomerations. The twelve communal waste management projects aim to improve the waste management infrastructure within complex regional systems, including treatment of solid municipal waste. The waste programmes aim to establish selective waste collecting and managing networks around regional centres, and to close and remediate old and dangerous waste disposal sites.

The Prime Minister’s Office has acted as National ISPA Coordinator while the Ministry of Environment and Water was designated as the ISPA Implementing Agency. This Ministry has been responsible for project identification and project preparation together with the National ISPA Co-ordination Office. The local municipalities and their partners are the beneficiaries of ISPA assistance. Their responsible actions contribute to the successful implementation of projects, and to the productive operation of investments.

The aims of ISPA assistance are, (i) under the accession negotiation to fulfil accepted duties of environmental protection through investment; (ii) introduction and set up of Cohesion and Structural Fund methodologies and structures, and finally; (iii) to gain enough experience to successfully use the EU resources after accession.

The experience gained during the preparation and execution of ISPA projects shows that implementation has been, however, rather slow and difficult, in particular in the environment sector. Slow progress in implementing ISPA projects has been mainly due to the lack of technical preparation and poorly prepared tender dossiers.

**Energy programmes**

The currently effective strategy for energy efficiency and renewable energy resources is specified by Government Resolution No. 1107/1999 (X.8.) on the strategy for energy savings and energy efficiency development until 2010, it also contains an action programme. In the framework of the action programme, support schemes were launched in the business, municipality and residential sectors, promoting developments as well as logistics, training and planning/analysis activities. The programme contains components for the residential sector, district heating systems, the agricultural sector, as well as the transport and industrial sectors.
As regards renewable energy resources, the above Resolution identifies tasks for reducing natural gas consumption by establishing renewable capacities applied for electricity and heat generation, provides excessive support to biomass and geothermic energy, and promotes the spread of the application of renewable energy resources, primarily solar energy, in the residential sector.

In the course of the last ten years, the number of projects aimed at energy efficiency and the application of alternative energy resources has increased significantly in Hungary. Hungarian has initiated a number of programmes since 1991; the most important ones include the residential energy efficiency and renewable energy resources programmes, the Energy Loan Programme, the Energy Conservation Loan Fund (German coal aid), the energy efficiency loan instrument co-financed by PHARE, as well as the PHARE CBC programme.

In the framework of the Energy Conservation Strategy and Action Programme, Hungarian residents first had the opportunity in the year 2000 to directly apply for state subsidies for energy efficiency investments (replacement of doors and windows, subsequent heat insulation, reconstruction of heating systems). A new programme was launched to support investments exploiting renewable energy resources. Funds for Programme grants, financed by the Dedicated Funds for Economic Development, have increased gradually.

In its Resolution No. 1113/1996 (XI.29.), the Government decided on the establishment of the Energy Conservation Loan Programme, integrated later on into the application system of the subsequent Energy Conservation Programme. The majority of municipalities applied for funds for the modernisation of heating systems, lighting systems, heat insulation, and the utilisation of renewable energy resources. The objective of the Energy Conservation Loan Fund is to finance development projects effectively contributing to the moderation of the energy demand of the economy as well as to the reduction of environment pollution and dependence on imports.

The energy efficiency loan instrument, co-financed by PHARE, was established during the 1998 to 2000 phase of the PHARE programme of the European Union; a total of 53 projects were implemented. The objective of the programme was to support investment projects resulting in more effective and more rationalised energy consumption and definitely entailing energy savings. The Austro-Hungarian PHARE cross-border CBC programme for 2002 supports investments exploiting renewable energy resources in the framework of environment protection support instruments. The beneficiaries of the tender are municipalities and non-profit organisations.

The five-year UNDP programme (2001 to 2005), financed by the Global Environmental Fund (GEF) and other UN sources, offers direct support to Hungarian municipalities improving their energy management and institutional capacities in order to perform energy audits and energy management planning.

2.2. Findings related to previous Hungarian programmes and the pre-accession instruments in transport

The main documents taken into account during the preparation of PHARE and ISPA programmes include the Accession Partnership, approved by the European Council on 6 December 1999, the National Programme for the Adoption of the Acquis and the VADEMECUM on the Co-ordination of Pre-Accession Instruments, the Preliminary National Development Plan and the applicable decisions of the Hungarian Government.
Although the PHARE programme was launched in 1989, supplementary financing could only be provided for infrastructure and environment protection projects following the Copenhagen Decision in 1993. With the creation of the LSIF (Large Scale Infrastructure Facility) horizontal programme, the amounts allocated to large infrastructure projects further increased (Hungary received EUR 19 million). This programme represented a logical transition between PHARE and the transport infrastructure investments eligible for support in the framework of the ISPA programme launched in the year 2000. This aid amount involves approximately EUR 300 million, to be used by the end of 2006. The programming of ISPA has been concluded more or less on time by the Hungarian authorities. The ISPA programming framework has been set by the transport strategy drawn up by the Hungarian authorities in agreement with the Commission. Following this, ISPA support has been used for the reconstruction of railway sections of Helsinki corridors No. IV and V in the framework of three large projects (Budapest-Cegléd-Szolnok-Lőkösháza; Budapest-Győr-Hegyeshalom; Zalaököv-Zalaegerszeg-Boba), while the road transport infrastructure is intended to be developed by the project to reinforce roads for 11.5 kN loads.

The Prime Minister’s Office has acted as National ISPA Coordinator while the Ministry of Economy and Transport was designated as the ISPA Implementing Agency. This Ministry has been responsible for project identification and project preparation together with the National ISPA Co-ordination Office. In this particular sector the final beneficiaries, mainly MAv and UKIG have played an essential role in order to ensure a timely and efficient preparation and implementation of the transport projects.

As regards the establishment of the preliminary conditions and operating environment for ISPA, Hungary relies on the Cohesion Fund methodology of accessing the resources. Within the framework of the Pre-Accession Funds, ISPA is one of the key instruments for passing on knowledge related to the structural support policy of the EU.

PHARE and ISPA projects implemented / in progress during the preparation period in line with the intentions and guidelines of the European Commission are closely aligned with the regional development strategies. These projects allow regional and national actors to gain practical experience, having a positive impact on the development of regions and sectors targeted by them. Since their introduction, they have formed an integral part of the realignment process.

The programmes that have been or are being implemented closely follow the development requirements that are of primary importance for both the EU and Hungary. As regards the road transport sector, the Hungarian transport policy has focused chiefly on the establishment and development of the high-speed and trunk road network. The development projects of high-capacity motorways, carriageways and main roads allow a mitigating of Hungary’s reliance on Budapest’s central role, improved access to cities in the provinces and the transit transport traversability of the country.

The development of the feeder elements of the backbone network has served the dual purpose of establishing certain important missing network connections and improving the quality and capacity of the existing road network components. Relative to its financial strength, Hungary has laid great emphasis on the creation of high-capacity core networks and the connecting feeder road network.
II. EIOP DEVELOPMENT STRATEGY

1. SWOT ANALYSIS

The SWOT analysis illustrates Hungary’s characteristics of the two priorities in EIOP, it identifies opportunities and indicates threats. The tension points of the SWOT analysis have guided the directions of EIOP and programmes and developments recently launched. It is the basis for the development concept of the programming period, where weaknesses and opportunities are turned into development directions taking into account the criteria of support from the pre-accession instruments, the Cohesion Fund, and the Structural Funds.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richness of biodiversity, bio-</td>
<td>High urban pollution rates, particularly in terms of air and noise pollution;</td>
</tr>
<tr>
<td>geographical region of international significance;</td>
<td>Waste water collection and treatment fail to comply with EU norms;</td>
</tr>
<tr>
<td>Most heavily &quot;polluting&quot; industry closed down;</td>
<td>Drinking water quality does not comply with EU requirements in some areas;</td>
</tr>
<tr>
<td>Hungary is rich in water resources;</td>
<td>Weaknesses in the flood protection of the Tisza Valley;</td>
</tr>
<tr>
<td>Favourable natural properties in terms of the use of some renewable energy resources;</td>
<td>Low levels of selective waste collection and use;</td>
</tr>
<tr>
<td>Enclosed and central position;</td>
<td>Low levels of waste management and recycling, particularly in terms of hazardous waste;</td>
</tr>
<tr>
<td>Extensive public transport network</td>
<td>Regional inequalities in environment infrastructure;</td>
</tr>
<tr>
<td></td>
<td>Low environmental awareness;</td>
</tr>
<tr>
<td></td>
<td>Unexploited opportunities in renewables and energy efficiency;</td>
</tr>
<tr>
<td></td>
<td>Limited infrastructure supply in terms of environmentally friendly energy;</td>
</tr>
<tr>
<td></td>
<td>Under-development of and limited access to the motorway network;</td>
</tr>
<tr>
<td></td>
<td>Lack of bypass roads leading to safety problems, air and noise pollution;</td>
</tr>
<tr>
<td></td>
<td>The quality of the road network is</td>
</tr>
<tr>
<td>Opportunities</td>
<td>Threats</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Improving municipal environmental infrastructure (bypasses, public transport, water, waste) to reduce regional inequalities;</td>
<td>• Increasing motor traffic to increase pollutant emissions;</td>
</tr>
<tr>
<td>• Elimination of insufficiencies on the supply side to induce economic growth;</td>
<td>• EU norms not complied with are to entail fines and make exports difficult;</td>
</tr>
<tr>
<td>• Improving labour demand and investments;</td>
<td>• Omitted flood protection developments to endanger economic assets and life conditions;</td>
</tr>
<tr>
<td>• Programme to boost demand for environmental industry;</td>
<td>• Insufficient environmental infrastructure may hinder regional investments and developments;</td>
</tr>
<tr>
<td>• Life conditions and economic opportunities to be improved by protection against damage by floods and increased remediation of polluted areas;</td>
<td>• Increased motor traffic to result in traffic congestions, with a negative effect on the environment;</td>
</tr>
<tr>
<td>• Increase in the share of renewable energy resources and improved energy efficiency to reduce import demands and emissions, and to contribute to the performance of EU requirements;</td>
<td></td>
</tr>
<tr>
<td>• Improved energy efficiency in transport, manufacturing, and community development;</td>
<td></td>
</tr>
<tr>
<td>• Improving project design and management;</td>
<td></td>
</tr>
<tr>
<td>• Development of expressways connecting motorways to improve accessibility and improve the life quality of residents;</td>
<td></td>
</tr>
<tr>
<td>• Construction of bypass roads to reduce environmental loads on settlements;</td>
<td></td>
</tr>
<tr>
<td>• Transport modernisation to reduce environmental effects through an intermodal system</td>
<td></td>
</tr>
</tbody>
</table>
2. SPECIFIC OBJECTIVES

Hungary has made substantial investments in infrastructure since 1988; however, considerable investments are still needed to meet EU standards. The Government has a number of programmes covering these investments and Structural Funds will contribute to them according to this strategy.

The overall objective of the Environmental Protection and Infrastructure Operational Programme (EIOP) is improving the transport infrastructure and protecting the environment. This is one of the specific objectives laid down in the National Development Plan.

‘Infrastructure’ in the context of the EIOP encompasses:

- Environmental utilities and services,
- The network of nature conservation areas and natural landscapes,
- Energy initiatives and
- Transport networks.

The EIOP aims to reduce the infrastructure gap that exists between the European Union and Hungary both in terms of quantity and quality. This should result in more effective and efficient services, whilst taking fully into account Sustainable Development and the Polluter Pays Principle.

One of the horizontal principles applied to Structural Funds is environmental protection; Hungary is treating this as a stepping-stone to Sustainable Development. The Polluter Pays Principle is an example of how externalities are incorporated into internal costs; in Hungary it is covered by a complex regime of taxes and tariffs (these are explained in more detail in the Cohesion Fund Strategy).

The EIOP’s specific objectives are to:

1. the protection and improvement of the environment that will improve (a) the quality and coverage of environmental services and utilities, (b) nature conservation and (c) energy initiatives.
2. the improvement of the transport network through investments in upgrading the national transport infrastructure.

These twin objectives of the EIOP are translated into two specific priorities:

1. Environmental Protection
2. Transport Infrastructure Development.

A third priority, Technical Assistance (TA) will assist in the implementation and monitoring of the programme. TA is expected to contribute significantly to achieving these objectives.
3. PROGRAMME STRATEGY

3.1. THE CONTEXT OF THE STRATEGY

The EIOP’s strategy is based upon:

- The current situation analysis for the environment and transport sectors as set out in Chapter 1 and summarised in the SWOT analysis with particular emphasis on the weaknesses.
- The national environment and transport development strategies as laid down in their current and respective policy documents.
- The major problems and strategic directions emphasised in the National Development Plan and the Cohesion Fund Strategy, with special regard to the complementarity of Funds and the delineation between intervention areas.

The vision of the Hungarian regional development concept\(^5\) outlines a spatial structure for Hungary with many features from which the following 6 are relevant to our strategy. The country will be characterised by:

1. Protecting and using sustainably natural resources so as to preserve the state of environment.
2. Protecting natural areas, so conserving nature, landscape values and the cultural identity for future generations.
3. Reducing the differences between, and increasing, the level of basic public services available in various communities.
4. Developing Hungary’s role as a bridge between Eastern and Western Europe as well as between Northern and Southern Europe. This is important due to her cultural heritage, geographical location and national economy.
5. Developing Hungary’s transport corridors as integrated links to the European network. These corridors are dynamic factors in regional development.
6. Reducing regional disparities between, and the number of, socially and economically disadvantaged areas.

The EIOP is not the sole financial instrument of environment and transport development; section 3.4 identifies links to other EU financing instruments. Due to its complexity, the full impact of the EIOP cannot be measured with one or some indicators. However, two quantified objectives cover most of the EIOP activities, therefore these have been selected as OP-level indicators:

- The coverage of population benefiting from improved environmental services and reduced flood risk due to EIOP developments,
- The coverage of the road transport network upgraded due to EIOP developments.

\(^5\) Parliament Resolution No 35/1998 (III.20) on the National Concept on Regional Development
3.2. DEVELOPMENT STRATEGY FOR ENVIRONMENT PROTECTION

The environmental policy and its implementation strategy are balanced, addressing all the main environmental priorities, which are set out in the National Environmental Program 2003-2008 (NEP 2). The NEP 2 identifies several dozens of tasks covering 12 broad environmental issues. These are described in more detail in Annex 1 at the end of this document. The NEP 2’s four main objectives are to:

a) **Protect ecosystems**, by taking into consideration the principles of sustainable development in the administration and use of natural resources so that their value is preserved for future generations, preservation of natural systems, assets and biosphere;

b) **Ensure a harmonious relationship between society and the environment** by improving the health of the population, preservation, improvement, and remediation of the environmental so as to sustain an adequate life quality;

c) **Assert environmental aspects in economic development**, so that welfare is coupled with reduced environmental loads by establishing and maintaining a harmonious relationship between society and the environment, the sustainable use of natural resources and land areas so as not to exceed their environmental capacity, and the prevention and mitigation of environment damage;

d) **Improve the knowledge, awareness, and co-operation as related to environmental processes, effects, as well as environment protection and nature preservation** through monitoring and evaluating changes in environmental conditions, effects, and impact of various measures, making transparent domestic and international decision-making processes affecting the environment and improving its publicity, measuring changes in environmental conditions and the impact of measures by appropriate indicators and improving the co-ordination and provision of information at all levels, with the participation of stakeholders from all sectors, NGOs, and interest representation groups concerned.

The EIOP’s environment protection strategy supports these NEP 2 objectives. However, since there is only three years to implement the programme, it is not possible to address all the issues in the NEP 2. Therefore, the EIOP synthesizes all the environmental problems facing Hungary into this integrated strategy; this is reflected in the situation and SWOT analyses. The EIOP concentrates on those that could contribute to sustainable development and focuses on four environmental specific objectives:

- Improve access to environmental and water management infrastructure,
- Protection of groundwater and aquifers,
- Strengthen nature conservation,
- Development of energy management though increased efficiency and use of renewables.

The Quantified objectives for EIOP environment development are:

- Environment protection-oriented developments planned for 2004-2006 will affect 10% of the Hungarian households
- EIOP will target 5% of the protected areas.
3.3. DEVELOPMENT STRATEGY FOR TRANSPORT INFRASTRUCTURE

3.3.1 National Policy Context

The objectives of Hungary’s transport policy are to establish an up-to-date, economically efficient and safe transport that increasingly meets the requirements of individuals, families, different communities and the business sector and puts less and less strain on the environment. The main strategic directions of Hungary’s transport policy have not changed since 1996; they are: they are contained in the new Hungarian Transport Concept (2003-2015) as follows:

- **Facilitating Hungary’s integration into the European Union;**
  
  This is objective encompasses the development of Hungary’s transport infrastructure, which includes Pan-European corridors, expressways, trunk railroads, national public ports, central and regional airports, inter-modal transport and increasing load-bearing capacity of roads.

- **Enhancing the conditions for improved regional contacts with neighbouring countries;**
  
  This objective covers the upgrading of border crossings according to the Schengen requirements, constructing regional airports and North-South and East-West expressways.

- **Attaining regional development objectives;**
  
  This objective requires the modernisation of the national road network, the regional and settlement roads and roads handled by local governments. Accessibility times to the regional centres should be improved as a result.

- **Improving the quality of life, maintaining health, increasing safety of transport and protecting the natural environment;**
  
  This objective comprises investments to improve transport health and safety, construct bypass roads, residential and bicycle roads, provide proper conditions for handicapped people, develop public transport and transport related IT.

- **Establishing conditions for the efficient operation of transport systems through regulated competition in the sector.**
  
  The legal, institutional and controls for market regulation that conforms to the EU requirements must be completed.

These are complex long-term objectives, which have many components. Despite this complexity, Hungary’s transport policy covers every transport mode. This policy is supported by Cohesion Fund and EIOP strategies.
3.3.2 EIOP transport strategy

The main problems of the existing transport network in relation to our economic and environmental goals are as follows:

- Road transport is seeing dynamic growth, particularly as Hungary is a transit country with increasing local and international road traffic. Demand for cars is also increasing because this kind of transport is more comfortable and flexible than railway. This puts more and more strain on both the infrastructure and the environment especially in those settlements.

- The present road network cannot handle this increased traffic. Structural and capacity shortages of the network means that access to the peripheral regions and settlements are more difficult, thereby inhibiting their chances for catching up with more developed areas. The EIOP will support the development of those 1 and 2 digit roads connecting to the expressways (whose further development will be financed by the Cohesion Fund), which improve the accessibility of regions.

- In spite of good public transport system, big cities, particularly Budapest are congested. There are increasing demands to improve the urban transport system by increasing accessibility to the other public transport modes through the construction of the rapid rail connections.

- There is a growing demand for inter-modal transport and the Hungarian government intends to develop several logistics centres at selected transport nodes with well-developed transport connections.

The implementation period for Hungary’s first opportunity to access Structural Funds is short; this has contributed to the selection of transport development priorities. The programme focuses on roads, because the problems of road transport mentioned above are the most severe. They conserve the disparities between regions and enhance the load on environment. Also road-upgrading projects need a relatively short time for preparation and implementation compared to other type of projects.

Beside road network development, the objective is to give preference to making transport more environmentally friendly. Therefore, the focal points for the strategy are to:

- Upgrade the main road network,
- Develop environmental friendly infrastructure

**Upgrading the main road network**

Increased prosperity in the region over the last 10 years has seen an increase in road usage, by both passenger and freight transport; evidence of this can be seen in the serious environmental pollution in settlements that along the main transit routes. The inadequacy of the existing road network for handling this increased road traffic further exasperates existing problems in accessibility, mainly in the underdeveloped regions of north-eastern and Eastern Hungary. Accessibility is a decisive factor in attracting investors to and withholding migration from these regions thereby eliminating barriers to balanced regional economic development in Hungary.
Hungary’s axle load limit was stricter than in the EU countries (10 tons) after accession the roads have to be upgraded to comply with EU standards (11.5 tons of axle load). This will be augmented with by-passes and relief roads and improving accessibility. This will require, and absorb, as much investments as is available.

This measure of the transport priority supports both specific objectives of the programme, and also contributes to the following objectives of the national policy:

- **Facilitating Hungary’s integration into the European Union** through upgrading roads to 11.5 kN axle-load bearing capacity
- **Attaining regional development objectives** through upgrading the national road network to improve the accessibility of regions.
- **Improving the quality of life, maintaining health, increasing safety of transport and protecting the natural environment** by widening road sections to four lanes, construction of by-pass roads.

**Development of environmental friendly infrastructure**

One of EIOP’s specific objectives is improving the state of environment through infrastructure investments. This measure directly supports this objective by

- Constructing environment friendly inter-modal transport infrastructure
- Developing suburban railway transport connections between economic centres (Budapest) and the surrounding communities in the suburbs.

These developments will assist in diverting a part of road transport to the rail network or the Danube waterway. This is important because, inter-modal transport reduces pollution and congestion on the roads caused by freight transport. This element of the measure also contributes to specific objective of improving regional accessibility through investments in upgrading national transport infrastructure. Hungary has all the geographical (the Danube is a Helsinki corridor) and transport facilities (high railway density) that make inter-modal logistics viable and attractive. In order to effective operation there is highly important that intermodal logistic centres to be directly connected to the main road and railway network.

Public transport connections can provide easy access for commuters in large cities (especially in Budapest) from communities in the suburbs. It will also reduce road congestion at peak times. Upgrading the existing railway infrastructure, so that it is suitable for modern suburban transport, is sustainable and a less stressful and polluting mode of transport.

This measure also directly supports two elements of the national transport policy:

- **Facilitating Hungary’s integration into the European Union** by developing Inter-modal transport
- **Improving the quality of life, maintaining health, increasing safety of transport and protecting the natural environment** by increasing environmental friendly transport.

The quantified objectives of EIOP transport development:

- Strengthening the axle-load bearing capacity of at least 260 km of 1, 2 and 3 digit roads
- Decrease of number of accidents by 5 %
3.4 RELATIONS TO THE COHESION FUND AND OTHER OPERATIONAL PROGRAMMES

The EIOP will be financed from National sources with co-financing from the European Regional Development Fund (ERDF). The EIOP’s objectives, priority areas, and measures are in line with the European Regional Development Fund Regulation (EC) No. 1783/1999 of the European Parliament and of the Council.

In Hungary, the primary function of the EIOP is to complement the Cohesion Fund. However, the EIOP also supports actions contributing to the assessment of air and noise pollution and their subsequent reduction; managing flood in a sustainable way, which also improves nature conservation; hazardous and inert wastes (three special waste streams) management; and the use of renewable energy resources and the encouragement of efficient energy consumption.

The Cohesion Fund Managing Authority (Prime Minister’s Office) and the EIOP Management Authority (EIMA) will ensure effective co-ordination, implementation and the delineation between Cohesion Fund and EIOP projects. Schedules identifying the various communities in each funding category will be prepared by the EIMA with assistance from the Ministry of Environment and Water.

Within the environment sector the specific objectives of the Cohesion Fund will be implemented through the following priorities:

Development of drinking water facilities: Priority is given to projects covering the North-Great-Plain and the South-Great-Plain regions affecting a population above 100 000 people. The investments to be financed will consist in technological upgrading of treatment plants and/or definition and construction of new supply facilities.

EIOP projects on settlements scattered in the country except North Great Plain and the South Great Plain, affecting population less than 100,000 people on areas where parameters of drinking water represent significant health risk (arsenic above 10 µg/l, nitrite, boron, fluorite and ammonium) with deadline for complying of December 2009. Projects targeting the improvement of the quality of exploited drinking water. These small projects because of the scattered settlements cannot be organised into a regional (probable CF funded) project.

Development of waste water facilities: This priority will focus on the development or upgrading of sewage network, waste water and sludge treatment plants for agglomeration with pollution load above 50,000 population equivalent.

Any other agglomeration between 2,000 and 50,000 p.e. (development of network, creating or upgrading treatment capacity, sludge treatment and utilisation, rehabilitation of networks) will be supported by the EIOP.

Development of solid waste facilities: Priority is given to waste management projects involving solid waste management infrastructure development in complex regional systems. This shall include the establishment of separate waste collection and treating systems organised around large-capacity regional landfills or incinerators, and closure and rehabilitation of landfills not compliant with EU legislation.
The EIOP improves and develops the treatment of some special waste streams: animal waste, health-care waste (of medical services) and construction and demolition waste.

Protection of water resources by remediation measures (Remediation of contaminated sites): The clearance of contaminated land for protecting the groundwater which are falling under the responsibility of the Hungarian state and the local authorities will be done under this priority.

The Cohesion Fund will support big projects (approx. above 16 million EUR in value), where particularly sensitive areas of the groundwater are threatened. These areas are the responsibility of central budget financed authorities and their institutions (mainly ministries, e.g., Ministry of Interior, Ministry of Defence, Ministry of Economy and Transport, Ministry of Agriculture and Rural Development) or local authorities, and their associations.

EIOP projects are smaller (approx. below 16 million EUR in value) and are located at particularly sensitive areas of the groundwater. The sites are the responsibility of companies that are 100% state ownership (e.g. State Railways, Hungarian Privatisation and State Holding Company). Both Cohesion Fund and EIOP projects will be selected according to their ranking in a priority list and the remediation must remove the threat to groundwater posed by the pollution at the protect location.

In this programming period, the Cohesion Fund in the transport sector will be implemented through the following priorities:

Development of the railway infrastructure: Within the railway sector priority is given to the rehabilitation of the rail network with special regard to the Transeuropean corridors. The Cohesion Fund will continue and finalise some of the investments already started under the ISPA pre-accession instrument in both Transeuropean corridors, mainly IV and V. These infrastructure investments will create the adequate infrastructure conditions for the opening of Hungary’s railway network to international operators and provide a competitive transport facility along the main corridors.

Development of the road infrastructure: This priority will mainly focus on the further extension of the motorway network by building the missing links of the highway network. Special regard will be given to connections between the different radial motorways and the main national roads.

Development of civil aviation: For the air traffic sector the priority will be to develop the airports and the airport infrastructure that provide basic conditions for aviation, enduring technical progress and a higher capacity. The increase in air traffic volume at Ferihegy International airport, through recent developments, substantiates the need for further developments of the air control facilities, responsible for the safety of the flight operations.

Development of inland waterways: The development of the international waterway along the Danube on the Hungarian sections will be given special attention in order for vessels with more than 2.5 m draught to navigate without restrictions throughout most of the year.

Road development: The national road upgrading programme, started under ISPA, will continue under the EIOP, although already running projects will be finished under ISPA/Cohesion Fund. In this way EIOP complements the Cohesion Fund.

Road developments in EIOP will focus on the upgrading of roads that connect underdeveloped regions to the motorways, enhancing the quality of 1, 2 and 3 digit roads (four
lanes and increasing load bearing capacity) and reducing strain on environment by constructing by-passes and relief roads.

**Suburban Railway development:** The Cohesion Fund supports the upgrading of the main railway lines along the Trans-European corridors while the EIOP will finance suburban transport development as part of upgrading railway infrastructure. Including station upgrades by providing Park+Ride and Bike+Ride parking lots, Central Traffic Control System with customer information systems, and new level crossings and traffic signals.

The following criteria will be used to differentiate between measures in the EIOP and the **Operational Programme for Regional Development (OPRD):**

In case of environmental remediation, the OPRD complements those measures, which are financed under the EIOP and the Cohesion Fund. The OPRD projects cover the whole territory of Hungary. The aim of the OPRD is to re-utilise brownfields in order to promote their functional change, their integration into the settlement structure and to decrease land use needs of green field investments. Supported brownfields throughout Hungary might be unused or underused former industrial sites, or military objects (such as barracks), are in a poor physical state, are burdened with environmental pollution and cause a settlement structure problem. Priority will be given for large and continuous brownfields, which are in deteriorating settlement parts or are in a particularly disadvantaged area from an economic point of view. The OPRD finances environmental rehabilitation only as an integral and non separable, indispensable part of the urban rehabilitation for the sake of re-using the contaminated site.

In the transport sector the EIOP will finance the development of 1,2 and 3 digit roads (these do not include motorways, which form an own category themselves). OPRD will support local and inter-settlement public transport, under the category of 4 and 5 digit roads.

As to suburban public transport EIOP will only finance railway developments and OPRD will fund bus and tramline related transport infrastructure developments. Park+Ride and Bike+Ride parking lots will be financed by EIOP if they can be connected to suburban railway developments. All other P+R and B+R parking facilities will be implemented under OPRD.

Several components of the **Agricultural and Rural Development Operational Programme (ARDOP)** may have potential impact on the environment and nature conservation; this properly reflects the importance of the horizontal nature of environment protection. The description of the dividing line with ARDOP is based on the assumption that ARDOP measures do not contain any specific and direct environmental activities. Several measures supported under ARDOP, while not being directly targeted at environmental protection, could actually involve such specific environmental activities.

As far as energy is concerned, ARDOP supports exclusively infrastructure related to the energy production supplying farms and the related agricultural activities (measure “development and improvement of infrastructure connected with agriculture”). Such activities are excluded from EIOP.

As far as animal waste management is concerned, ARDOP supports exclusively investments for animal waste management necessary for the daily operation of farms (measure “Assistance to investments in agriculture”: the beneficiaries are farmers) and investments for the management of waste, such as storage and/or elimination on the site, related to the daily operation of the food processing industry (measure “Improvement of processing and
marketing of agricultural products: the beneficiaries are legal entities and economic organisations operating in the processing of agricultural products) – activities for which EIOP support is excluded. ARDOP does not intervene in any investment in infrastructure operated by public organisations (such as ATEV) in charge of collecting, processing and incinerating animal waste – for which EIOP exclusively provides support.

As far as nature conservation is concerned, also in relation to Natura 2000, ARDOP may support activities for preserving and enhancing the landscape if they are part of an overall project of village renewal (measure: renovation and development of villages and protection and conservation of the rural heritage). It does not aim at supporting nature conservation activities and related investments within Natura 2000 sites, which are for EIOP.

In the transport sector there is no overlap between ARDOP and EIOP, because ARDOP concentrate on improving agricultural roads, which are not included in the 1-5 digit system.

The priorities and measures of the **Economic Competitiveness Operational Programme** (ECOP) deal with environment protection in several areas, particularly with investments in infrastructure that produce environmental benefits, as well as supporting the use of Environmental Management Systems (EMS) in SMEs.

EIOP’s transport developments will support the objectives of the ECOP by promoting economic growth, dissolve the regional concentration of business sector investments, and by improving accessibility help create new jobs, particularly in disadvantaged areas. ECOP does not contain any overlaps with the transport and environment protection measures planned within EIOP.

Regarding the support of logistics, the following approach has been adopted in order to demarcate the activities of ECOP and EIOP. EIOP’s measure 2.2 (“Development of environmental friendly transport infrastructure”) aims at building access and connections from main road and railway lines to inter-modal transport centres in order to improve connections of waterway and road transport, to build connection points and to provide there the conditions necessary for logistics services. That is, EIOP will support the road, waterway, etc. developments between and around the logistic bases of enterprises. The latter are assisted by the ECOP through supporting the establishment of logistic capacities of enterprises (especially those providing logistic infrastructure for supplier networks and clusters) supplying complex quality logistic services in measure 1.2 “Development of business infrastructure”.

The objectives of the **Human Resource Development Operational Programme** (HRDOP) contribute to increasing environmental awareness and spreading environmental information. The HRDOP does not contain any priorities or measures overlapping with EIOP. However, EIOP may considerably contribute to meeting the HRDOP’s employment and workforce retention objectives, as many infrastructure investments create both short and long-term jobs and improved transport systems will contribute to the improvement of workforce mobility.

The experiences of the ISPA pre-accession instrument, particularly the need to have a good pipeline of well-prepared projects, have been taken fully into account in the preparation of both the EIOP and the Cohesion Fund Strategy. The administrative absorption capacity has been increased in preparation for implementing these funds.

The successful completion of the EIOP will substantially contribute to the development of the economy and the improvement of life quality. This first Operational Programme for the period between 2004 and 2006 will provide a basis for developments to be implemented in later phases of support.
### 4. QUANTIFIED OBJECTIVES AND IMPACTS AT PROGRAMME LEVEL

#### 2.1 Indicator Table at Programme level

<table>
<thead>
<tr>
<th>Type of indicator</th>
<th>Indicator</th>
<th>Data source</th>
<th>Base line</th>
<th>Quantified target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>Reduced BOD load from households into the water and soil</td>
<td>Project implementation report, Wastewater database, Households statistics</td>
<td>0</td>
<td>5% reduction</td>
</tr>
<tr>
<td>Impact</td>
<td>Decrease of number of accidents</td>
<td>National Police Database</td>
<td>0</td>
<td>5% reduction</td>
</tr>
<tr>
<td>Context-Environment</td>
<td>Improvement in water quality</td>
<td>Water quality measurement</td>
<td></td>
<td>Beginning and end of the program</td>
</tr>
<tr>
<td>Context-Transport</td>
<td>Decrease of number of accidents</td>
<td>National Police Database</td>
<td></td>
<td>% of reduction</td>
</tr>
</tbody>
</table>

#### 2.2 Indicator Table at the Horizontal Priorities

<table>
<thead>
<tr>
<th>Type of indicator</th>
<th>Indicator</th>
<th>Data source</th>
<th>Base line</th>
<th>Quantified target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>CO₂ emission per unit of freight transport</td>
<td>Project implementation reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Result</td>
<td>Share of projects supported within the OP with positive and neutral environmental impact</td>
<td>Project implementation reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Result</td>
<td>Newly created and safeguarded jobs occupied by women</td>
<td>Project implementation reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>Increase in water and waste water treatment capacity meeting EU requirements in settlements / agglomerations below 50.000</td>
<td>Statistical data collection, Project implementation reports</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. PRIORITIES OF THE OPERATIONAL PROGRAMME

1. ENVIRONMENTAL PROTECTION PRIORITY

The Specific objectives of this priority relate to the main issues of environmental protection and they address the selected weaknesses identified in the SWOT analysis:

Specific objective 1: improve access to environmental and water management infrastructure

One of Hungary’s main issues is connect more communities to environmental and water management infrastructure. In some areas there is an inadequate supply of quality drinking water and supply systems / pipelines, also there is a lack of proper sewage network and treatment utilities. This is also true for solid waste, especially in some special waste stream. There is also a need to have proper environmental infrastructure in the air and noise monitoring for gathering real time monitoring information.

Specific objective 2: protection of groundwater and drinking water aquifers

98% of Hungary’s drinking water comes from aquifers and other groundwater. Industrial and agricultural utilisation of groundwater is also considerable. Therefore, Hungary’s unified hydraulic groundwater system is a principle and strategic natural resource, and this underpins Hungary’s groundwater protection policy. The majority of the pollution is the legacy of poor industrial practises, where polluted soil endangers not only groundwater and drinking water aquifers but the health of the population as well.

Specific objective 3: strengthen nature conservation

The natural assets of the Carpathian basin are extremely important for the whole of Europe because of its unique wild flora and fauna, climate, surface geography, and soil characteristics. To preserve these valuable natural assets, its biological diversity and other notable features of our landscapes actions have been designed to raise the low levels of environmental awareness and protect the high-level preservation of biodiversity and the riches of water reserves. The Tisza-valley affords also convenient possibility for ecological flood-management; flood-management must get priority the countenance against the Tisza flood damages and building-up wetlands for preservation goals, and recharging the nutrition levels in flood plane farms. All these are realising the principles of sustainable development.

Specific objective 4: development of energy management through increased efficiency and use of renewables.
Hungary has set herself high targets to improve her energy efficiency and use of renewable sources, both as a basis for improving economic efficiency and safeguarding energy supplies. This emphasis will also contribute to the reduction of environmental loads, as well as to partial regional energy sovereignty. On the production, transmission and consumption sides, the demand for energy generation, the consequently superfluous imports of energy resources, and emissions of pollutants should be reduced by increasing energy efficiency and utilisation of renewable energy resources. A measure has been designed to improve underused renewable energy resources; unexploited opportunities for energy efficiency, limited supply of infrastructure in terms of environmentally friendly energy. It will build upon favourable natural properties in the use of renewable energy resources.

The long-term preservation of environmental values requires various measures, which also contribute to the completion of EU obligations. The specific objectives aim to improve the conditions of life and to increase environmental safety in settlements, and to reduce environmental loads. The measures are described in the next section.

**Indicators:**

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<thead>
<tr>
<th>Type of indicator</th>
<th>Indicator</th>
<th>Data source</th>
<th>Quantified target</th>
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<td>Output</td>
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<td>Project implementation reports</td>
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<td>Output</td>
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<td>Project implementation reports</td>
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<td>Output</td>
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<td>Statistical data collection, Project implementation reports</td>
<td>35 000 m3/day</td>
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<td>Result (core)</td>
<td>Households directly effected by reduced risk due to cleaning up contaminated sites and strengthened flood protection</td>
<td>Detailed investigation report for each site approved by the Regional Environmental Authority, Project implementation reports</td>
<td>Increase by 2 600 and 7 200 people</td>
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<tr>
<td>Result</td>
<td>Households served with new and rehabilitated water and wastewater treatment capacity</td>
<td>Central Statistical Office data collection, Project implementation reports</td>
<td>Increase by 52 000 people</td>
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<td>Impact</td>
<td>Area of territory in NATURA 2000 ecological network where natural restoration is assisted by the support of ERDF</td>
<td>Central Statistical Office data collection, Projects implementation reports</td>
<td>5 % of the protected’ area</td>
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<td>Impact</td>
<td>Improvement of water quality: increase in number of measuring working stations where water quality is acceptable/ good in the riverbasins affected by the water quality improvement measures</td>
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<td>15% increase</td>
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</tbody>
</table>
1.1. Water Quality Improvement

Specific objectives are to:

- Supply the population with healthy drinking water meeting the relevant standards,
- Contribute to the technical compliance with the Hungarian Implementation Program of Urban Waste Water Collection and Treatment (Government Decree 25/2002 (II. 27.)) in agglomerations between 2,000 and 50,000 p.e. (population equivalent),
- Eliminate differences between the regions concerning adequate quality of drinking water and the environmental infrastructure of wastewater collection and treatment systems.

Description:

a, Improvement of the quality of drinking water

EIOP projects on settlements scattered except North Great Plain and South Great Plain regions in the country affecting population less than 100,000 people on areas where parameters of drinking water represent significant health risk (arsenic above 10 µg/l, nitrite, boron, fluorite and ammonium) with deadline for complying of December 2009. Projects targeting the improvement of the quality of exploited drinking water. These small projects because of the scattered settlements cannot be organised into a regional (probable CF funded) project.

In accordance with the provisions of a Hungarian legal regulation (Government Decree No. 201/2001 (X. 25.)) adopted in the framework of EU harmonisation each municipal government is obliged to provide for the supply of healthy drinking water. Priority will be given to the projects in Northern Hungary and South Transdanubia Regions where parameters of drinking water represent significant health risk (arsenic above 30µg/l, nitrite, boron, fluorite) with deadline for complying of December 2006. In the course of the drinking water quality improvement interventions all components in excess of the relevant limit values will be adequately removed, along with those whose reduction is necessitated by other health requirements.

Since the quality of the drinking water needs to be provided for at the place of consumption, the most necessary network reconstruction activities also have to be carried out as part of the improvements, in order to ensure that the water provided for the consumer is of the equality ensured by the drinking water cleaning technology investment. The expected technical interventions will have to be implemented beside the continuous service of the currently working water treatment facilities.

In order to ensure the provision of drinking water supplies of adequate quality the most adequate and least expensive technical solutions should be selected. The main objective of the component is to supply the population at the municipalities with healthy drinking water meeting the EU standards.

It may be accomplished in the following ways:
- shifting to another aquifer;
- modernisation of the existing water treatment (cleaning) facility;
- installation of a new water cleaning facility.
b, Development of waste water collection and treatment

In spite of considerable developments taking place recently, Hungary is still seriously lagging behind in terms of urban wastewater collection and treatment. The Hungarian Implementation Program of Urban Waste Water Collection and Treatment, approved by the Government Decree 25/2002 (II. 27.) includes steps to comply with EU and Hungarian requirements in some kinds of agglomerations.

Providing the public collection and treatment of urban wastewater in settlements above 2,000 p.e. is the mandatory task of local municipalities. The component supports agglomerations between 2,000 and 50,000 p.e. There is a significance regional disparity in the connection rate in Hungary: in certain counties this rate was below 50%. The Structural Funds will enable them to construct the necessary basic infrastructure and provision of the public services in this field.

The main aims of the components are to eliminate differences in the country concerning coverage with public wastewater collection system and to treat sufficiently the collected wastewater. In order to achieve the objectives the following activities will be financed:

- support for constructing of new and upgrading the capacity of the existing wastewater collection systems and treatment plants;
- increasing the connection rate;
- constructing of sludge treatment facilities and disposal sites.

State aid: Infrastructure development qualifies as general measure and does not qualify as state aid according to Article 87 of the EC Treaty, since it is designed to stimulate economic activity as a whole.

1.2. ANIMAL WASTE MANAGEMENT

Specific objective are to:

- reduce health risk coming from inadequate treatment of animal waste
- reduce hazardous components
- separate of animal waste of high and low infection risk

Description:

The NWMP sets the treatment of animal waste among the tasks of local governments. Under Hungarian legislation, carcasses and animal waste from slaughterhouses classify as hazardous waste due to their infection potential, although their treatment has to follow first of all veterinary sanitation rules.

The disposal of animal carcasses in animal waste dumps and dead animal pits must be discontinued. Hungary has to establish and develop regional animal waste treatment sites (regional animal waste collection sites with the separation of animal waste of high and low infection risk, composting plants, transfer stations, collecting places, incinerator etc.). The
quantity of waste deposited at centralised depositories with adequate protection must be minimised through increased processing, composting and incineration. In order to prevent the spread of animal epidemics at the time of appearance of any contagious disease, incinerator equipment suitable for the disposal of carcasses and comply with environmental requirements should be installed. The majority of the animal waste is taken over and treated by ATEV Protein Processing Co. that belongs to the Ministry of Agriculture and Rural Development.

In order to fulfil their legisational obligations the municipalities have to establish their own regional or sub-regional collecting sites with the separation of animal waste of high and low infection risk. This collecting and buffer storage system must replace the carcass wells and animal pits operated by municipalities. So parallel with establishing and developing their new collecting sites the municipalities will terminate and recultivate the carcass wells and the animal pits.

According to the typical properties of the animal waste and for managing the specific objectives, the main activities of this measure are:

- to enhance special animal waste collection and treatment systems/facilities and including liquidation of all operating and closed-down dead animal pits and animal waste dumps.
- Close down dead animal pits and animal waste dumps.

**State aid:** Under this measure regional aid can be granted in line with the provisions of EC Guidelines on National regional aids (OJ C74 10.3.1998). The modified notification is foreseen to be submitted to the EC in the frame of the interim procedure.

### 1.3. **TREATMENT OF HEALTHCARE, CONSTRUCTION AND DEMOLITION WASTE**

**Specific objective are to:**

- support collection systems and waste utilisation,
- reduce hazardous components and
- apply material specific treatment rules.

**Description:**


The NWMP sets the treatment of some special waste streams (eg. health-care waste, construction and demolition waste a part of them containing asbestos) among the tasks of local governments. According to the special demands there is a particular task for the local governments to solve the treatment of health-care, construction and demolition waste. These special waste streams not only stress the environment, but they potentially risk the health as well.

Specialized action plans exist for the different treating procedures of municipal solid waste (selective collection, recovery, disposal, pre-treatment activities etc.) to achieve the national and regional objectives of waste management.
There are sub-programs as well for the treatment of health-care waste, construction and demolition waste according to the demand for the special treating procedures. These separated programs define the tasks for the health-care, construction and demolition waste. According to the typical properties of these special waste streams, there is a need to treat them separately to guarantee the safe circumstances.

According to the above mentioned special wastes and for managing the specific objectives the main activities of this measure are:

- to invest in hospital (health care) waste incinerator to fulfil the technical requirements (emission, continuous measurement) and develop and improvement of the health-care waste collecting and pre-treating systems,
- to develop selective collection and utilisation of construction and demolition waste including treatments of the asbestos containing waste.

**State aid:** Under this measure beneficiaries of the aid are not undertakings, but non-profit organisations this measure does not qualify as state aid according to Article 87 of the EC Treaty. In case of privatisation (of the beneficiaries e.g. the hospitals in which the investment was carried out) the value-increasing effect of the investment has to be taken into account in the price.

### 1.4. Protection of Groundwater and Drinking Water Aquifers with Remediation Measures

**Specific objectives are to:**

- Reduce the level of, or eliminate pollution in a polluted area for the protection of groundwater and aquifers;
- Decrease the risk of pollution on the particularly sensitive areas of the groundwater;

**Description:**

The National Environmental Remediation Program (NERP) - started by a Government Decision in 1996 (2205/1996.) - and the Government Decree 33/2000 jointly provide the legal background for a phased implementation of the contaminated land remediation. The vast majority of the pollution is the legacy of earlier poor industrial practises..

In 1996 a national review was started to map pollution sources and contaminated lands endangering soil and groundwater. The sites having most potential environmental risk (affected groundwater and aquifer, type of contamination; area etc.) are in National Remediation Priority List (NRPL) with a given priority number.

This measure in EIOP will assist the NERP meet its’ groundwater protective goal. The remediation measure will support those sites, which are having high NRPL priority number.

Considering groundwater protection, this measure focuses on the particularly sensitive areas of the groundwater, with the responsibility of companies under 100% state ownership (e.g. State Railways, Hungarian Privatisation and State Holding Company).

**EIOP** projects are smaller (approx. below 16 million EUR in value) than the Cohesion Fund projects.

Projects will be selected on basis of their direct contribution to the objectives of NERP and they must decrease or eliminate the risk, so reducing the number of sites on NRPL.
The main activities under this measure are:

- the implementation of contaminated land remediation,
- investment for reduction of risk of pollution.

**State aid:** Under this measure aid for rehabilitation of polluted industrial sites can be granted in line with the provisions of EC Guidelines on State aid for environmental protection (OJ C37 3.2.2001). The modified notification is foreseen to be submitted to the EC in the frame of the interim procedure.

1.5. **NATURE CONSERVATION AND SUSTAINABLE FLOOD MANAGEMENT**

**Specific objectives are** to:

- Increase and strengthen the ecological state on the river basin of Tisza
- Contribute to a sustainable (in an ecological way) flood management for the River Tisza

**Description:**

Strengthening nature conservation efforts by creating Hungary’s NATURA 2000 network and reducing and overcoming the danger of flood of the River Tisza by implementing the Improved Vásárhelyi Plan are great opportunities for the nature conservation and the flood management in the catchment area of Tisza, which has a high share of the regional population in the Tisza river basin. They will also help meeting Hungary’s obligations under some EU directives and they also support each other simultaneously and improve the potential for economic development. These synergies along with the potential in the regional for economic and nature development, led to the design and scope of measure.

**a, Strengthening nature conservation efforts**

In Hungary sites for the network of NATURA 2000 sites must be designated on the basis of the Birds and Habitats Directive. This component of the measure will support the purchase of land that will improve nature conservation management in the NATURA 2000 sites. The criteria for purchasing the areas that are necessary to the nature conservation property management are in accordance with the points included in Commission Regulation (EC) No 1685/2000, and with those activities that serve environment preservation.

Another component of the measure is to develop the forest academy programmes. Education and raising awareness are important strategic issues in nature conservation; these will play an important role in branch policy through the institutional system of the forest academy programmes.

Therefore the main activities of nature conservation component are:

- Implementing investments within NATURA 2000 network, in the river basin of Tisza with particular regard to wetlands; characteristically habitats of Pannon region (as in Hungarian proposal) and grasslands,
- The natural reconstruction, protection, presentation and complex development in the territories under the NATURA 2000 programme,
• Wetland restoration and rehabilitation (mortlakes, oxbows, reservoirs); creation of new wetlands in the frame of landscape rehabilitation linked to flood management and NATURA 2000,
• Raising environmental awareness and ecological behaviour of students by developing the forest academy programme.

b, Flood management of the Tisza Valley

The floods of the last 5 years on River Tisza have led to a revision of the traditional, expensive, follow-up approach of flood fighting and the formulation of a flood control development programme based on the concept of preventive flood mitigation. This concept is developed in the Improved Vásárhelyi Plan (IVP), which aims to lower the peak flood levels by implementing flood retention reservoirs. This component of the measure contribute to the IVP and will support the improvement of the economic, environmental, ecological and conservation status of the regions influenced.

Site selection of the reservoirs will be based the results from public hearings on issues of ecology, nature conservation, land use and farming, and by the technical consideration of parallel flood plain management serving local interests. Special attention will be devoted to the selection of reservoir sites, to which water can be diverted at least to a certain depth by gravity and offer thus opportunity for ecological water supply and flood plain farming.

Therefore, the activities of “sustainable flood management” component are to:
• Implement flood retention reservoir(s),
• Establish a landscape management pilot area and wetland habitats and
• Increase the flood safety in the region

State aid: Under the nature conservation component beneficiaries of the aid are not undertakings, but non-profit organisations this measure does not qualify as state aid according to Article 87 of the EC Treaty. Under the flood management component, infrastructure development qualifies as general measure and does not qualify as state aid according to Article 87 of the EC Treaty, since it is designed to stimulate economic activity as a whole.

1.6. Development of air and noise monitoring

Specific objectives are to:
• Monitor air pollution and noise loads
• Support noise abatement on the basis on strategic noise maps

Description:

The new air quality legislation prescribes measuring obligation for more components. The measure aims the development of monitoring network. The new devices will ensure continuous air quality monitor in some cities polluted by heavy traffic. Furthermore in two densely populated cities the smog alarm system will be based on these monitors.

The measure will also improve the capacity of some regional Environmental Inspectorates (EIs); firstly to use proper technical equipment (hardware, software and peripheries) for
making strategic noise maps. These maps support to pinpoints locations that reach the noise limits along the critical road and rail corridors that come within the remit of 2002/49/EC Directive. Secondly, the installation of noise load monitoring units, which are appropriate for long-term noise measurement. These two elements will help to make the possible intervention for reducing noise levels abatement (e.g. pavement renewal, noise reduction barriers, passive acoustic protection of buildings).

The main activities of the measure are to develop air quality and noise level monitoring network and technical equipment and to support for the implementation of noise abatement on the basis of strategic noise maps. These activities support to make appropriate environmental decisions for the protection of human health first of all.

**State aid:** Under this measure beneficiaries of the aid are not undertakings, but non-profit organisations this measure does not qualify as state aid according to Article 87 of the EC Treaty.

### 1.7. Environmentally Friendly Development of Energy Management

**The specific objectives are to:**

- Increase the utilisation of renewable energy resources;
- Increase public and industrial energy efficiency.

**Description:**

#### a) Increasing the use of the renewable energy resources

The activities of this component are to support small and medium-sized enterprises, local authorities and all other beneficiaries, their direct investments in renewable energy production as well as investment in production of energy sources. With the establishment of capacities aimed at the supply and transformation of fuels required for the operation of equipment for producing renewable energy the component targets the raw material supply for renewable energy plants. It pays particular attention to the utilisation of renewable energy generation investment projects (renewables in power generation and heat generation), and foresees promotion of projects based on the utilisation of renewable energy resources with a considerable installed capacity (biomass, geothermal, solar, wind, and low-performance hydroelectric power plants). Project investment at community level for residential utilisation of renewable energy resources, like establishing belt-type district-heating for small settlements, communal exploiting geothermal energy; utilisation of biogas are supported in the component.

#### b) Increasing energy efficiency

The main activity of the component is to rationalise energy use and make its consumption more efficient. It is to support the development of environmentally friendly energy use in the municipal and business sectors since there are unexploited opportunities for improving the energy efficiency, especially in the fields of district heating modernisation, CHP and building energy efficient reconstruction.
State aid: Under this measure investment and operating aid can be granted in line with the provisions of EC Guidelines on State aid for environmental protection (OJ C37 3.2.2001).

2. TRANSPORT INFRASTRUCTURE DEVELOPMENT PRIORITY

Development projects designed to improve division of work between the various transport sectors should be implemented with the least possible pressure on the environment. To fulfil this requirement, environmentally advantageous waterway and rail transports should have connection with regional roads in order to transship their cargos, whenever these modes of transport are unsuitable for accessing inner areas. As a result, intermodal junctions supporting transhipment have a primary role. Such transport nodes have the potential of generating income for the relevant region in respect of information flow as well as market access. The rationale for their development includes the fact that regions do not have fully built port terminals and the number of railway intermodal junctions is also limited. Logistics centres are also scarce. Improvement in public transport, particularly the role of railway in the suburbs, increases transport safety and modernises the conditions of its operation.

Such transport development investments contribute to the reduction of long-distance and transit road transport, which are the most important factors in damaging the natural environment and disturbing residential areas. Through their multiplicator impact, they can also serve as a launch pad for the development of regional economies. By connecting the region gradually into the circulation of trade, manufacturing and value-added networks, logistics can become a true engine of development. Their development is taken on board due to the above rationale.

Transit traffic causes severe congestion on certain sections of the existing network, making conditions difficult for local traffic and placing a tremendous burden on the quality of life in settlements. 28% of main transit transport routes cut through settlements, causing regular congestion, slowing down traffic and increase environmental loads. Long distance traffic often uses unsuitable roads, whose capacity and level of development does not support smooth transport. Specifically, the quality of life in many settlements is badly affected by constant traffic jams and reduced travel speeds, and by increased noise and air pollution. Accordingly the construction of bypasses and relief roads is a priority for investment in the EIOP.

Modern road network can contribute to improving economic of underdeveloped areas in Hungary. The routes will improve transport links between the regions, and alter the pattern of traffic flows between new and existing roads reducing congestion on existing routes, reducing transit traffic in settlements, and reducing the potential number of accidents. The SWOT analysis identifies that the missing elements affects inter-regional development, cause bottlenecks. The planned developments in the area in one hand could increase the multiplication effects of economic development by improving accessibility. On the other hand the upgraded roads with reinforced load bearing capacity also help to settle a stabile, well planned, good functioning road network, which also contributes the growth of the regional economic force. The planned interventions establishes a new high capacity road network, which in co-operation with the expressway network serves well the increased heavy-good transport as well as the wide-spread passenger flow demands within and between the regions.
The described measures of the transport priority not only aims at the pure road development actions (which are basic for a highly flexible sensitively changeable transport network), but also demands to develop a real multimodal transport system. The initial step for developing a high quality, functioning multimodal transport system is establishing connection points and multimodal “junctions”. The transport infrastructure development priority also aims at providing the balanced division of labour between the transport branches.

Furthermore, in accordance with the National Development Plan and the Hungarian Transport Policy, in harmony with the ISPA and Cohesion Fund development measures the road rehabilitation programme to reach the 11.5 ton load bearing capacity shall be continued relying on Structural Fund type support, as the ISPA funds have been exhausted by the time of accession and Cohesion Fund also finances only the begun investments. These grants impact the stages of the extended TINA network, and the most important main roads. The planned road rehabilitation programme shall improve the public roads which are deteriorating dramatically under the transit traffic of heavy-duty vehicles. The Directive No. 96/53/EC of the European Council regulates the maximum allowed weight of certain vehicles in international freight transport within the community. In agreement with the Directive the 11.5 ton road rehabilitation programme is a part of the complex road development plan of the country of which development issues can be treated as a pressing local development need at regional level also.

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<td>Impact</td>
<td>Decrease of number of accidents</td>
<td>National Police Database</td>
<td>5% of reduction</td>
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### 2.1. **Upgrading the main road network**

The specific objectives are to:

- Improve the infrastructure conditions for regional and inter-regional transport connections;
- Reduce transit traffic in settlements (with bypasses); and
- Reduce noise, vibration, and air pollution.
- Improve conditions of main roads
Description:

a) Road rehabilitation programme for achieving 11.5 ton load bearing capacity

To meet the requirements of the 96/53 EC Directive, Hungary must reinforce the national main road network, making it suitable for admitting the transport of vehicles with 11.5 tonnes axle weight. The selected road sections form a complex development programme, which together with other scheduled road developments, helps to set up a modernised, enhanced main road network, suitable for the increased loads that will come after accession. This will contribute to Hungary’s participation in the internal market with its increased opportunities for trade and economic development.

The following activities will be financed:

- The strengthening of the main network of the national road network and its turning to bear the traffic of vehicles with an axle-load of 11.5 tons

b) Development of bypasses and relief roads to reduce transit traffic through settlements

The development of bypasses and relief roads relieves settlements from the impact of heavy transit traffic; those roads sections close to the settlements will also benefit from modernisation. This programme has already begun in towns and settlements with large transit traffic; but because of a dynamic increase in traffic, more and more towns and settlements have to be included in the programme. This component of the measure intends to develop and modernise the current crossover sections, partly by creating new bypass routes and partly by developing already operating or missing road sections.

The following activities will be financed:

- The building of road section bypassing the settlements sections of the main network of the national public road-network

c) Development of main road network, capacity improvement

Modern road networks play a considerable role in the economic development of the country. This component of the measures targets disadvantaged regions and seeks to increase the capacity of existing main roads, and solve the main bottleneck problems.

The envisaged developments will result in the construction of the missing elements from the mesh structure, supplement the existing radial structure, and improve the chances of realignment for economically underdeveloped areas. The planned main road sections are also included in regional road network plans; according to these plans and the further needs, some of the targeted sections may also be developed into a motorway, or expressway.

The targeted intervention has a dual objective: the development of existing lower-category roads connecting to expressways and to higher-category roads will improve accessibility of the disadvantaged region and will improve the safety and the effectiveness of the passenger and freight transport traffic. Developments include the construction of new roads connecting two or more settlements, which were set up according to the CSF and EIOP’s objectives to ensure quicker and safer journeys to the regions and their settlements.

The following activities will be financed:

- Capacity extension of the main roads between the region
State aid: Infrastructure development qualifies as a general measure and does not qualify as state aid according to Article 87 of the EC Treaty, since it is designed to stimulate economic activity as a whole.

2.2. Development of Environmental Friendly Transport Infrastructure

The specific objectives are to reduce:

- Congestion, environmental loads of road traffic and improvement of railway transport services in the suburbs
- Transit traffic volumes by improving connections into waterway and road transport, building connection points and providing there the conditions necessary for logistics services.

Description:

a) Improvement of suburban railway transport

In consequence of the increased load of existing road network, there is clear need for railways connecting large cities and their suburbs. The congestion, the low speed and the environmental problems all necessitate the development of suburban railway. The more intensive involvement of the concerned railway sections prospectively develops the accessibility.

The environmental friendly transport ensures more healthy and comfortable way of travelling for hundred thousands of commuters and improves the quality of life in the concerned areas. Reconstruction of the existing suburban rail network raises the level of services and constitutes the basis of modernised rail traffic.

In the public transport between the capital and the suburbs, the share of rail traffic is 38-40%. The interregional traffic on the concerned railway lines also takes a great part. Harmonised improvement of the suburban railway sections will result in an infrastructure competitive to road traffic.

The following activities will be financed:

- To improve the parking possibilities, passenger traffic at the affected railway stations
- To abolish the level differences in connection with railway and road crossings

b) Building access and connections from main road and railway lines to intermodal transport centres

The development of intermodal centres by extension of their connections into the main road and railway networks is intended to be catalytic; it will facilitate the implementation of well operating infrastructure for waterway-to-road, rail-to-road and waterway-to-rail junctions as a means of attracting further economic development. This programme includes building road and railway connections to the intermodal transport centres and transport nodes from the proximity of major economic centres through major transport network.
Logistics centres, with well-developed transport connections, facilitate the business, information, warehousing, loading, customs and other services related to the flow of goods. This role of logistics in attracting enterprises with the value-added approach is a key consideration in project definition. On the other hand, the positive social impacts of such centres of regional importance are felt in employment, the relocation of the focal point of freight transport, its suitability for planning, its controllability and in the reduced pressure on the environment.

The following activities will be financed:

- Building road and railway connections to intermodal transport centres

**State aid:** Infrastructure development qualifies as general measure and does not qualify as state aid according to Article 87 of the EC Treaty, since it is designed to stimulate economic activity as a whole.

### 3. TECHNICAL ASSISTANCE PRIORITY

As prescribed by Council Regulation No. 1260/1999, a specific proportion of Structural Funds support may be used for financing preparation, monitoring, evaluation, and control measures as required for implementing the Regulation above. Commission Regulation No. 1685/2003 that has been amended by No.1145/2003 provides instructions on the costs that can be co-financed from the Funds in relation to the management and implementation of Structural Funds.

#### 3.1. TECHNICAL ASSISTANCE MEASURE

In line with points 2 and 3 of Rule N° 11 of Commission Regulation No. 1145/2003, the priority consists of only one measure, although the measure is broken down into two individual components.

**Specific objectives are:**

- To promote the professional, efficient and transparent execution of those management, implementation, monitoring and control activities which are eligible for co-financing through the Structural Funds and which are necessary for successful implementation of the EIOP.

- Arranging for the delivery of the necessary information to partners and potential end-users, ensuring capacity building in the form of training applicants and managers of the programme on issues relevant to Structural Funds programmes, exchange of experience, increasing the professionalism of reports and evaluations, further development of IT for management and monitoring.
Description:

a) Assistance for the Management, Implementation, Monitoring and Control of the EIOP

- Expenditure on the meetings of the Monitoring Committee and, where relevant, its subcommittees relating to the implementation of the programme, including the participation of experts and third parties, as necessary;

- Expenditure on the preparation, selection, appraisal and monitoring of assistance and of individual operations, including support for the activities of the Intermediary Bodies on such tasks and use of consulting services where necessary. Monitoring activities will include monitoring the outputs, results and impacts of operations, including in terms of sustainable development and equal opportunities. However, the costs related to the preparation of operations themselves co-financed by the Funds will be part of the project cost co-financed under the relevant measure;

- Expenditure relating to the preparation, selection, appraisal and monitoring of the Programme (but excluding expenditure on the acquisition and installation of computerised systems for management, monitoring and evaluation). This may cover activities needed for improving the skills required for carrying out these tasks, subject to the provisions of point 2.2 of Rule No 11;

- Expenditure relating to audits and on-the-spot checks of operations.

Make use of technical assistance will help the EIOP perform effectively, using proven management methods and efficient organisational solutions.

In accordance with point 2.4 of rule 11 of the above mentioned Commission Regulation, the Structural Funds’ contribution to activities co-financed under this sub-measure shall not exceed 7 044 915.16 euros.

b) Other categories of expenditure (Information actions, Seminars, Studies, …)

Activities to be co-financed under this measure may include:

- Publicity and Information Actions:
  - Organisation of national and regional conferences, regional and micro-regional seminars, delivery of presentations, preparation and delivery of information material for the media, partners, ultimate beneficiaries and the public;
  - Development, maintenance and operation of the OP’s Internet web sites;
  - The dissemination of information materials, brochures, etc. for the general public as well as potential final beneficiaries.

- Advisory services
  - Elaboration of information materials relating to the Structural Funds, EIOP and the preparation of applications;
  - Familiarisation of potential beneficiaries, with the requirements for preparing applications and provision of feedback on application experiences in the course of the implementation of the OP;
  - Preparation of reports and studies for the Programme’s evaluation.
- **IT Monitoring System**
  - Information collection, preparation of the studies and analyses necessary to substantiate regional development measures;
  - Development of IT tools for management, monitoring and evaluation of the programme. However, acquiring and installing the main IT monitoring system is the responsibility of the National Development Office, not a task to be financed by EIMA.

The measure will enhance the delivery of the programme, ensuring the necessary publicity for the general public, programme partners and beneficiaries on the OP’s priorities and measures and the support available from the Structural Funds and supporting information-gathering and analysis to improve delivery of the programme.

## 4. INFORMATION ON STATE AID

According to Article 18(2)(b) of Council Regulation (EC) No 1260/1999, the draft Operational Programmes need to contain the information needed to check compliance with aid schemes pursuant to Article 87 of the Treaty. According to the Vademecum for Structural Funds plans and programming documents (Commission Working Paper No 1), this information is one of the elements required by the Commission for declaring the a draft Operational Programme “admissible”.

This information should be provided in the same form as for current Member States: Each draft OP should, therefore, contain the attached table, which should be filled in by detailing all State aid schemes and/or ad hoc State aid that will be financed under each measure (title of the scheme, national State aid number of the scheme, references of the approval letter by the Hungarian State Aid Monitoring Office, and duration of the scheme).

<table>
<thead>
<tr>
<th>Measure number</th>
<th>Title of the State aid scheme and ad hoc State aid(*)</th>
<th>State aid number(*)</th>
<th>Approval letter reference(*)</th>
<th>Duration of the scheme(*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. No State aid falling under Article 87(1) of the EC Treaty shall be granted under this measure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2. Environment Protection Fund Appropriation</td>
<td></td>
<td>Notification foreseen in the frame of the interim procedure (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3. No State aid falling under Article 87(1) of the EC Treaty shall be granted under this measure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4. Environment Protection Fund Appropriation</td>
<td></td>
<td>Notification foreseen in the frame of the interim procedure (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Status</td>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>1.5.</td>
<td>No State aid falling under Article 87(1) of the EC Treaty shall be granted under this measure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.6.</td>
<td>No State aid falling under Article 87(1) of the EC Treaty shall be granted under this measure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.7.</td>
<td>Aid to energy saving and energy-effectiveness from the earmarked scheme for amelioring the effectiveness of energy used</td>
<td>Notified to the EC (under approval) (2)</td>
<td>31/12/2006</td>
<td></td>
</tr>
<tr>
<td>2.1.</td>
<td>No State aid falling under Article 87(1) of the EC Treaty shall be granted under this measure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.</td>
<td>No State aid falling under Article 87(1) of the EC Treaty shall be granted under this measure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>No State aid falling under Article 87(1) of the EC Treaty shall be granted under this measure</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) The state aid scheme HU/31/2002 is under modification in order to fully cover measures 1.2. and 1.3. The scheme has been notified to the State Aid Monitoring Office, but corrections are needed. The notification is foreseen to be submitted to the EC in the frame of the interim procedure (in December 2003-January 2004) after correcting the relevant regulations. The legal regulation is the duty of the Ministry of Environment and Water, independent from the Ministry of Economy and Transport responsible for the EIOP.

(2) The modification of the „Decree No. 1/2001 (I. 5.) of the Minister of Economic Affairs on Entrepreneurial Earmarked Schemes of the Ministry of Economic Affairs, Article 18 (2)” is under way. This is not a notification of a scheme, it is a clarification and a separation of financing state aid measures. The Decree 1/2001 is a base regulation on the MoET’s earmarked schemes therefore it includes all schemes at once. Consequently the Decree 1/2001 will include the "Earmarked Scheme for Investment Promotion" financing ECOP measures, and separately the "Earmarked Scheme for Amelioring the Effectiveness of Energy-use" financing EIOP energy measure without possible overlaps. The Earmarked Scheme for Investment Promotion (Hungarian abbreviation: BöC) will be modified to directly exclude energy investments. The modified decree is expected to come into force in the middle of January. The legal regulation is the duty of the Energy Department in co-ordination with the Legal Department of the Ministry of Economy and Transport, independent from the Environment and Infrastructure Operative Program Department of the Ministry responsible for the EIOP.

**NOTE:** “In conformity with its duties under Article 34(1)(g) of Council Regulation No 1260/1999, the Managing Authority will keep the above State aid table up-to-date and will inform the Commission of any modification of the table. The introduction of a new aid scheme or ad hoc aid requires a modification of the assistance by a formal Commission decision. Article 4 of the Commission decision approving the present programme (suspensive clause concerning State aid) applies to measures which contain State aid that is subject to appropriate measures or has not yet been authorised by the Commission. At the present stage, this Article applies to measures 1.2 (Animal waste management), 1.4 (Protection of groundwater and drinking water aquifers with remediation measures) and 1.7 (Environmentally friendly development of energy management).”
IV. COHERENCE AND CONSISTENCY OF THE STRATEGY

The EIOP contains development activities in several areas related to each other, such as energy, nature conservation, intermodal connection and road transport, potable water quality and management, and waste management. Naturally, the objectives and contents of individual priorities in the EIOP are closely related to the EU policies of the particular field, moving forward and using their components and recommendations. It is also very important that the individual development activities are in line with the EU and Hungarian, so-called horizontal principles, which need to be applied independently from specific policies, including equal opportunities and sustainable development. These principles should be taken into consideration in all projects with ERDF support.

1. COMPLIANCE WITH COMMUNITY POLICIES

The EIOP is linked to the following Community policies:

- 6th Environmental Action Programme
- Sustainable Development Strategy
- European Spatial Development Perspectives
- Transport Policy.

This section IV emphasises the links between the National framework and Community policies. The measures of EIOP reflect the principles formulated in Community policies.

The objectives and instruments of the environmental protection strategy comply with the principles included in the 6th Environmental Action Programme of the European Union, which focus on climatic change, natural and bio-diversity, environment and health, sustainable resource utilisation and waste management.

The action priorities laid down in the Community policy included in the Sustainable Development Strategy of the European Union approved by the European Council in June 2001 focus on an integrated environmental policy approach, more responsible management of natural resources, use of clean energy and improvement of transport systems and physical space management.

The National Environmental Program (NEP 2) is also based on this programme and strategic document. The thematic structure of the Programme and its integration into the NDP is in line with the EU 6th Environmental Action Programme and the EU Sustainable Development Strategy structure. The EIOP reflects the expectations of the EU and Hungarian policies, and contributes to the development of programmes in the area of climatic change, protection of
environmental quality in cities, biological diversity and nature conservation, protection and sustainable use of internal waters, waste management and environmental safety.

The transport infrastructure development programme takes into account the European Spatial Development Perspective (ESDP) and the objectives of the EU transport policy published in 2001, and have been elaborated in accordance with them. The priorities of the European Union published in 2001 are reflected in the objectives, according to which each country needs to strive for reducing regional transport disparities and traffic congestion, achieve a balance between modes of transport, eliminate bottlenecks in networks, and managing the globalisation of transport.

The following horizontal principles are present in EIOP:

- Equal opportunities
- Sustainable Development

These principles are integrated in the entire programme at the level of priorities, measures, and projects.

1.1. SUSTAINABLE DEVELOPMENT

The strategic framework of EIOP is specified by the National Development Plan, focussing on the following areas:

- Sustainability of natural values and improvement of environmental quality,
- Integration of environment protection into regional and sectoral policies,
- Protection and preservation of the natural heritage, maintenance of biodiversity,
- Decreasing the regional disparities and improvement of accessibility,
- Promoting education on the protection of the environment and related information flows.

The EIOP’s objectives are set on the basis of the national priorities mentioned above.

The objectives are to:

- Strengthen environment protection,
- Reduce harmful environmental effects,
- Improve regional transport connections through investments in upgrading the national transport infrastructure.

The programme supports the use of environmentally friendly technologies at all levels in the areas of environmental protection and transport. Prevalence of the basic principles of sustainable development can be evaluated after programme implementation is completed. Both priorities will apply these objectives to the activities likely to be financed. These measures will contain a full evaluation of environmental aspects and opportunities, as well as reports on the completion of the objectives set. Projects should emphasise the importance of environmental awareness.

Specific measure–level objectives are set by the Programme Complement. At the level of measures, environmental indicators should be defined which are relevant at programme level. These indicators are specified in the Programme Complement. Indicators refer to the
following areas: water quality improvement, treatment of special waste streams, development of air- and noise monitoring, protection of groundwater and drinking water aquifers with remediation measures, nature conservation and sustainable flood management, environmental friendly energy management, upgrading of the national road network, intermodal logistic.

1.2. **Equal Opportunities**

The measures of the programme do not contain any discrimination with regard to women in employment, and the new jobs will be available for both genders equally. EIOP equally supports activities which relate to the employment of women and minorities. In the area of transport and environment protection infrastructure, the distribution between men and women in employment is nearly 50-50%. Consequently, the implementation of the Operational Programme will improve the employment ratios of women concerning demand at the labour market.

In order to realign with the average level of development of the European Union, employment must also be increased in accordance with the provisions of the Technical Programming Document issued by the Commission for the period between 2000 and 2006. Effective development of environment protection and the transport system will also lead to an increase in the level of employment apart from the necessary modernisation activities. "Gender Mainstreaming” has the following meaning:

"Gender Mainstreaming” includes all measures and activities in the course of planning, implementation, monitoring, and evaluation, which directly take into account any impact on men and women. “Gender Mainstreaming” also includes the measures and activities, including supplementary planning, implementation, monitoring, and evaluation, which contribute to the provision of equal rights for women.

"Mainstreaming” requires compliance with the directive on equal opportunities throughout the programme, and specifically at project level. The programme should accessible to those groups who do not benefit from "Mainstream” measures and support from other sources.

Prevalence of the principle of equal opportunities is ensured by the equal distribution of men and women in the EIOP Monitoring Committee and some strategic committees. The prevalence of this principle should be described in the annual report prepared for the Monitoring Committee.

The objectives related to equal opportunities prevail through measures within each priority. Review thereof includes the following:

- Equal representation of the sexes in the Planning and Monitoring Committees,
- Evaluation of the existence of equal opportunities in the planning phase,
- Reporting on measures to eliminate existing hindrances,
- Setting project-level objectives,
- Monitoring the achievement of the objectives set,
- Data collection.

The objectives of measures are defined in the Programme Complement. There are no aggregate data on the disabled, minorities, and gender distribution. This fact seriously hinders
the definition of specific objectives in terms of enforcing the principle of equal opportunities. The Programme Monitoring Committee can only record objectives if such data are available for the Committee.

2. COHERENCE WITH NATIONAL AND REGIONAL POLICIES

The environmental protection priorities of the EIOP are based on the following legal regulations:

- Act No. LIII/1995 (Ktv.) on the general rules of environmental protection,
- Act No. LIII/1996 on nature conservation,
- Act No. LVII/1995 on water management.

These acts clearly distribute assignments between the state, municipalities, the economy, and the society. The Act on environment protection enforces the principle that environment protection data are public: it clearly states that such data are of public interest. Further detailed regulations related thereto are contained in Act No. LXXXI/2001, announcing the Aarhus Convention on access to information in environmental affairs, participation of the public in decision-making, and the provision of the right of justice, approved on 25 June 1998. The most important legal concepts to be taken into account in relation to developments include the standard environmental use permit, the permit for hydraulic engineering works, as well as the environmental impact study and environment protection review procedures, made EU conform by virtue of Government Decree No. 20/2001 (II.14.). These primarily preventive instruments contribute a great deal to professional integration.

Environmental performance evaluation supports the voluntary environmental rating of industrial companies. In addition to the legal concepts mentioned above, the economic instruments applied in environment protection (e.g. product fees, etc.) and the institution of the environmental commissioner are also very important.

As regards the priority of environment protection development, Government Resolution No. 1117/2001 (X. 19.) – which was prepared on the basis of the Act on the concept of the second planning period (2003 to 2008) of the National Environmental Program – is of key importance for the next period. In addition to the Environment Protection Act, this concept forms the basis of the second Programme adopted by the government with the Resolution No. 2130/2003. (VI.19.) and to be approved by the Parliament, which will also include the National Nature Conservation Master Plan, identifying the future priorities of nature conservation.

On the basis of an authorisation contained in Act No. LVII/1995 on water management, the Government approved the long-term river management concept in 1999. Then, in the year 2000, the European Union’s Water Framework Directive was issued. In Government Resolutions Nos. 2255/2000 (X. 31.) and 2003/2002 (I. 11.), the Government decided to accelerate the former 10-year programme, requiring dikes to be strengthened to a degree of 80% in the next five years.
Government Decree No. 123/1997 (VII. 18.) regulates the establishment of protection areas around potable water bases. In hydro-geological protection areas, wastewater should be drained and placed in a recipient without causing any damage (waste water treatment). Directive No. 98/83/EC of the European Communities, regulating the quality of drinking water, came into force at the end of 1998. In order to comply with the new limit values introduced with the directive, a drinking water improvement programme had to be developed, which was approved by the Government in its Resolution No. 2060/2001. (IV. 2.). The programme can actually be implemented from 1 January 2004.

With its Resolution No. 2207/1996. (VII. 24.), the Government launched the waste water collection and treatment programme, which already took into account the provisions of Directive No. 91/271 (EEC) on communal waste water treatment. The tasks required for adopting Directive No. 91/271 (EEC) in the Hungarian legislation were defined in Government Resolution No. 2168/2000 (VII. 11.). As the EU accession negotiations progressed, a national programme for waste water treatment was prepared for waste water collection agglomerations exceeding 2000 population equivalent by the end of the year 2000. This programme also represents the technical implementation of the EU regulation indicated above. The future objectives of this area are contained in the National Implementation Programme for Communal Waste Water Removal and Treatment approved by Government Decree No. 25/2002 (II. 27.).

Finally, Government Resolution No. 2329/2001 (XI. 21.) also needs mentioning as it summarises all the measures related to the implementation of the Water Framework Directive in Hungary, forming the basis for the Hungarian Strategic Document and Government Resolution No. 1189/2001 (XI.7.) “On the Hungarian Strategic Document for the implementation of Directive No. 2000/60/EC of the European Parliament and of the Council on specifying the framework for community actions in water policy and related measures”.

Another important programme for the implementation of the environment protection strategy is the National Environmental Remediation Programme (NERP), prescribed by Government Resolution No. 2205/1996 (VII. 24.) on the remediation of abandoned environmental damage falling into the sphere of responsibility of the state. The future tasks of this programme are set out in Government Decree No. 33/2000 (III. 17.) on the specific tasks related to activities affecting the quality of underground waters. Even according to conservative estimates, the financial pre-requisites of NERP amount to nearly 1000 billion HUF. The period of implementation is expected to be 30 to 40 years, provided that an annual 25 to 35 billion HUF is allocated for this purpose.

Another important statutory regulation setting objectives at regulatory level is Government Decree No. 21/2001 (II. 14.) on the specific rules related to air protection.

Act No. XLIII/2000 on waste management and Act No. XXV/2000 on chemical safety adopt the provisions of numerous EU directives and the respective elements of the strategy are implemented on the basis of the provisions of these acts and their executive orders. The National Waste Management Plan, approved by the Parliament and forming a part of the National Environmental Program, has been completed on the basis of these acts.

Hungary has developed programmes to preserve and maintain the state of areas not qualified as nature conservation areas as well as of areas close to nature (lawns, forests, and water habitats complying with specific conditions) besides protected areas are implemented by
virtue of Act No. LIII/1996. Forming a part of the National Environmental Program, the National Nature Conservation Master Plan – submitted to the Parliament for approval – also summarises the developments required in the course of the next six years. The currently effective strategy for energy efficiency and renewable energy resources is specified by Government Resolution No. 1107/1999 (X.8.) on the strategy for energy savings and energy efficiency development until 2010, as well as by the action programme forming a part thereof. In the framework of the action programme, support schemes were launched in the business, municipality and residential sectors, promoting developments as well as logistics, training and planning/analysis activities. The programme contains components for the residential sector, district heating systems, the agricultural sector, as well as the transport and industrial sectors.

As regards renewable energy resources, the document above identifies tasks for reducing natural gas consumption by establishing renewable capacities applied for electricity and heat generation, provides excessive support to biomass and geothermic energy, and promotes the spread of the application of renewable energy resources, primarily solar energy, in the residential sector.

The priorities of transport infrastructure development as described in the Operational Programme have been elaborated on the basis of the following acts and resolutions:

- Parliament Resolution No. 68/1996.(VII.9.) prescribing the strategic directions of Hungarian Transport Policy;

- Parliament Resolution No. 35/1998.(III.20.) on the acceptance of the National Concept for Physical Planning;

- and various Government resolutions on the implementation of the Policy and the Parliament Resolutions.

The Transport Policy delineated five strategic directions providing for the development of transport networks to promote the infrastructure conditions of economic and social integration into the European Union as well as to improve the conditions of co-operation with neighbouring countries and enhancing Hungary’s more balanced regional development. These directions are complemented by the prioritised aspects of protecting human life and the environment and the objectives to operate networks effectively, in compliance with market demands.

The revised Transport Policy for the period until 2015 – the adoption of which is under way – has as one of its most important elements the change of focus according to which network development is obviously geared towards regional policy objectives. As a result of the continuous – primarily public road network – developments of recent years, the new directions of development should serve for balancing the transport connection system of regions so that life quality and traffic safety can be improved. All this should be achieved in a way that the negative impact of transport on human life and the environment be present to the least possible degree.

Each part of the policy is in concordance with the National Concept for Regional Development and ensuing National Spatial Development Plan, in which the land demands for transport network development are catered for – among other things – by the regulation of spatial structure and zone use.
In Government Resolution No. 2303/2001.(X.19.), the foundations of a long-term public road network development plan have been laid out, raised to become one of the components of the “Hungarian development model”. A modernised and specified version of this is included in Government Resolution No. 2044/2003.(III. 14.), taking into consideration the balanced regional and economic development of Hungary, the expansion demands of transport connections with neighbouring countries, the new requirements arising from EU accession, and budget planning cycles as well.

The realisation of large-scale assignments is included in various sectoral policies and development programmes, such as

- the Public Road Network Development Concept of Design and Statistical Regions, focussing on county-level developments besides regional correlations, ensuring coherence in national public road network development;

- The Development Plan for Railway Tracks, harmonised with railway reforms;


- Public road network development plans for various planning periods – adopted by the Government -, also including alignment with the TEN network for the planned network and the terms and conditions of compliance with EU Directive 96/53/EC.
3. COHERENCE AND CONSISTENCY OF THE STRATEGY AND THE PRIORITIES

This section summarizes the findings of the assessment carried out by the Ex Ante Evaluation Team on the coherence and consistency of the EIOP.

The EIOP builds on the socio-economic analysis of the NDP, its development strategy, the priorities defined in it and the horizontal objectives of the Community. The goal of the planning procedure was to examine in more detail the strengths, weaknesses and potential of the areas of intervention assigned to EIOP, to use this analysis to firm up the NDP priorities and translate them into appropriate Measures and actions “on the ground” that would serve to further the NDP objectives.

Overall, with regards to consistency with the strategy, objectives and priorities of the NDP and the Cohesion Fund, the current EIOP represents a considerable evolution from previous versions. It exhibits greatly enhanced internal and external cohesion; a clearer presentation of the case for the strategy adopted, and has a more consistent presentation.

3.1. CONSISTENCY WITH THE STRATEGY, OBJECTIVES AND PRIORITIES OF THE NDP AND COHESION FUND

The rationale behind the strategy and its process of development has been outlined clearly within the EIOP. The description of the relationship between EIOP and the NDP, Cohesion Fund, other OPs and running national programmes is provided in the General Introduction section, in Section I and Section II. It is also shown how the NDP objectives flow into specific EIOP strategy.

The General Introduction section provides a brief, but useful introduction setting the EIOP in the context of the NDP. Section II sets out the links with projects financed through Cohesion Fund including those involved into the Operational Programmes of the NDP. This section also contains a quite detailed description of the national programmes in the field of environment protection and transport. As the level of the description suggests this section identifies clearly the links between the EIOP and national programmes and considers the way these programs overlap or complement each other.

Section II starts with the presentation of the SWOT analysis that was developed in association with the ex-ante evaluators in a workshop setting. The SWOT consists of an integrated analysis; strengths, weaknesses, opportunities and threats identified within are consistent with the SWOT analysis provided in the NDP. Both the SWOT and situation analysis do therefore positively contribute to the justification of the EIOP strategy and ensure it remains consistent with NDP objectives.

Section II is mainly concerned with articulating an overall programme strategy and the derivation of the specific objectives from the NDP. The NDP defines a clear role and remit for each OP by developing its strategy on the basis of national needs, detailed in the NDP
situation and SWOT analyses. The NDP developed long-term, current programming and specific objectives and a set of priorities that relate specifically to the five individual OPs.

The overall objective of the EIOP was defined as “to promote environmentally friendly development” which recently has recently changed to “to contribute to the development of a better infrastructure and cleaner environment”. The Evaluators hope that more active role defined in the latter objective means a greater contribution and a stronger devotion to achieve the goals declared. This twofold focus may seem contradictory which again is not dealt with in this section. Under both priorities a range of key objectives is defined, with a series of foci developed. Thus in terms of the overall rationale for the strategy there does appear to be clear justification for its implementation, with a structured approach to its development.

3.2. INTERNAL CONSISTENCY WITHIN EIOP

Both the SWOT and situation analysis positively contributes to the justification of the EIOP strategy and assists that it remains consistent with NDP objectives. However when a closer examination of the programme is conducted, the consistency of the planned activity on the ground with these strategies is not as clear, and the linkages between individual elements of activity are not fully apparent. Improvement in competitiveness is one of the three specific objectives of the NDP as a whole and EIOP is but an auxiliary instrument to ECOP through which this NDP objective is to be achieved; however it does not mean that considerations on its effect on competitiveness should not be addressed and highlighted in the EIOP.

A further concern is the lack of balance in the development of priorities into measures, with the environmental priority dominating in terms of the quantity of individual measures. The transportation priority does however form a key part of the EIOP, accounting for more than half of the overall budget, yet the strategy under this priority is not developed in the same depth or with the same specific detail as the measures in the environmental priority. This inconsistency of approach makes the overall strategy appear a little bit unbalanced, and further explanation of the specific tasks under the transportation priority seems to be useful.

Proposed measures are in line with the results of the SWOT analysis, in general. Most weaknesses and threats are addressed, and opportunities utilized by the proposed measures. The effectiveness of the measures however could be questioned since some aspects of the measures may not be too strong due to very limited financing available. The measures in the Environment Protection Priority became more streamlined than in the earlier versions.

Overall rationale of the strategy provides solid evidence in supporting the justification for interventions under the EIOP. There is a good relationship between the issues identified in the SWOT analysis and the proposed priorities for action under the EIOP. Both the SWOT and situation analysis positively contributes to the justification of the EIOP. Compared to previous versions the SWOT analysis presents—in line with the Commission’s template, along with the specific objectives—the programme strategy and the quantified objectives and impacts at Programme level. This reinforces the value of the work done on the SWOT analysis.

The section setting out the proposed Priorities and Measure of the OP, has been considerably expanded compared to previous drafts. The Programme consists of 3 Priorities:

- Environmental Protection
- Transport Infrastructure Development
- Technical Assistance.
The Priorities and Measures of the Programme are as follows:

**Priority 1** consists of 6 proposed Measures
1.1 Water Quality Improvement
1.2 Animal Waste Management
1.3 Treatment of Healthcare, Construction and Demolition waste
1.4 Protection of Groundwater and Drinking Water Aquifers with Remediation Measures
1.5 Nature Conservation and Sustainable Flood Management
1.6 Development of Air and Noise Monitoring
1.7 Environmental Friendly Development of Energy Management.

**Priority 2** consists of 2 proposed Measures
2.1 Upgrading the Main Road Network
2.2 Development of an Environment Friendly Transport Infrastructure.

**Priority 3** consists of a single Technical Assistance Measure.

While the overall structure of Priorities and Measures has changed significantly there is a greater clarity about the specific activities that will be undertaken and the document is much easier to read than it used to be. Each Measure is described logically, the specific tasks identified are in general well related to the situation analysis and the SWOT analysis and a clear objective is identified for each Measure.

The strong sense of being two separate Programmes within one Programme in previous drafts has much reduced as a result of the much clearer linkage to the NDP and its Priorities. The innate contradictions between the two priorities is mentioned and thus observed to a certain extent. Proper distinction between EIOP and other Operational Programs in terms of measures utilised is also welcome by the Evaluators along with a clear separation of sources of funding for the measures observed.

Overall, the OP provides a much more coherent and focused analysis than was found in previous versions and Measures address identified problems based on a substantial base of evidence. On the whole, greater integration of approach across the OP is demonstrated.
Pursuant to Article 18 of the Council Regulation (EC) No 1260/1999 of the European Union, the Operational Programme should contain an indicative financing plan, which specifies the financial allocation for each priority.

The proportions of the financial plan have been determined according to the above-mentioned Regulation, the programme strategy and the experiences of similar development supports. The presented amounts always indicate the level of commitments; the actual payments will depend on the implementation of the programme. The contribution form the funds were calculated in relation to the total public or similar eligible expenditure.

The amount of private co-financing is expected to be around 40 million euros for environmentally friendly development of energy management measure within EIOP.

With reference to Article 29(2) of the Council Regulation (EC) No 1260/1999, it is noted that the contribution from the Structural Funds in the financing plan below is to be calculated in relation to the total public or similar eligible expenditure within the maximum rates set in Article 29(3) and 29(4) of that Regulation. In addition, the programme is expected to mobilise about 40 million euro of private co-financing.

In accordance with Article 29(3) of the same Regulation, the contribution from the Funds is subject to a maximum of 75% of the total (public or similar) eligible cost in the case of measures carried out in the regions covered by Objective 1, i.e. in the whole territory of Hungary. In any event, the contribution of the Funds shall be subject to the ceilings outlined in the same Article in the case of investment in infrastructure generating substantial net revenue and in the case of investments in firms.

At the time of the finalisation of the text of the programme (December 2003) and subject to further negotiations with the Hungarian authorities, the total amount of EIB loans to the Operational Programme was estimated at 100 million euro, which corresponds to almost the entire amount of national co-financing from the central budget (see second column under "national public participation" in the financing plan below). This figure is of an indicative nature and fully dependant on satisfactory due diligence to be conducted by the Bank’s services. In particular it could be exceeded, if revenue-generating projects retained require an increased share of loan co-financing or if suitable forms of programme co-financing could be developed further.

V. FINANCIAL TABLE
Environmental protection and infrastructure development operational programme Hungary 2004-2006 (in EUR)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Total Cost</th>
<th>Community participation</th>
<th>National public participation</th>
<th>Private</th>
<th>Cohesion Fund</th>
<th>Other</th>
<th>EIB loan</th>
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<tr>
<td></td>
<td>Total</td>
<td>ERDF</td>
<td>ESF</td>
<td>EAGGF</td>
<td>FIFG</td>
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<tr>
<td></td>
<td>Total</td>
<td>Central</td>
<td>Regional</td>
<td>Local</td>
<td>Other</td>
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<td>125 291 228</td>
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<td>4 054 752</td>
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<td>15 263 586</td>
<td>0</td>
<td>1 353 385</td>
<td>0</td>
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<td>2006 ERDF</td>
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<td>4 054 752</td>
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<td>327 245 758</td>
<td>113 048 028</td>
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<td>2006</td>
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VI. IMPLEMENTING PROVISIONS

1. MANAGEMENT

The management of the Environmental Protection and Infrastructure Operational Programme shall be the responsibility of the Managing Authority under the close supervision of the Monitoring Committee. The Managing Authority shall be responsible for the efficiency and correctness of the management and implementation of the programme.

1.1. THE MANAGING AUTHORITY OF THE ENVIRONMENTAL PROTECTION AND INFRASTRUCTURE OPERATIONAL PROGRAMME

The Managing Authority for the Environment Protection and Infrastructure Operational Programme is the Ministry of Economy and Transport. The Head of EIOP Managing Authority is Mr. László Magyari, titular state secretary. The Minister of Economy and Transport appoints the Head of Managing Authority.

The organisation chart shows the structure of the Managing Authority:
Contact details of the Head of Managing Authority:

<table>
<thead>
<tr>
<th>Eiop Managing Authority</th>
<th>Ministry of Economy and Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational unit</td>
<td>Titular State Secretariat</td>
</tr>
<tr>
<td>Head of the Managing Authority (name and title)</td>
<td>Mr. László Magyari, Titular State Secretary responsible for Structural Funds</td>
</tr>
<tr>
<td>Phone</td>
<td>+36 1 374 2820</td>
</tr>
<tr>
<td>Fax</td>
<td>+36 1 331 5990</td>
</tr>
<tr>
<td>Email</td>
<td>E-mail: <a href="mailto:lmagyari@gkm.hu">lmagyari@gkm.hu</a></td>
</tr>
</tbody>
</table>

1.1.1 Responsibilities of the EIOP Managing Authority

The responsibilities of the Managing Authority with regard to the management and monitoring of the Operational Programme are defined under the relevant articles of Council Regulation No. 1260/1999\(^6\). These include:

- setting up a system to gather reliable financial and statistical information on implementation, for the monitoring of indicators and for evaluation; and for forwarding this data in accordance with arrangements agreed between the Member State and the Commission, using computer systems permitting the electronic exchange of data with the Commission (Article 34.1)
- preparing the Programme Complement (PC) and any adjustment thereof and submitting it for approval by the Monitoring Committee (Article 34.1 and 34.3)
- drawing up and, after obtaining the approval of the Monitoring Committee, submitting to the Commission the annual implementation report (Article 34.1)
- after submission to the European Commission of the annual report, reviewing with the Commission and the CSF Managing Authority the main outcomes of the previous year and preparing the Member State’s response, in agreement with the CSF Managing Authority, to any recommendation from the Commission (Article 34.2)
- ensuring that the Intermediary Bodies and final beneficiaries, for the measures where the Managing Authority have delegated tasks, properly account for and manage EU-funded expenditure and that these bodies maintain a separate accounting system or an adequate accounting code for all transactions relating to the assistance (Article 34.1)
- ensuring the correctness of operations financed under the assistance, particularly by implementing internal controls in keeping with the principles of sound financial management (Article 34.1)
- ensuring compliance with EU policies in the course of management and implementation of the Programme as stipulated in Article 12, with particular regard to competition policy, public procurement, publicity, the environment and equality (Article 34.1)

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\(^6\) Hereinafter referred to as ‘Regulation’ (unless otherwise indicated).
ensuring compliance with the obligations concerning information and publicity under Article 46 of the Regulation and the development and implementation of the EIOP Communication Action Plan in accordance with Commission Regulation No. 1159/2000 (Article 34.1)

chairing and providing the secretariat for the Monitoring Committee (Article 35.2)

establishing and maintaining an appropriate audit trail in accordance with Commission Regulation No. 438/2001

1.1.2 Operation of the EIOP Managing Authority

In order to implement the above, the day-to-day tasks of the Managing Authority are carried out by the Environment and Infrastructure Operational Programme Department (EIOP Department), under the supervision of the Titular State Secretary.

The EIOP Managing Authority is expected to implement the following operational tasks:

- to co-ordinate the ministry’s (MoET) operations in relation to the implementation of the EIOP
- to ensure co-operation with the Intermediate bodies as well as economic and social partners
- to ensure that the calls for proposals, terms of references and the operations are in line with the relevant EU and national legislation and with the EIOP Programme Complement
- to prepare and update the EIOP Internal Procedures Manual
- to prepare the Communication Action Plan of the Environmental Protection and Infrastructure Operational Programme in line with Commission Regulation No. 1159/2000 and the Communication Action Plan of CSF
- to use the monitoring information system in line with the Government Decree 124/2003 (VIII.15.)
- to appoint the members of the Project Selection Committees based on the proposal of the partner ministries and Intermediate bodies
- to chair the Project Selection Committees
- to ensure that Project Selection Committees have appropriate rules of procedure
- to ensure that the operations and decisions of Project Selection Committees are in line with the rules of procedure

The Managing Authority will delegate activities to the Intermediate Bodies but it remains responsible for ensuring that the programme is implemented in line with the Structural Funds Regulations. For the transport priority, the Managing Authority will not delegate any tasks to any Intermediate Body and will itself fulfil all of the tasks.

With regard to the adequate separation of functions, the following operational units within the EIOP Department form the institutional framework for carrying out the tasks detailed above:

- Policy and Operations Unit
- Financial, Monitoring and Legal Unit
• Communication and Partnership Team
• Transport Project Management Unit.

The Policy and Operations Unit is responsible for the priorities and measures of the EIOP, with special regard to the co-ordination of the drafting and the amendment of the Programme Complement and the participation in the project selection. The Policy and Operations Unit is expected to ensure that the projects are in line with the objectives and the strategy set out in the OP and the PC; and to monitor the changes in the Hungarian policy context in order to achieve complementarity of the EU-financed and national policy documents and programmes. The Unit is also responsible for maintaining and updating the implementation rules of EIOP set out in the EIOP Internal Procedures Manual.

The Finance, Monitoring and Legal Unit is responsible for the sound financial management of the EIOP including the compilation of payment claims, financial reports and the implementation of proper internal financial control. This Unit is not responsible for internal audit (ex-post internal control with the aim of system audit), which is the responsibility of the Internal Audit Unit outside the EIOP Department. The Unit is responsible, however, for the monitoring of the programme implementation, the maintaining of indicators and the programme evaluation. The close monitoring of EU and Hungarian legislation, proposals for their amendments and their adequate implementation is also in the range of the Unit’s activities.

The Communication and Partnership Team is responsible for the creation and updating of the Communication Action Plan as well as the co-ordination of EIOP communication and partnership activities. The Team is also expected to ensure that the horizontal policies and their priorities are properly taken into account in the implementation of the EIOP both on programme and project levels.

For the transport priority, the EIMA shall not delegate project management tasks to an Intermediate Body. A separate unit within the EIOP Department, the Transport Project Management Unit has the responsibility to carry out project management tasks.

1.2. MANAGEMENT ARRANGEMENTS

The following institutions shall form the implementation system of the Operational Programme:

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Authority (MA):</td>
<td>Ministry of Economy and Transport, Environment and Infrastructure Operational Programme Department</td>
</tr>
<tr>
<td>Intermediate Bodies (IB):</td>
<td>• Ministry of Environment and Water, Development Directorate</td>
</tr>
<tr>
<td></td>
<td>• Energy Centre Public Benefit Company</td>
</tr>
<tr>
<td></td>
<td>• Hungarian State Treasury</td>
</tr>
<tr>
<td>Paying Authority (PA)</td>
<td>Ministry of Finance</td>
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</tbody>
</table>
1.2.1 EIOP Management Committee

The Management Committee is a consultative, advisory and co-ordinating body contributing to the preparation of the decisions of the EIOP Monitoring Committee and Managing Authority. It shall review the progress of implementation of the measures and, if necessary, propose changes to be taken or initiated by the EIMA. Furthermore, it comments beforehand on every document and proposal to be submitted to the EIOP Monitoring Committee. It needs to be stressed that the activities of the Management Committee cannot hinder or influence, in any way, the decision-making competence of the Monitoring Committee or the Managing Authority for the implementation of the OP.

The chairman of the EIOP Management Committee is the Head of the EIOP Department. The Managing Authority operates the Secretariat of the Management Committee. The Management Committee consists of the following members:

- the Managing Authority (chairman and secretary)
- the Intermediate Bodies (Ministry of Environment and Water, Development Directorate; the Energy Centre Public Benefit Company and the Hungarian State Treasury)
- the key ministerial partners (from the Ministry of Economy and Transport these are the Deputy State Secretariat for Energy and the Deputy State Secretariat for Transport; as well as the Ministry of Environment and Water)
- the CSF Managing Authority
- and the Paying Authority.

The Managing Authority shall chair the Management Committee and provide its secretariat. The EIOP Management Committee shall meet at least once every two weeks.

1.2.2 Participation of the key ministerial partners in the Programme

The key ministerial partners are those ministries and departments that are responsible for programming the EIOP, thus elaborating the OP and its measures. Therefore it is essential that they take part in the management and co-ordination system of the program.

Key ministerial partners, although they are not part of the implementation system, have a major role in the development of national policies, the programming of the OP and the PC, as well as in the strategic decisions of the EIOP.

| Key ministerial partners: | • Ministry of Economy and Transport  
|                          |   - Deputy State Secretariat for Energy  
|                          |   - Deputy State Secretariat for Transport  
|                          |   • Ministry of Environment and Water  |

The EIOP Managing Authority shall not delegate any task or responsibility to the key ministerial partners. These organisations are involved in the EIOP implementation through the OP Monitoring Committee, the Management Committee and the Project Selection Committees.
1.2.3 Intermediate Bodies

Without prejudice to the Managing Authorities responsibility for ensuring the efficiency and correctness of management and implementation of the programmes, in accordance with Article 34 of the Regulation, ‘Intermediate Bodies’ are defined by Article 2.2 of Commission Regulation No. 438/2001 as public or private bodies or services acting under the responsibility of the managing or paying authorities authority or performing tasks on their behalf in relation to final beneficiaries or the bodies or firms carrying out operations. In accordance with Regulation No. 438/2001, Hungary shall ensure that Intermediate Bodies receive adequate guidance on the provision of management and control systems necessary to ensure the sound financial management of the Structural Funds and to provide adequate assurance of the correctness, regularity and eligibility of claims on Community assistance.

Within the environmental protection priority the implementation of the Operational Programme is the responsibility of the Managing Authority but the MA delegates a number of tasks to the Intermediate Bodies in order to ensure the effective and efficient management of the assistance. These task delegations are through Delegation Agreements, which are contracts laying down the rules for co-operation.

The Managing Authority contracts IBs on a bilateral basis, with the approval of leaders of the ministries supervising the MA and the IB concerned, in order to state the terms and conditions, the scope and guarantees of delegation, as well as the relationship between organisations.

| Intermediate Bodies (IB): | • Ministry of Environment and Water, Development Directorate  
| | • Energy Centre Public Benefit Company  
| | • Hungarian State Treasury |

Two of the Intermediate Bodies, which are responsible for the implementation of the measures within the environment priority (the Ministry of Environment and Water, Development Directorate and the Energy Centre Public Benefit Company) shall be entrusted with the same type of tasks, while the special IB (the Hungarian State Treasury) is only responsible for certain tasks linked to financial management and control, to be specified in the Delegation Agreement.

The two IBs are delegated essentially the same project management tasks, which include the following:

- participating in the preparation of calls for proposals and the terms of references for the measures as well as operation documents (guidelines, manuals, etc.),
- receiving and registration of applications and their formal checking,
- arranging the evaluation of project applications through the operation of the activities of the Project Selection Committees (proposing members to and providing secretariat for the Project Selection Committees),
- preparing aid contracts with beneficiaries, monitoring the implementation of the projects and required amendments,
- receiving and processing of progress reports, invoices and payment claims of beneficiaries to the EIMA,
• preparing reports to the EIMA (weekly reports on payments and monthly reports on the state of the implementation of the EIOP),

• conducting in-built control and ex-post audit activities including on-the-spot checks of projects, ensuring the regular, effective and efficient use of resources, with the involvement of the Managing Authority,

• implementation of Community policies and horizontal priorities as well as obligations for information and publicity at project level,

• maintaining up-to-date financial and statistical data at project level in the central monitoring information system and completion of regular and occasional reports for the Managing Authority in the required format and with the required contents,

• taking the required measures and reports in due course in case of irregularities,

• taking part in the implementation of the Communication Action Plan of the EIOP, which includes liaising with the potential applicants, and the publicity and information related task.

The Hungarian State Treasury, as a special Intermediate Body according to Government Resolution 2136/2003. (VI. 27.), takes part only in the financial implementation of the EIOP. The State Treasury shall perform a list of tasks such as: the monitoring the public debt and of the grant accumulation of applicants, the money transfers and the checks related to that, the availability of funding for the grant payments, and the management of repayments and funds used irregularly. The State Treasury has also to perform the task of regularly providing the MA with the required information.

The Intermediate Bodies must provide for the elaboration and operation of adequate management and control systems ensuring that Hungarian and EU resources are used in accordance with the regulations.

The Intermediate Bodies shall forward all information to the Managing Authority in due time, with special regard to information that are related to civil law, criminal law or administrative procedures concerning activities of programme implementation or activities in the Managing Authority's responsibility.

The implementing organisations shall operate under the supervision of the EIOP Managing Authority for each measure they contribute to. All organisations shall be subject to regular audits from the EIOP Managing Authority and the Paying Authority or any other organisation acting on their behalf, or other national or European body as laid down in the relevant Hungarian and/or EU regulations.

### 1.2.4 Data collection

According to Article 34.1 of the Regulation, an IT system permitting the exchange of data with the Commission shall be set up.

The data provided by the applicants and the beneficiaries of the support shall be entered into the monitoring information system. Based on the government degree 124/2003 (VIII. 5.), exclusively the monitoring information system shall be used for collecting and organising the monitoring data of Structural Funds programmes. The National Development Plan Office (located in the Office of the Prime Minister) is responsible for the development and maintenance of the system. Nevertheless, the EIMA and the Intermediate Bodies are
responsible for operating an effective data collection system as required under Article 34.1 (a) of the Regulation.

The single IT system, which shall be used by all the managing authorities, the Intermediate Bodies and the paying authority, is capable of providing accurate real-time data on all levels of the implementation system, and can also serve as a means for electronic communication between the Commission and Hungary.

1.2.5 Information and publicity

The Managing Authority is responsible for fulfilling the requirements on information and publicity. All information and publicity measures related to the Operational Programmes shall be implemented in accordance with the requirements set down in Commission Regulation No. 1159/2000.

In accordance with the Commission Regulation the objectives of information and publicity measures are as follows:

- To ensure transparency through the provision of information on the Structural Funds regime, the availability of funds and application procedures for potential and final beneficiaries, regional and local authorities, the economic and social partners as well as the Non-Governmental Organisations.

- To improve understanding of Community measures through raising awareness of the role played by the Structural Funds and the European Union in regional development as well as in the support of economic and social cohesion in Hungary.

In accordance with the above-mentioned Commission Regulation the Community emblem is to be clearly displayed on all communication materials, application forms, letters of grants, etc.

The implementation of information and publicity measures conform to the Communication Plans to be prepared for the EIOP by its Managing Authority. The Communication Plan sets out the objectives, strategy, content, target groups, budget allocation, a set of criteria to be used for evaluating the effectiveness of the measure as well as the responsible department or body for each publicity and information measure. The Programme Complement includes measures intended to publicise the EIOP.

The information and publicity strategy and measures related to the Community Support Framework are co-ordinated by the Department for Partnership and Information of the Office of the National Development Plan and EU Support within the Prime Minister’s Office. A publicity and information officer is to be appointed within the EIOP Managing Authority.

1.2.6 Annual implementation report and final report

In accordance with Article 37 of Regulation, the Managing Authority shall submit an annual implementation report to the European Commission, within six months of the end of each full calendar year of implementation. The report must be examined and approved by the Monitoring Committee before it is sent to the Commission. Once the European Commission has received the report, it shall indicate within a period of two months if the report is considered unsatisfactory, giving its reasons; otherwise, the report shall be deemed to be
accepted. The annual report shall be prepared not later than 31\textsuperscript{st} May and is submitted to the CSF Managing Authority preparing the annual report on the CSF.

The annual report shall include the following information laid down in Article 37 (2) of the Regulation:

- any change in general conditions which is of relevance to the implementation of the Environment and Infrastructure Operational Programme, in particular the main socio-economic trends, changes in national, regional or sectoral policies or in the frame of reference in accordance with Article 9.c,

- the progress achieved in implementation of priorities and measures for the European Regional Development Fund in relation to its specific targets, with a quantification, wherever and whenever they lend themselves to quantification, of the physical indicators and indicators of results and of impact referred to in Article 36 at the appropriate level (priority or measure)

- the financial implementation of the programme, summarising for each measure the total expenditure actually paid out by the Paying Authority and a record of the total payments received from the Commission and quantifying the financial indicators referred to in Article 36.2(c) of the Regulation

- the steps taken by the Managing Authority and the Monitoring Committee to ensure the quality and effectiveness of implementation, in particular:
  - monitoring, financial control and evaluation measures, including data collection arrangements
  - a summary of any significant problems encountered in managing the Environment and Infrastructure Operational Programme and any measures taken, including action on recommendations for adjustments made following the annual implementation review between the Commission and Hungary as defined in Article 34.2 of the Regulation, and the corrective measures, as defined in Article 38.4 of the Regulation
  - the use made of Technical Assistance
  - the measures taken to ensure publicity for the programme

- the steps taken to ensure compatibility with Community policies and to ensure coordination of all the Community Structural Assistance, having regard to the Community Support Framework

A final report shall be submitted to the Commission at the latest six months after the final date of eligibility of the expenditure defined in the Commission Decision on the Operational Programme in accordance with Article 30.2, second paragraph. The final report shall cover all information of the entire implementation period – from 2004 to 2008. Structure and content of the final report is identical with that of the annual report and furthermore it contains the evaluation of the implementation and results of the programme.

1.2.7 The annual implementation review

In line with Article 34.2 of the Regulation, every year, when the annual implementation report is submitted, the European Commission shall review the main outcomes of the previous year
with the EIOP Managing Authority in accordance with the arrangements to be defined later by agreement.

After this review, the European Commission may make comments to the EIOP Managing Authority and to the Hungarian Government. The EIOP Managing Authority shall inform the European Commission of the action taken on these comments. Where in duly substantiated cases the European Commission considers that the measures taken are inadequate, it may make recommendations to the EIOP Managing Authority for adjustments aimed at improving the effectiveness of the monitoring or management arrangements for the programme, together with the reasons for any such recommendations. If it receives any such recommendations, the EIOP Managing Authority shall subsequently demonstrate the steps taken to improve the monitoring or management arrangements or it shall explain why such steps have not been taken.

1.3. **Specific provisions for the compliance with Community policies**

In accordance with Article 34.1 of the Regulation, the Managing Authority is responsible for ensuring that operations financed by the Funds shall be in conformity with the provisions of the Treaty, with instruments adopted under it and with Community policies and actions, including the rules on competition, on the award of public contracts, on environmental protection and improvement and on the elimination of inequalities and the promotion of equality between men and women.

1.3.1 **Provisions for competition and State aid**

**General**

Article 12 of the Regulation requires that operations financed by the Structural Funds shall be in compliance with the provisions of the Treaty, with instruments adopted under it and with Community policies and actions, including the rules on competition.

The Operational Programmes have been developed having regard to the Commission’s Guide to the Community Rules on State Aid. The provisions of Articles 87 and 88 of the Treaty in relation to competition rules are fully respected.

**Treatment of aid schemes in the EIOP**

In accordance with Article 18.2 (b) of the Regulation, the Operational Programmes contain a summary description of the measures planned to implement the priorities, including the information needed to check compliance with State aid pursuant to Article 87 of the Treaty. In order to fulfil the requirements of the above regulation, the Hungarian authorities provided the State aid table in each Operational Programme in the format requested by the Commission that contains a list of State aid measures. As a general rule, the list referred to above covers all State aid measure – already notified and approved by the Commission as existing – aid and which shall be co-financed by the various measures of the programmes.

Besides State aid already notified and approved, State aid or *ad hoc* aid granted under the measures shall be covered by the *de minimis* rule or by a block exemption regulation in accordance with the Council Regulation on the application of Articles 87 and 88 of the EC

With regard to aid schemes on the existing aid list, should any modification occur it shall be notified to the Commission for approval by the State Aid Monitoring Office (SAMO) under the procedure set by Annex IV of the Accession Treaty and after accession in line with Art. 88 of the EC Treaty.

Specific obligations with regard to individual notification of aid granted under an aid scheme apply to aid granted in certain sectors and for certain large investment projects shall be respected.

For operations within the Operational Programmes, Managing Authorities and Intermediate Bodies shall have the responsibility to assure compliance with State aid rules, during the stages of project selection, approval of payment claims and on-the-spot checks. The annual implementation reports shall detail the steps taken to ensure that all operations comply with State aid rules.

**Block Exemptions**

By Council Regulation on the application of Articles 92 and 93 of the EC Treaty to certain categories of horizontal State aid (Council Regulation No. 994/98 of 7 May 1998, OJ L142 of 14.05.98), the Commission has been enabled to adopt regulations declaring certain categories of State Aid compatible with the common market and exempting them from the notification requirements laid down in Article 88(3) of the EC Treaty.

From the four block exemption regulations, adopted by the Commission insofar, the rules of the following two shall be applied:


**Regional Aid**

As regards maximum aid intensity ceilings, the total amount of public aid, independently of its origin in State resources (central, regional, local authorities) Community funding or combination of both, should not exceed the aid intensity ceiling determined by the regional aid map of Hungary. For the 2004-2006 period, the whole of Hungary shall be eligible for regional aid under Article 87(3)(a). Although all regions shall be eligible areas, different maximum aid intensity ceilings are defined for different areas (regional aid map).

**Environmental aid**

As regards environmental protection projects the rules laid down in the relevant Commission Communication (OJ C 37, 3.2.2001) shall be applied.

With reference to the responsibility of the Managing Authority under Article 34.1 of the Regulation, Hungary should set up a monitoring system containing information on all State aid granted under the programme. This information should be broken down to the level of the
individual enterprise and to the individual project so as to facilitate the control of cumulating of State aid by the Commission.

1.3.2 Public Procurement

Contracts for goods, services and works will be awarded in compliance with national and Community rules on public procurement and will be based on competitive tendering. In the case of open tendering, in order to ensure the widest possible competition for contracts they will be advertised in the national media and in the Official Journal of the European Communities where the relevant thresholds under Community Directives are applicable.

During the implementation of measures financed by Structural Funds, the Managing Authority must make sure that the Hungarian Public Procurement Act and the related implementation decrees are complied with. For this purpose the Managing Authority monitors that:

- A separate chapter in support agreements contains provisions on verifying the public procurement procedure.
- The reports compiled by beneficiaries contain a description of how public procurement rules were enforced. No payment shall be done in lack of the required public procurement procedure.
- In the course of the multilevel controlling process experts of proper competencies shall review the documents certifying compliance with public procurement rules.
- The announcement on the public procurement procedure shall be published in the Official Journal of the European Union and its electronic daily publication (TED database), if required.

1.3.3 Environment and sustainable development

Pursuant to Article 12 of the Regulation, operations financed by the Funds and activities receiving support from the EIB or from another financial instrument shall be in compliance with the provisions of the Treaty, with instruments adopted under it and Community policies and action approved therein, and, within this, with the rules on environmental protection. In particular compliance with the Habitats and Wild Birds directives (92/43/EC and 79/409/EC) and Directive on Environmental Impact Assessment (85/337/EEC as amended by 97/11/EC) must be ensured.

In addition, in order to achieve sustainable development, it is important that the programmes of Structural Funds should support activities that have positive (or neutral) effects on the environment; and the available financial resources should be used in order to achieve much wider environmental impacts.

Concerning the objectives and priorities of the Operational Programme, the achievement of the sustainable development and the compliance with the environmental acquis are essential. These are key issues in the entire Operational Programme, in accordance with the following points:
• Environmental assessment of projects before approval ensuring that environmental criteria are also taken into account,
• Projects providing some extra for environmental purposes, using natural resources sensibly, and promoting environmental products and services, etc., should be assigned a larger weight in the valuation system,
• As a result of the implementation of measures, the quality indicators of environment should remain at the current level, or should even improve;
• Compilation of environmental guidelines for bidders,
• Participation of environmental representatives in Monitoring Committees,
• Use of Technical Assistance for the establishment of basic data and monitoring progress,
• Report on environmental protection activities in the annual reports,
• The fight against environmental crimes with particular focus on regions with natural protected sights.

1.3.4 Equal opportunities

Equal opportunities is promoted in the Environmental Protection and Infrastructure Operational Programme on multiple levels. Measures to improve competitiveness affect equality in various ways and to different extents. On a general level, the equitable participation of women and men can be ensured among EIOP implementation and management bodies. In course of its operation, the Managing Authority will pay equality issues particular attention in the following ways:

• With the aid of technical assistance, training in this field will be organised for both MA staff and organisations contributing to the implementation of EIOP and the appropriate application of these principles in human resources management. Technical assistance shall also be used to improve the information base and to monitor the outputs, results and impacts of operations in this field.

• Applicants for Structural Funds assistance shall be asked to demonstrate how their project applies equality, where it is relevant. The principle is integrated in the project selection process by including it among the selection criteria. Preference shall given to applications in the project selection, that apply equal opportunity in their projects. In addition, an assessment shall be conducted on each project in order to analyse the effect of project implementation on equality. If the effect of the project is negative, it may result in the rejection of the project. In order to aid applicants in this field, guidance to project applicants includes guidance on equal opportunities as well.

• In the composition of the Monitoring Committee, the equitable participation of women and men shall be promoted. The ensuing list forms the basis, on which the Management Authority finalises the member list of the Monitoring Committee. Equality bodies take part in the work of the Monitoring Committee.

• The annual and final reports include reporting on equal opportunities related activities in the OP.

• The issue of equal opportunities receives emphasis in the Environment and Infrastructure Operational Programme’s communication activities. In order to draw attention to increase awareness, equal opportunity shall appear as a distinct theme in communications.
Throughout the implementation of the measures, the approach of the Operational Programme is that while equal opportunity between men and women is the main focus, other disadvantaged social groups should also be taken into consideration when equal opportunity is applied. Consequently, the same tools shall be used to promote equal opportunity during project selection in respect of other disadvantaged members of the community, including the Roma community, the disabled and people with learning difficulties.

1.3.5 Telecommunications and IT infrastructure

With regard to the upgrading of roads foreseen under measure 2.1 of the programme, it is noted that the development of electronic telecommunications networks for advanced services (such as broadband) is an important tool for economic development. These infrastructure investments may be co-financed under the Economic Competitiveness Operational Programme subject to compliance with the Commission guidelines on the criteria and modalities for the use of the Structural Funds in electronic communications. As the development of “passive infrastructure” could be more cost-efficient if implemented at the same time as road infrastructure investment, the two Managing Authorities should explore the ways to ensure such “synergies” wherever possible.

2. MONITORING

2.1. Roles and responsibilities of the EIOP Monitoring Committee

In accordance with Article 35.3 of Regulation, the Monitoring Committee shall supervise the implementation of the Programme and satisfy itself as to the effectiveness and quality of the implementation. The Monitoring Committee for the EIOP shall be formally constituted no more then three months after the decision on the contribution of the Funds. It shall act under the authority and within the legal jurisdiction of Hungary.

The OP Monitoring Committee will have the following tasks and powers:

- It shall approve and (if necessary) adjust of the Programming Complement, including the physical and financial indicators to be used for monitoring, project selection criteria, and any adjustments to it. The approval of the Monitoring Committee is required for all modifications made in the Programme Complement.

- It shall periodically review progress made towards achieving the specific objectives of the Programme and the targets set for the different measures.

- It shall examine and approve the annual and final implementation reports before they are submitted to the European Commission by the EIMA.

- It shall consider and approve any proposal to amend the contents of the European Commission decision on the contribution of the Structural Funds to the programme, in accordance with Article 34.3 of the Regulation.

- It may propose to the EIOP Managing Authority any adjustment or review of the Programme in accordance with Article 34.3 or to improve the management of assistance, including in respect of financial management.
The Monitoring Committee shall meet at least twice a year. It adopts its own rules of procedure and makes decisions on the basis of consensus whenever it is possible. Majority voting is used in exceptional cases. The Monitoring Committee may discuss issues and make decisions by written procedure, according to the rules set out in its rules of procedure.

A Preliminary EIOP Monitoring Committee has been set up to prepare for the tasks and the establishment of the Monitoring Committee.

2.2. MEMBERS OF THE MONITORING COMMITTEE

Following consultation with partners, the EIOP Managing Authority shall set up the Monitoring Committee within three months of the European Commission’s decision on the contribution of the Funds. Membership of the EIOP Monitoring Committee shall comprise of voting and non-voting members.

Voting members are the representatives from:
- EIOP Managing Authority,
- CSF Managing Authority,
- Key ministerial partners (1.2.2),
- Intermediate Bodies (1.2.3),
- all Regional Development Councils,
- Local authorities (representatives from municipalities),
- Social partnership (representatives of employers and employees),
- Bodies representing horizontal issues (equal opportunities and sustainable development).

Non-voting members are the representatives from:
- European Commission,
- Government Control Office,
- Paying Authority,
- Secondary and higher education,
- Roma minority,
- European Investment Bank.

An equitable participation between men and women is promoted in the Monitoring Committee according to Article 35.1 of the Regulation. The Managing Authority shall provide the chairperson and the secretariat for the Monitoring Committee.
2.3. **COLLECTION OF INDICATORS**

One of the requirements for obtaining assistance from the Structural Funds is that beneficiaries provide information, which shall enable the effects of such assistance to be evaluated. The data to be provided is described in the request for proposals. Beneficiaries shall be required to provide information in such a way as to be consistent with current and future data protection legislation. Information shall also be provided in accordance with undertakings regarding the provision of data made by beneficiaries at the time of making the application for assistance. The Intermediate Bodies of the EIOP continuously collect the information provided by the beneficiaries and make this available to the Managing Authority in accordance with its requirements for information.

The collection of the macro-level, sectoral or technical data and analyses, needed for the evaluation of the wider economic and social impacts of the EIOP, is the task of the Participating Ministry responsible for the named priority. According, the Participating Ministries shall place this information at the Managing Authority’s disposal.

Pursuant to Article 36 of the Regulation, in drawing up the indicators, the Managing Authority and the Monitoring Committee should take into account the categorisation of fields of interventions proposed by the Commission. The use of these categories helps the Commission services report on Structural Fund activity.

Table 6.1 shows the classification of the measures of the EIOP into the categories defined in Annex IV of Commission Regulation No. 438/2001. In accordance with the Vademecum for Structural Funds Plans and Programming Documents, the Programme Complement contains the three-digit categorisation of fields of interventions.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Category number</th>
<th>Category name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Water quality improvement</td>
<td>34</td>
<td>Environmental infrastructure</td>
</tr>
<tr>
<td>1.2 Treatment of special waste streams</td>
<td>34</td>
<td>Environmental infrastructure</td>
</tr>
<tr>
<td>1.3 Treatment of healthcare, construction and demolition waste</td>
<td>34</td>
<td>Environmental infrastructure</td>
</tr>
<tr>
<td>1.4 Protection of groundwater and drinking water aquifers with remediation measures</td>
<td>35</td>
<td>Spatial planning and rehabilitation</td>
</tr>
<tr>
<td>1.5 Nature conservation and sustainable flood management</td>
<td>12 13 35</td>
<td>Forestry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promoting the adaptation and the development of rural areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spatial planning and rehabilitation</td>
</tr>
</tbody>
</table>
### Table 6.1 Categorisation of fields of intervention

<table>
<thead>
<tr>
<th>Measures</th>
<th>Category number</th>
<th>Category name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6 Development of air- and noise monitoring</td>
<td>34</td>
<td>Environmental infrastructure</td>
</tr>
<tr>
<td>1.7 Environmental friendly energy management</td>
<td>33</td>
<td>Energy infrastructure</td>
</tr>
<tr>
<td>2.1 Upgrading the national road network</td>
<td>31</td>
<td>Transport infrastructure</td>
</tr>
<tr>
<td>2.2 Development of environment friendly transport infrastructure</td>
<td>31</td>
<td>Transport infrastructure</td>
</tr>
</tbody>
</table>

#### 3. EVALUATION

Ex-ante evaluation is carried out by a group of selected experts; results of their work are included in a separate Chapter of the Operational Programme.

Due to the short term planning period, no mid-term evaluations will be made. However, in order to appropriately assess the progress of implementation and results achieved on-going evaluation might be carried out by the MA or other organisation commissioned with this task.

Ex-post evaluation is the responsibility of the Commission, in strict co-operation with the Member State concerned and with the Managing Authority of the Operational Programme.

In order to assess the effectiveness of the Environmental Protection and Infrastructure Operational Programme, an evaluation on the progress and implementation must be performed. This evaluation has to take into consideration how much the EIOP contributes to:

- the economic and social cohesion according to the Article 158 of the Treaty,
- the achievement of the overall and specific objectives, laid down in the National Development Plan and in the Community Support Framework,
- the achievement of the quantified objectives laid down in the EIOP.

The person appointed for evaluation is responsible for meeting the above listed criteria.

#### 4. FINANCIAL MANAGEMENT AND CONTROL

##### 4.1. Paying Authority and the Flow of Funds

Without prejudice to the Commission’s responsibility for implementing the general budget of the European Communities, Hungary shall take responsibility in the first instance for the
financial control of assistance. Management and financial provisions may require adjustments in order to comply with any future rules enacted under Article 53.2 of the Regulation, in addition to the Commission Regulation No. 438/2001.

4.1.1 Paying Authority

The Ministry of Finance is designated as the single Paying Authority for all Structural Funds and the Cohesion Fund, and shall therefore have responsibility for drawing up and submitting payment applications supported by certified statements of expenditure and receiving payments from the Commission.

Contact details of the Head of Paying Authority:

<table>
<thead>
<tr>
<th>Paying Authority</th>
<th>Ministry of Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational unit</td>
<td>NAO Office</td>
</tr>
<tr>
<td>Head of the Paying Authority (name and title)</td>
<td>Mr. Róbert Thuma Director General</td>
</tr>
<tr>
<td>Address</td>
<td>H – 1055 Budapest, József nádor tér 2.</td>
</tr>
<tr>
<td>Telephone</td>
<td>+36 1 327 21 45</td>
</tr>
<tr>
<td>Fax</td>
<td>+36 1 327 27 87</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:robert.thuma@pm.gov.hu">robert.thuma@pm.gov.hu</a></td>
</tr>
<tr>
<td>Bank account number of the Paying Authority</td>
<td>Not yet opened in the Treasury</td>
</tr>
</tbody>
</table>

The PA shall satisfy itself, that the administrative, accounting, payment and internal control arrangements of the Managing Authority ensure compliance with the applicable rules with regard to the following:

- the eligibility of claims is checked before payment is authorised,
- the commitments and payments (both cases Community and national) effected are correctly and fully recorded in the accounts,
- the eligibility of applications are checked before contracts with beneficiaries are signed and the commitment recorded.

The Paying Authority shall satisfy itself, that the following arrangements (rules and procedures) of the Managing Authority are regulated:

- the maintenance of a sufficient audit trail,
- the regular and effective functioning of management and control systems,
- compliance with the applicable rules,
- the verification of expenditure.

The Paying Authority will also be responsible for reporting on irregularities to the European Anti-Fraud Office (OLAF) in accordance with the provisions of Commission Regulation (EC) No 1681/94 concerning irregularities and the recovery of sums wrongly paid in connection with the financing of the structural policies and the organisation of an information system in this field.

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4.1.2 Financial tasks of the Paying Authority

- Managing the liquidity of payments (payment on account, interim payments, final balance) from the Funds and ensuring the continuous availability of payments (Community contribution),
- Certifying on the basis of information (including audit reports and reports on 5% checks) on management and control procedures in place provided by the Managing Authority and complementary checks conducted by the PA where appropriate that the declarations of expenditures are accurate and that they result from accounting systems based on verified supporting documents,
- Drawing up and submitting the certified payment application documentation by Funds (declaration of certification of expenditure, statement of expenditure, application for payment) – on the basis of the statements prepared by the Managing Authority – to the Commission on the basis of expenditure actually incurred by the final beneficiaries,
- Summing up and submitting not later than 30 April of each year expenditure forecasts to the Commission for the current and following year on a basis of the forecasts compiled by the Managing Authorities,
- Recovering sums due to the Funds re-paid (re-transferred) by the Managing Authorities and the application of financial corrections where they arise, as a result of the discovery of administrative errors, or from events arising from the management of the programme or from the occurrence of irregularities,
- Summing up and submitting to the Commission once a year a statement of the amounts awaiting recovery at that date, classified by the year of initiation of the recovery proceedings,
- The Paying Authority keeps accounting records by measures, priorities and funds based on its own bookkeeping as well as on the accounting information system of the Managing Authority or the Intermediate Body, containing not only the contribution of the Structural Funds, but also the central budgetary financing and private contribution as well.

4.1.3 The reimbursement of payment claims of the Beneficiaries

With regard to the responsibility of the Managing Authority for the correctness of operations financed under the assistance they retain the right of authorising the payments in case of certain measures.

Accordingly, the process of reimbursement of the payment claims of the beneficiaries is as follows:
- Beneficiaries submit their paid invoices or accounting documents of equivalent probative value to the Intermediate Body. The Beneficiary is responsible for certifying the accuracy and actuality of expenditure at project-level.
- The Intermediate Body receives and controls the invoices, and certifies the eligibility of expenditure.
- Based on certified invoices the Intermediate Body draws up and submits a claim for EU funds and for national co-financing to the Managing Authority.
- On the basis of the payment order of the Managing Authority the Hungarian State Treasury transfers the national co-financing from the MA’s central budget account to the account of the specific measure.
At the same time the Managing Authority forwards the claim to the Paying Authority in which the MA claims for the transfer of EU co-financing to the account of the specific measure.

On the basis of the claim for EU support submitted by the Managing Authorities, the Paying Authority orders the Hungarian State Treasury to transfer the EU contribution from the PA’s OP account to the account of the specific measure.

On the basis of the transfer order of the Intermediate Body, the Hungarian State Treasury transfers the national and EU contributions from the account of the specific measure to the Beneficiary.

On the basis of the transfer order of the Intermediate Body, the Hungarian State Treasury transfers the national and EU contributions from the account of the specific measure to the Beneficiary.

4.2. Financial management and control arrangements

The legal framework for financial implementation is set down in a government regulation on financial management, accounting and control of EU Structural Funds and the Cohesion Fund. Besides the clear definition and separation of functions of the actors of the implementation system the aim is to make the payment process more simple and the shortest possible, and to reduce the number of control levels by creating a single-channelled, reliable

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8 The governmental regulation "on the establishment of financial management, accounting and control systems related to receiving supports from the Structural Funds and Cohesion Fund of the European Union" is being approved by the government mid-December.
but controllable system on the basis of relevant EC regulations (Council Regulation 1260/1999, Commission Regulations 438/2001, 448/2001, 1386/2002, and 1605/2002). Deadlines are set for each phase of the payment process. It also includes the requirements for verification controls, 5-15% checks and winding-up tasks.

**Bilateral agreements** between the Managing Authority and the Paying Authority establishes a clear separation of functions by determining the roles and responsibilities of these main actors and the information needs for payments, financial control, certification of statements of expenditure, accounting and the treatment of irregularities.

**Operational Manuals** of the Paying Authority, Managing Authority and Intermediate Bodies cover the whole range of activities of the relevant bodies, detailed procedures with the templates of the necessary documents and deadlines for each work phase.

### 4.2.1 Responsibility of the EIOP Managing Authority

The primary responsibility of the Managing Authority is to ensure correct management and implementation in the case of operations performed in the framework of the Operational Programme (Article 34.1).

The Managing Authority may delegate a part of its tasks concerning financial management to the Intermediate Bodies, provided that they operate a reliable financial management system. In this case, separate divisions or units within the Intermediate Bodies shall perform the delegated tasks and separate units shall perform other tasks of the Intermediate Bodies.

The EIOP Managing Authority shall ensure that Intermediate Bodies and final beneficiaries are appropriately informed about their responsibility related to financial management. It shall furthermore ensure that Community rules are enforced in public procurement procedures. The EIOP Managing Authority or other Intermediate Body acting in its representation shall perform on-site audit to investigate the source documentation that supports requests for payment.

In the case of transport priority, the EIMA shall perform the tasks specified under point 4.2.2.

### 4.2.2 The responsibility of Intermediate Body carrying out the financial management of the given aid scheme

The Intermediate Body (or in the case of transport priority, the EIMA) controls the invoices and supplementary documents submitted by the beneficiary, including control for compliance with the format and contents required by the aid contracts. Therefore, the Intermediate Body (in the case of transport priority, the MA) is responsible for ensuring that all payment claims submitted in the framework of the EIOP implementation are supported with controlled invoices and accounting documents and proper audit trail is maintained. The Intermediate Body is also responsible for ensuring that only requests that are based on costs actually incurred and paid and are eligible for support are submitted to the Managing Authority.

The control procedures operated by the Intermediate Body comply with the provisions of Article 4 of Commission Regulation No. 438/2001, and include document-based audit covering 100% of the payment claims and on-the-spot checks.
The Intermediate Body is responsible for submitting the summaries of eligible expenditure to the Managing Authority, in the form required by the Paying Authority. At the same time, the Intermediate Body shall ensure that reports on expenditure are forwarded to the partner ministry.

4.2.3 Financial control

Verification of operations

According to the Consolidated Budget Act every person in charge of an organisation that participates in the implementation of an OP is responsible for the creation and maintenance of systems that ensure an efficient, effective, and economical use of funds.

The verification of operations (first level control) concerning the assistance granted under EU Structural Funds – according to Article 4 of Regulation No. 438/2001 – shall be performed by the Intermediate Bodies (in the case of transport priority the MA). Within the framework of the management and control systems Intermediate Bodies shall elaborate and operate detailed procedures to verify the delivery of the products and services co-financed and the reality of expenditure claimed and to ensure compliance with the terms of the relevant Commission decision and with applicable national and Community rules in particular, the eligibility of expenditure for the relevant support, public procurement, state aid, protection of the environment and equality of opportunity. Certification of the expenditure claimed can only be done after carrying out this first level of control.

Internal audit

All organisations and institutions involved in the implementation of the Operational Programme shall establish and operate their own internal audit unit. That unit is directly under the supervision of the head of the organisation concerned. Accordingly, in the case of the EIOP, that role is performed by a separate Audit Unit.

The Internal Audit Unit of the Ministry of Economy and Transport (which reports directly to the minister) is functionally and organisationally independent from the EIMA. The Internal Audit Unit of the Ministry shall carry out the 5% checks. The internal audit unit of the MA shall follow the principles of the audit strategy of the Ministry of Finance. The unit is entitled to carry out checks related to any aspect the implementation of the EIOP including the implementing bodies and the final beneficiaries.

The internal financial control function (ex-ante and built-in controls) is within the EIOP Department, clearly separated from the audit function. The main tasks of the Ministry’s Internal Audit Unit is to carry out audits laid down in the relevant EU regulations.

Bodies performing the 5% checks

5% checks according to Article 10 of Regulation 438/2001 shall be done by the supervisory control units (internal audit units) of the OP Ministries and by the Government Control Office. In accordance with Government Resolution 2213/2002 the planning and the implementation of the 5% checks are co-ordinated by the Ministry of Finance. For the preparation of this co-ordination task the Ministry of Finance established and chairs the Interministerial Committee for International Assistance Control.
The OP Ministry and the GCO shall send the reports of on the 5% checks to the Ministry of Finance. On the basis of these reports an annual report shall be elaborated which shall be discussed by the Inter-ministerial Committee for International Assistance Control (which co-ordinates the 5% checks). After the conciliation the annual report shall be sent to the European Commission by the Ministry of Finance.

Declaration at winding-up of assistance

In accordance with the Government Resolution 2213/2002 (VII. 24.) the issuance of the winding-up declaration for Structural Funds operations is the task of the Government Control Office.
ANNEX 1: PAN-EUROPEAN ROAD TRANSPORT CORRIDORS IN HUNGARY

Source: Institute for Transport Science, 2002
ANNEX 2: CURRENT AND PLANNED TRANSPORT INFRASTRUCTURE NETWORK IN HUNGARY

Source: Institute for Transport Science, 2002
ANNEX 3: CURRENT HUNGARIAN ENVIRONMENTAL STRATEGY AND SECTORAL PROGRAMMES

The second National Environment Program (hereinafter: the Program or NEP 2) for the period between 2003 and 2008 and the National Nature Conservation Master Plan as part of the Program formulates the direction of Hungary’s environmental policy for the period when Hungary becomes a member of the European Union. The main objective of the Program is to ensure that social and economic developments are effected with environmental aspects taken into account in the coming six years. The second NEP 2 specifies Hungary’s objectives arising from its national characteristics, position, and interests. Their implementation is integral parts of the accession process and subsequent membership responsibilities.

The Program group’s tasks into subjects focussed on ensuring a healthy environment and preserving our natural heritage. These purposes are served by more rational resource management, promotion of cleaner and more efficient and more competitive production, prevention and reduction of environmental load and pollution, and the conservation of natural values. In the period of the first NEP, the degree of environmental loads was reduced in Hungary; still, serious environmental problems are to be eliminated in the years to come as well.

NEP 2 focuses on environmental problems that

arise in a complex manner in the intersection of social-economic-environmental problems;

require intervention affecting several environmental components;

affect a broad section of society and the economy;

Can only be eliminated effectively by involving a wide range of stakeholders.

Main Objectives

Protection of ecosystems, that is, taking into consideration the principles of sustainable development in the administration of natural resources; economical utilisation of natural resources considered to be vital elements (water, earth, air) to protect their value and preserve them for coming generations, taking their quantity and quality features into account as well; preserving and ensuring the survival of natural systems and assets; preserving the variegated nature of the biosphere; preserving the information hidden in natural processes.

Ensuring a harmonious relationship between society and the environment: improving the health status of the population, preservation, improvement, and remediation of the environmental condition required for adequate life quality, that is, ensuring the conditions of a healthy environment, as well as to reduce and eliminate effects impairing / endangering human health.

Assertion of environmental aspects in economic development. Economic development should be implemented in a way that growing welfare be coupled with reduced environmental loads. In terms of economic development, this is subject to the establishment and maintenance of a harmonious relationship between society and the environment; sustainable use of natural resources and land areas; exploitation not exceeding environmental load capacity; prevention/mitigation of environment damage.
Improvement of knowledge, awareness, and co-operation as related to environmental processes, effects, as well as environment protection and nature preservation: monitoring and evaluating changes in environmental conditions, environmental effects, and the environmental impact of various measures; making transparent domestic and international decision-making processes affecting the environment and improving the corresponding publicity; measuring changes in environmental conditions and the impact of measures by appropriate indicators; and in the spirit of mutual global environmental dependency – the improvement of co-ordination and information at all levels, with the participation of stakeholders from all sectors, NGOs, and interest representation groups concerned.

Thematic Action Programmes

**Action programme to raise environmental awareness**

Comprehensive objectives are to:

expand the knowledge of society as related to the environment and sustainable development;

improve access to information;

promote environment-aware decisions and more sustainable lifestyles;

Enhance responsible social participation in environmental policy decisions.

**Action programme related to climate changes objectives are to:**

regulate / decrease emissions from domestic economic activities;

reduce greenhouse gas emissions / the contribution to global air pollution, as well as to improve local / regional air quality;

Contribute to the divulgence of environmentally friendly consumption habits and to the improvement of urban environment quality.

**Action programme for environmental health and food safety objectives are to:**

reduce health risks caused by indoor and outdoor air quality;

improve noise protection, chemical and nuclear safety;

handle environmental health problems related to drinking water quality;

handle environmental health problems of soil pollution and waste management;

improve food safety;

develop the environmental health and food safety institutional system;

Promote and make accept environment-aware and environmentally sound lifestyles.
**Action programme for the quality of urban environments objectives are to:**

promote the environmentally appropriate transformation of settlement structure, development, and rearrangement as well as to reduce environmental problems arising from earlier mistakes;

improve the status of residential area water management;

protect urban greens, to increase their proportion, and to improve their condition;

alleviate settlement environment problems originating from traffic;

Ensure the proper state of repair of built environment components, of the built and archaeological cultural heritage.

**Action programme for the protection of biological diversity and landscape conservation objectives are to:**

protect natural systems and values;

preserve bio diversity;

use natural resources in a sustainable manner;

Establish a harmonious relationship between society and the environment.

**Action programme for the quality of rural environments, land use objectives are to:**

promote the protection of the natural and cultural assets of rural areas and the sustainable use of natural resources by properly co-ordinating spatial development, agricultural policy, and environmental policy;

Ensure adequate income levels and infrastructure facilities for rural residents.

**Action programme for the protection and sustainable use of Hungarian waters objectives are to:**

implement pro-rata the scheduled domestic tasks included in the water Framework Directive;

protect operating and future water bases and high-priority water protection areas;

spread rational water use and pollution-reducing technologies widely;

develop the treatment of communal waste water taking settlement characteristics into consideration (e.g. size, possibility of economical canalisation);

increase the proportion of the utilisation of communal waste water sluice;

Eliminate environmental damage endangering underground water stocks.

**Action programme for waste management objectives are to:**

develop prevention and utilisation of communal and production waste;

perform low-risk treatment of communal and production waste to be neutralised;
Improve planning and efficiency in waste management.

**Action programme for environmental safety objectives are to:**

- elevate environmental safety to a strategic level;
- analyse the impact of past environmental damage;
- identify environmental disasters and hazards;
- handle environmental risks;
- Perform horizontal tasks in environmental safety.

**Major Specific Programmes**

Our strategic aim is to make *air quality* comply with the respective healthcare limit values at all settlements in Hungary by 2010. For this purpose, emission control plans will be made by 2004. By 2007, emissions from highly environmentally hazardous operations will be suppressed to appropriate levels by technological modernisation and the introduction of new technologies. Modernisation of all large firing facilities (over 50MW) is highly prioritised; the same applies to the introduction of developed technologies in all productive operations causing considerable air pollution. With significantly reduced emissions of sulphur-dioxide, nitrogen-oxides, volatile organic compounds, and ammonium, the proportion of areas with polluted air will be decreased from the present 11% to 5-8%. Thereby the proportion of the population living in air polluted areas can be reduced from the present 40% to 20%.

*Air pollution by transport* can be reduced by preserving the proportion of public transport, improving the quality thereof, establishing a combined environmentally friendly infrastructure, reducing average pollutant emissions from vehicles, accelerating the rate of renovation of the vehicle fleet, and ensuring compliance with regulations on the environmental control of operating vehicles. These are coupled with measures for settlement development and rearrangement to mitigate urban transport problems, constituting a specific Programme objective.

Today, it is estimated that there are about 20,000 people whose quality of life is impaired by excessive exposure to *noise*. An EC Directive is in preparation to redress this situation, it is likely to require the preparation of noise maps and the development of noise reduction plans for the areas that are affected the most. Developments / investments to reduce noise in endangered areas are continued to be supported (noise protection walls, modernised public transport facilities, etc.).

The use of toxic chemicals, pesticides, and non-biodegradable organic toxins will be reduced by 20%. In the course of this Programme, many substances harmful to health will be withdrawn from distribution, to be replaced by modern environmentally friendly substances. National action plans are continuously developed according to which the production and use of non-biodegradable organic pollutants should be discontinued, on the one hand, and non-used stocks should be neutralised.

The measures included in the Programme provide a basis for the fact that by 2015, the quality of Hungary’s surface and underground waters comply with the criteria for good ecological status as provided with the Water Framework Directive of the European Union.

For the protection of surface and subsurface waters, harmless disposal of urban sewage must be ensured, considering the requested transitional periods.

Schedule of the installation of wastewater collection systems:

a) Considering the provisions of the Directive 91/271 EEC:
   - By 2008 Hungary will establish the wastewater collection system for agglomerations of discharges higher than 10,000 PE, on the designated sensitive areas.
   - By 2010 Hungary will implement the wastewater collection systems for agglomerations of discharges higher than 15,000 PE.
   - By 2015 collection systems will be established for agglomerations between 2,000 and 15,000 PE.

b) Considering other internal obligations of Hungary:
   - By 2015 Hungary will establish the wastewater collection systems for agglomerations of discharges less than 2,000 PE in the settlements included in the programme of protection of subsurface drinking water resources.

Schedule for the establishment of wastewater treatment plants

a) In respect to the provisions of Directive 91/271 EEC Hungary will ensure that
   - By 2008 agglomerations in sensitive areas where PE exceeds 10,000 - similarly to the collection systems - tertiary treatment will be provided,
   - By 2010 secondary (biological) treatment will be provided for the agglomerations in normal areas with a population equivalent (PE) of more than 15,000,
   - Latest by 2015 secondary (biological) treatment should be provided for all agglomerations with PE between 2,000 and 10,000,
   - Latest by 2015 secondary (biological) treatment should be provided for all agglomerations with PE between 10,000 and 15,000.

b) Considering other internal obligations of Hungary:
   - Latest by 2015 Hungary will establish biological wastewater treatment plants (or natural biological plants of nearly equivalent capacity) for agglomerations of discharges less than 2,000 PE.

The National Implementation Programme envisages chronologically the following investments:

2001-2005: Projects which were under establishment in 2000, and projects to be launched in the near future will be completed. Implementation of larger projects - developments of agglomerations for wastewater collection and treatment higher than 10,000 PE will begin. Implementation of the collection system and wastewater treatment plant of the agglomerations in sensitive areas will be completed. The National Implementation Program provides resources for 5,500 km of sewer system and 800,000 PE treatment capacities. The total cost of this phase is 1,190 million Euro.

2006-2010: The implementation of systems for agglomerations larger than 10,000 PE will be completed and the development of agglomerations between 2,000 PE and 10,000 PE will increase. In this period the construction of 4,320 km of collection system and wastewater treatment capacity of 2.6 million PE can be expected. The total projected cost of this phase is 1,310 million Euro.

2011-2015: The development of smaller agglomerations (below 10,000 PE) is scheduled. These areas are characterised by higher specific sewer length (per 1 PE) due to lower population density, and by relatively high specific development cost. In this period the
construction of 4,381 km of collection system and wastewater treatment capacity of 0.7 million PE will be completed, total projected cost of this phase is 760 million Euro.

2. Programme for Drinking Water Quality Improvement (initiated by the Gov. Decree 201/2001)

In order to comply with the Drinking Water Directive (98/83/EC), the National Programme for Drinking Water envisaging the following tasks regarding water resources:

- Until 25 December 2006, the improvement of drinking water quality should be solved in settlements where the arsenic content is above 30 μg/lit, further the quality of drinking water contaminated by nitrite, boron fluoride does not meet the limit values laid down in the annex of the relevant Gov. Decree.

- Until 25 December 2009, the improvement of drinking water quality should be solved in settlements where the arsenic content is above 10 μg/lit, and the contamination by ammonium ion is above the limit value.

The Programme covers 877 settlements with 2750 thousand inhabitants, i.e. 27.4% of the population of the country.

Until 2015, the high iron and manganese content of drinking water should be reduced to the limit value in the relevant settlements with 1,674,000 inhabitants.

The following table represents the estimated cost of the implementation of the Programme for Drinking Water Quality Improvement for the scheduled periods.

Table 3. Costs of Programme for Drinking Water Quality Improvement between 2004-2009

<table>
<thead>
<tr>
<th>Measure</th>
<th>2004-2006</th>
<th>2007-2009</th>
<th>Total million Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water treatment</td>
<td>176.8</td>
<td>217.2</td>
<td>394.0</td>
</tr>
<tr>
<td>Operational and equipment costs</td>
<td>12.4</td>
<td>10.0</td>
<td>22.4</td>
</tr>
<tr>
<td>Preparation, management and control of the Programme</td>
<td>8.4</td>
<td>8.4</td>
<td>16.8</td>
</tr>
<tr>
<td>Total</td>
<td>197.6</td>
<td>235.6</td>
<td>433.2</td>
</tr>
</tbody>
</table>

The implementation of the programme of Protection of Subsurface Drinking Water Resources will be completed by the end of December 2009, according to Gov. Decree 2052/2002 (II. 27.) The annual cost of the programme is about 10 million Euro, which includes the diagnostic analysis of 394 operating and 22 perspective water resources, further the completion of investments under way.


Reserves of groundwater represent outstanding natural resources in Hungary. A wide scale of pollution sources, in general through the geological medium, endanger the groundwater. The government’s short- and medium-term action plan in 1991 identified the tasks of surveying, uncovering and terminating accumulated environmental pollution, so it can be considered as the starting point for the remediation program. The National Environmental Remediation
Programme (2205/1996 Gov. Decree) was launched in 1996 under the leadership of the Minister for Environment. The main objectives of the Programme are the identification of the magnitude of risk, of scope of pollution and of deterioration of groundwater and the geological medium, the mitigation of the risk of pollution in the endangered areas, and the reduction of the level of pollution, or the possible elimination of pollution in sites. The remediation measures include follow-up monitoring activity in all cases.

To achieve these goals, the Programme manages state level strategic tasks: to co-ordinate research and technical development, to establish the background for legal, technical and economic regulations needed, to conduct public relation activity by organising educational programmes, conferences, workshops and by editing and publishing technical issues on the rehabilitation of contaminated areas. The survey of and data collection from contaminated sites are high priority tasks in the frames of the programme. The development of a database is also highlighted, such as the establishment of central and regional information systems. A more specific task of the Programme is the elimination of the hazardous effects of environmental contamination of governmental responsibility.

**Government Decree No. 33/2000 on Tasks related to the Protection of Groundwaters Against Certain Activities** provides the legal framework and regulation for the rehabilitation process of contaminated sites. Furthermore, it establishes a threshold system for groundwater and soil, and determines rules related to harmful activities on soil and groundwater. The referred governmental decree determines the rules and standards, as well as the phases of the rehabilitation process, the role of the competent authority and the rule of relevant procedures. It also clarifies the responsibilities of diverse actors.

Rehabilitation is in fact hindered by the fact that most of the responsible companies, organisations, and municipalities are facing financial difficulties. In several cases, the slow rehabilitation of old contaminated sites is an obstacle to "brownfield" investments and the improvement of less developed regions in which municipalities have an important role.


Waste management is one of the most stressed areas of the Hungarian environmental policy. In the Act No. XLIII/2000 on Waste Management, in force as of 1 January 2001, and the National Waste Management Plan (NWMP) (Parliament Resolution 110/2002), which defines the strategy of enforcement, the targets to be achieved by 2008 and the means for implementation, it also defines the priorities of waste management according to the international standards.

According to these priorities, the targets to be achieved include:

- first priority is the prevention of waste generation, including the reduction of both the amount and hazard degree of the wastes generated,
- second priority is the maximum possible increase in waste recovery,
- third priority is the environmentally friendly treatment of non-recoverable waste.

In addition to promoting these priorities, implementation should include:

- mitigation of environmental damages resulted by past activities.
- According to the programme as a result of preventive measures, waste generation in 2008 should not exceed that of 2000, as specified in the objectives of NWMP.
Regarding **recovery**, development and use of modern waste recovery technologies - including energetic use - should be promoted. It is also the objective of NWMP to recover at least 50% of waste by 2008.

With regard to **disposal**, the application of physical, chemical and biological methods should be promoted. For waste not recoverable as material, thermal treatment, especially that including heat generation should be preferred to landfill disposal. Only residue unlikely to be treated should be disposed on landfill sites. The objective of the NWMP is to ensure – before the deadlines of the relevant EC directives – the availability of the required disposal capacities and to closing down or modernise facilities not complying relevant rulings.

**Damages** caused by past improper waste management practices should be **mitigated**, illegal dumping sites and contaminated areas should be identified, assessed and eliminated; existing landfill sites failing to comply with the environmental requirements should be closed down, rehabilitated and remedied.

The program also aims at establishing **collection, recovery and disposal infrastructure facilities** for each type of waste.

**5. National Nature Conservation Master Plan**

The **National Nature Conservation Master Plan**, forming a part of the Programme, provides detailed recommendations to preserve and utilise our natural heritage.

Hungary’s areas of Community importance, amounting to at least 15% of the territory of the country, will be integrated into the ecological network named NATURA 2000 of the European Union.

By the end of the NEP 2 period, 11% of the country’s territory will be declared to be protected natural areas as being the most endangered, most valuable areas. The proportion of areas covered by forests subject to the obligation of forest renovation will be increased to 20%. Our objective is to gradually increase the proportion of forest areas covered with indigenous species of trees. Besides special measures assisting the survival of natural values, new types of nature and land use are intended to be realised to ensure co-ordinated conservation and farming.

By means of agro-environmental protection, rural development, and nature conservation measures reinforcing each other, it is intended to increase the retaining capacity of rural areas. Programmes on ecological farming, as well as farming programmes to be introduced in wetland and grasslands, pertaining to high-priority agro-environmental programmes, as well as farming programmes launched in sensitive natural areas will be realised in the aggregate on half of Hungary’s productive areas (approx. 3 million hectares).

By establishing a system of sensitive natural areas pertaining to the extensive agricultural zone, 28% of the country’s lands will offer the opportunity for land owners to be granted subsidies for environmental use and produce healthy, competitive products.

The envisaged cleaner and nicer environment as well as the animal and plant species considered to be rarities in other countries greatly contribute to enhancing the ecotourism attraction of Hungary and the equalisation of the spatial discrepancies present in the level of development of regions.
6. Improved Vásárhelyi Plan [Decree No. 1022/2003. (III.27.)]

The conceptual plan of raising the level of flood safety in the Tisza Valley (referred to as Improved Vásárhelyi Plan– IVP) envisages the controlled diversion and retention of part of the flood flow and the return thereof as needed to the river, or transfer thereof to an area of water scarcity. The structures and reservoirs of the flood mitigation project are required to be designed and operated to contribute – while retaining their flood control function – to the achievement of the agro-environmental and rural development objectives, as well as to the expansion of natural habitats.

The flood control developments are explored in depth by order of priority, while the agro-environmental, rural advancement, conservation, etc. impacts are also analysed for each stage of development.

The Vásárhelyi Plan approved by the Government intends to improve flood protection in Tisza Valley on the basis of a new flood protection concept. Instead of increasing and putting higher the flood protection dikes than the required construction, Vásárhelyi Plan will secure flood protection in Tisza Valley primarily by regulating the riverbed and flood reservoirs to be formed on the territory of Hungary. After the implementation of the Vásárhelyi Plan, the flood risks to more than 1 million residents living on the flood plain of the River Tisza and economic and cultural assets accumulated there will drop to one third of the current risks.

No further dikes are planned, but the “Improved Vásárhelyi Plan”, provides for complex long-term solutions by establishing a reservoir-based flood control system feasible in flood plains in Hungary, providing controlled outlets, and reactivating some part of former flood plains, taking the aspects of environment protection, nature conservation, and physical planning into consideration as well.

As a result of a controlled system, it will be possible to enrich wetland and to establish new types of farming by changing field work alongside the priority of the flood protection function.