



REPUBLIC OF TURKEY
MINISTRY OF ENERGY AND NATURAL RESOURCES
GENERAL DIRECTORATE OF STATE HYDRAULIC WORKS

YUSUFELI DAM AND HEPP PROJECT

CHAPTER II POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

ENVIRONMENTAL IMPACT ASSESSMENT

DRAFT FINAL REPORT (Rev F)



ENVIRONMENTAL CONSULTANCY CO.

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LIST OF ABBREVIATIONS

AIGM	General Directorate of Disaster Affairs
ASL	Above Sea Level
B/C	Benefit-cost ratio
Bern Convention	Convention on the Conservation of European Wildlife and Natural Habitats
BOD	Biological Oxygen Demand
BTEP	Thousand Tons of Petroleum Equivalent
CHY	Cable Head Yard
CITES	Convention on International Trade in Endangered Species of Wild Flora and Fauna
CR	Critically Endangered
COD	Chemical Oxygen Demand
dB	Decibels
DD	Data Deficient
DIE	State Institute of Statistics
DMI	General Directorate of State Meteorological Institute
DO	Dissolved Oxygen
D/S	Downstream
DPT	State Planning Organization
DSI	General Directorate of State Hydraulic Works
EC	Electrical Conductivity
EDF	Electric de France
EIA	Environmental Impact Assessment
EIE	General Directorate of Electrical Power Resources Survey and Development Administration
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
ENCON	ENCON Cevre Danismanlik Ltd. Sti. (Environmental Consultancy Co.)
EN	Endangered
ENE	East-northeast
ENPEP	Energy and Power Evaluation Program
EPDC	Electric Power Development Company
ERL	IUCN (European) Red List
ETL	Electric Transmission Lines
EU	European Union
EUAS	Turkish Electricity Production Corporation
GCCW	Georgian Centre for Wildlife Conservation

GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gases
GIS	Geographic Information Systems
GNP	Gross National Product
GWh	Giga Watt Hour
HH	Household
HEPP	Hydroelectric Power Plant
HSE	Health, Safety and Environment
HWCR	Hazardous Waste Control Regulation
HWL	High Water Level
IBA	Important Bird Area
ICOLD	International Commission on Large Dams
IPP	Independent Power Producers
IRR	Internal rate of return
IMS	Integrated Management System
IUCN	The World Conservation Union
JICA	Japan International Cooperation Agency
KEP	Kilogram Petroleum Equivalent
KGM	General Directorate of State Highways
KHGM	General Directorate of Rural Affairs
kWh	Kilo Watt Hour
Leq	Noise Level Equivalent
LTL	Long Term Limits
MAED	Model for Analysis of Energy Demand
MAK	Central Hunting Commission
MARA	Ministry of Agriculture and Rural Affairs
MCE	Maximum Credible Earthquake
MoEF	Ministry of Environment and Forestry
MENR	Ministry of Energy and Natural Resources
MOH	Ministry of Health
MPWS	Ministry of Public Works and Settlement
MTA	General Directorate of Mining Exploration and Research
MW	Mega Watt
MWCR	Medical Waste Control Regulation
MWL	Maximum Water Level
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration Environmental Data Service
OECD	Organization for Economic Cooperation and Development
OP	World Bank Operational Policy

PAP	Project Affected Person
PIO	Public Information Office
PM	Particulate Matter
RAP	Resettlement Action Plan
ROW	Right of Way
RS	Remote Sensing
SE	Southeast
SRF	Special Resettlement Fund
SS	Suspended Solids
STL	Short Term Limits
SY	Switch Yard
TCK	General Directorate of State Highways
TDS	Total Dissolved Solids
TEIAS	Turkish Electricity Transmission/Distribution Corporation
TKN	Total Kjeldahl Nitrogen
TKVKK	Trabzon Natural Wealth Preservation Committee
TPAO	Turkish Petroleum Corporation
TPE	Total Petroleum Equivalent
TPP	Thermal Power Plant
TRDB	Turkish Red Data Book
TSWCR	Turkish Solid Waste Control Regulation
TUGEM	General Directorate of Agricultural Production and Improvement
UNDP	United Nations Development Programme
U/S	Upstream
VU	Vulnerable
WB	World Bank
WCD	World Commission on Dams
WEC	World Energy Council
WPCR	Water Pollution Control Regulation
WWF	World Wildlife Foundation

II. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

II.1. Laws and Regulations Related to the Environment

II.1.1. Turkish Legal Framework for Environmental Protection

Turkish environmental regulations were developed in line with national and international initiatives and standards, and some of them have been revised in recent time to be harmonized with the EU Directives in the scope of pre-accession efforts of Turkey. In the following sections, legislation, process and procedures that are related to the environmental and social aspects of the proposed project are described.

The Ministry of Environment and Forestry is the responsible organization for the implementation of policies adopted for protection and conservation of the environment, and for sustainable development and management of natural resources. The Ministry of Environment and Forestry was first established as an Undersecretariat of the Prime Minister's office in 1987 and was promoted to the rank of Ministry of Environment in August 1991 by the Establishment Law No. 443. Finally, the Ministry of Environment and Forestry (MoEF) was established in 2003 through a merger of the previously separate Ministry of Environment and Ministry of Forestry. The central office of the Ministry of Environment and Forestry is located in Ankara, complemented by the Directorates in each province. The MoEF is organized into five technical general directorates and three departments as follows:

1. General Directorate of Environmental Impact Assessment (EIA) and Planning
2. General Directorate of Environmental Management
3. General Directorate of Nature Conservation and National Parks
4. General Directorate of Afforestation and Erosion Control
5. General Directorate of Forest-Village Relations
6. Department of Research and Development
7. Department of Training and Publication
8. Department of Foreign Relations and European Union

In addition to the branches stated above there are three affiliates under MoEF which are:

1. General Directorate of Forestry
2. General Directorate of State Meteorological Services
3. Authority for Specially Protected Areas

The Turkish Environment Law No. 2872, which came into force in 1983, handles environmental issues on a very broad scope. According to the basic principles that govern the application of the Environment Law, and as stated in the Constitution, citizens as well as the state bear responsibility for the protection of environment. Complementary to the Environment Law and its regulations, other laws also govern the protection and conservation of the environment, the prevention and control of

pollution, and the implementation of measures for the prevention of pollution. Some of these laws are:

- Water Products Law and Regulations (1971, last amended in 2003)
- Groundwaters Law (1960)
- Public Health Law (1930)
- National Parks Law (1983)
- Conservation of Cultural and Natural Assets Law (1983)
- Specially Protected Areas Law (1989, last amended in 1991)
- Coast Law (1990, last amended in 1992)
- Forestry Law (1956, last amended in 2004)
- Pastures Law (1998, last amended in 2004),
- Regulation on the Conservation and Use of Agricultural Lands (2001),
- Municipality Law (1930)
- Public Works Law (1985)
- Tourism Incentive Law (1982)

Some of these laws and regulations contain special articles (e.g. exemption clauses), which apply when an activity or project serves the public interest.

In line with the Environment Law, several regulations have been published since 1983 and these are:

- Air Pollution Control Regulation that was put into force in November 1986 (last amended in April 2003)
- Noise Control Regulation that was put into force in December 1986 (revised in July 2005 as Assessment and Management of Environmental Noise based on European Union (EU) Council Directive 2002/49/EC.
- Regulation on Industrial Originated Air Pollution Control that was put into force in October 2004
- Water Pollution Control Regulation that was put into force in September 1983 (last amended in December 2004)
- Solid Waste Control Regulation that was put into force in March 1991 (last amended in April 2005)
- Soil Pollution Control Regulation that was put into force in December 2001 (last amended in May 2005)
- Environmental Impact Assessment Regulation that was put into force in February 1993 (revised in June 1997, June 2002, and December 2003, and amended in December 2004)
- Medical Waste Control Regulation, that was put into force in May 1993 (last amended in June 1998)
- Harmful Chemical Substances and Products Control Regulation that was put into force in July 1993 (last amended in March 2005)
- Hazardous Waste Control Regulation that was put into force in August 1995 (last amended in March 2005)
- Environmental Auditing Regulation that was put into force in January 2002 and revised in January 2003.

In addition to the regulations listed above, the Labor Law has been revised and several health and safety regulations have been adopted or amended in order to be EU legislation. The major health and safety regulations are:

- Regulation on Occupational Health and Safety of December 9, 2003 (the regulation is based on European Union (EU) Council Directive 89/391/EEC dated June 6, 1989)
- Regulation on Health and Safety Signs of December, 2003 (the regulation is based on EU Council Directive 92/58/EEC dated June 24, 1992)
- Regulation on Heavy and Dangerous Works, of June, 2004
- Noise Regulation, of December, 2003 (the regulation is based on European Parliament and Council Directive 2003/10/EC dated February 6, 2003)
- Vibration Regulation, of December, 2003 (the regulation is based on European Parliament and Council Directive 2002/44/EC dated June 25, 2002)
- Regulation on Use of Personal Protective Equipment, of February, 2004 (the regulation is based on EU Council Directive 89/656/EEC dated November 11, 1989)
- Regulation on Health and Safety in Fixed Term and Temporary Employment, of May, 2004 (the regulation is based on EU Council Directive 91/383/EEC dated June 25, 1991)
- Regulation on Basics and Methods of Workers Health and Safety Training, of April, 2004

II.1.2. Turkish Legal Framework for Conservation of Wildlife and Nature

Turkish national policy regarding the conservation of biological resources has been established based on the relevant international agreements that Turkey is a signatory, which are ratified or acceded by laws or relevant legislation. In addition to these, various laws and regulations have provisions regarding the protection and conservation of natural habitats and wildlife.

The international agreements and conventions on biological conservation that Turkey had ratified are:

- Paris Convention on the Protection of the World Cultural and Natural Heritage (acceded by Law no. 2658 published in the Official Gazette dated 4 February 1983 and no. 17959);
- Bern Convention on Protection of Europe's Wild Life and Living Environment (acceded by the Decision of the Council of Ministers dated 9 January 1984 and published in the Official Gazette dated 20 February 1984 and no. 18318);
- Ramsar Convention on Wetlands of International Importance Especially as Wildfowl Habitat (acceded by the Decision of the Council of Ministers dated 15 March 1994 and published in the Official Gazette dated 17 May 1994 and no. 21937);

- Convention on International Trade in Endangered Species of Wild Flora and Fauna (acceded by Law no. 4041 and published in the Official Gazette dated 20 June 1996 and no. 22672);
- UN (Rio) Convention on Biological Diversity (ratified by Law no. 4177 published in the Official Gazette dated 27 December 1996 and no. 22860);

By the ratification of the above-mentioned international agreements, Turkey agreed on the implementation of the conservation measures specified in these agreements. Furthermore, national legislation was established to protect and improve the status of the biological resources of Turkey. Relevant Turkish legislation in this context is:

- Inland Hunting Law (2003)
- Water Products Law and Regulations (1971, last amended in 2003)
- National Parks Law (1983)
- Specially Protected Areas Law (1989, last amended in 1991)
- Forestry Law (1956, last amended in 2004)
- Regulation on Wildlife Protection and Development Areas (November 8, 2004)
- The Regulation on the Principles and Procedures Concerning the Protection of the Game and Wild Animals Together with their Habitats and Struggle with the Pests (2005)
- Environmental Impact Assessment Regulation (February 07, 1993; revised in June 1997, June 2002, and December 2003, and amended in December 2004)
- Annual Central Hunting Commission Decisions (published in the Official Gazette as a Circular by the Ministry of Environment and Forestry; last publishing on July 20, 2005)

In line with the above mentioned legislation the areas; with significant biological diversity, with local endemics of importance, with species that has a threat status of endangered, etc. are given protection status. With this regard an area can be put under protection and conservation as a national park, nature conservation area, wildlife protection and/or development area, specially protected area, water products production area. Turkish nature conservation categories and the relevant regulations are presented in Table II.1. In addition, in accordance with Ramsar Convention some wetlands were declared as Ramsar sites of protection.

Table II.1. Turkish Nature Conservation Categories

Type of Area	Definition / Protection Target	Level of Protection	Regulatory Base
First Degree Natural Protected Site¹	A site specified for preservation for public benefit due to public interest, rarity, specific characteristics, aesthetic value and or scientific value.	No activity that will effect/damage vegetation, topography and landscape is allowed.	Conservation of Cultural and Natural Assets Law (2863); July 21, 1983 Principal Resolutions of the High Committee of Protection of Cultural and Natural Assets November 5, 1999 (Decision No: 659).
Second Degree Natural Protected Site¹	A site with some degree of protection status, which may be used for development, subject to sufficient, controls being in place to protect the site.	No construction activities except touristic facilities with touristic investment or operation licences and ancillary facilities. Also, public benefit projects only.	Conservation of Cultural and Natural Assets Law (2863); July 21, 1983 Principal Resolutions of the High Committee of Protection of Cultural and Natural Assets November 5, 1999 (Decision No: 659).
Third Degree Natural Protected Site¹	A site of lower protection status, which may, under certain circumstances, be used for development.	Can be used for development considering the potential and use of the region.	Conservation of Cultural and Natural Assets Law (2863); July 21, 1983 Principal Resolutions of the High Committee of Protection of Cultural and Natural Assets November 5, 1999 (Decision No: 659).
National Parks	Natural areas with protection, recreation and touristic sites having national and international rare natural and cultural resource values regarding scientific and aesthetic view	Plans, projects and investments of governmental agencies and organizations are allowed (with the permission of Ministry of Agriculture and Rural Affairs)	National Parks Law (2873); August 09, 1983
Natural Parks	Natural sites appropriate for public recreation with vegetation and wildlife characteristics	Construction of touristic facilities are allowed for public use at the national and natural parks outside the touristic region, area and centers (with the permission of Ministry of Agriculture and Rural Affairs)	National Parks Law (2873); August 09, 1983
Nature Protection Area	Rare, under threatened ecosystems and species and natural sites containing special assets	Used for only scientific and educational purposes (These studies may	National Parks Law (2873); August 09, 1983

Table II.1. Turkish Nature Conservation Categories

Type of Area	Definition / Protection Target	Level of Protection	Regulatory Base
	that should be necessarily protected (used for scientific and educational purposes)	include the scientific investigations to obtain detailed information about the protected site or to define the mitigation measures for the protection of these sites.)	
Natural Asset	Natural sites protected within the scope of national parks principles, with natural characteristics and scientific values	Plans, projects and investments of governmental agencies and organizations are allowed (with the permission of Ministry of Agriculture and Rural Affairs) Construction of touristic facilities are allowed for public use at the national and natural parks outside the touristic region, area and centers (with the permission of Ministry of Agriculture and Rural Affairs)	National Parks Law (2873); August 09, 1983
<div data-bbox="225 1563 464 1877" style="background-color: yellow; border: 1px solid black; padding: 5px; text-align: center;"> Status of Coruh Valley Wildlife Protection Area </div>	A site specified for preservation and continuity together with flora and fauna due to wildlife characteristics	No activities except the ones stated in the management and approved plans. Projects with public benefit are allowed. Facilities, which have adverse effects on these sites, although not located within the boundaries of the protected site, are not allowed. If exists, no discharge without treatment is allowed. No solid waste disposal/storage facilities are allowed at the protection sites.	Inland Hunting Law (4915); July 01, 2003 Regulation on Wildlife Protection and Development Areas (25637); November 8, 2004

Table II.1. Turkish Nature Conservation Categories

Type of Area	Definition / Protection Target	Level of Protection	Regulatory Base
The Authority for the Protection of Special Areas (APSA)	Ecologically important sites sensitive to environmental pollution and disturbance with historical and natural assets	All facilities to be constructed within the boundaries of this site are dependent on the permission and monitoring of the Authority for the Protection of Special Areas. Allowable facilities are determined according to the issues stated in the Decree with Force of Law on the Establishment of the Authority for the Protection of Special Areas.	Decree with Force of Law on the Establishment of the Authority for the Protection of Special Areas (383); October 19, 1989

1 natural site is defined as the 'over-ground, underground or submarine assets that belong to geological eras, prehistoric and historic eras and that should be protected because of their rareness or specifications and preciousness'.

2 Status of Coruh Valley Wildlife Protection Area

Furthermore, forest areas, pasturelands, agricultural lands and habitats of endangered species and local endemic species are given importance during the evaluation of the projects in the scope of Turkish EIA Regulation. However, although the activities in such areas are also concern of various legislation, these areas are not specifically provided a protection status. In Turkey there is no conservation concept for vegetation community habitats as is provided in EU countries by the EU Habitats Directive.

In Turkey, there is no specific habitat compensation requirement. There is only a policy regarding forest areas, which aims to reforest at least as much as the forest area lost due to development activities, fires, etc.

According to World Bank OP 4.04-Natural Habitats, natural habitat issues and special needs for natural habitat conservation, including the degree of threat to identified natural habitats (particularly critical natural habitats), and measures for protecting such areas in the context of the country's development strategy should be identified. OP 4.04 defines existing protected areas and areas officially proposed by governments as protected areas (e.g., reserves that meet the criteria of the World Conservation Union [IUCN] classifications) as critical natural habitats. IUCN classification for protected areas (Area of land and/or sea especially dedicated to the protection of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means) contains six management categories. These are;

I— Strict Nature Reserve/Wilderness Area: protected area managed for science or wilderness protection; II— National Park: protected area managed mainly for ecosystem protection and recreation; III— Natural Monument: protected area managed mainly for conservation of specific natural features; IV— Habitat/Species Management Area: protected area managed mainly for conservation through

management intervention; V— Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation; and VI— Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems. Accordingly, Coruh Wildlife Protection Area can be classified as Class IV protected area.

II.1.3. Environmental Impact Assessment Procedure in Turkey

In the Environment Law, the general scope of the Environmental Impact Assessment procedure is set out in Article 10. Within this legal framework the EIA Regulation was put into force by its publication in the Official Gazette No. 21489 on February 7, 1993. Until present, the regulation was revised three times. The first revision was published in the Official Gazette No. 23028 on June 23, 1997 and the second was issued on June 6, 2002 (Official Gazette No. 24777). The last one was put into force on December 16, 2003 (Official Gazette No. 25318) and a further amendment was made on December 16, 2004 (Official Gazette No. 25672).

As mentioned previously, the provisions of the EIA Regulation do not apply to the Yusufeli project as it was exempt from EIA by the Ministry of Environment and Forestry, since the final design of the project had been approved by relevant authorities prior to the promulgation of this Regulation (Chapter I.3.1). Therefore, the preparation of an Environmental Impact Assessment Report (Environmental Impact Statement) for this project is not required under the Turkish Environmental Impact Assessment Regulation, (Chapter I.3.1).

However, despite the Yusufeli project was exempted from the requirements of the Turkish EIA Regulation, all project activities will need to comply with the requirements of all other environment related Turkish laws and regulations in force.

For information and completeness, the following description covers the procedural requirements of the Turkish EIA Regulation.

When an activity (project) is planned, the proponent is responsible for preparing an Environmental Impact Assessment Report, which is the same as an Environmental Impact Statement (EIS), along with many other permits required to realize the project, but not all facilities are subject to the preparation of an EIS. Depending on the type of the facility, its capacity, or the location of the activity, an EIS or a Project Description File is required.

If the planned activity is within Annex I of the Turkish EIA Regulation a full EIA Report is required. The process starts with submitting a brief report, summarizing the characteristics of the project and the impact area, and the potential environmental impacts and mitigation measures, prepared according to the format provided in Annex III of the EIA Regulation to the Ministry of Environment and Forestry. Then the Ministry of Environment and Forestry's General Directorate of EIA and Planning forms a committee from related governmental and non-governmental agencies, which also includes the project owner and the consultant that would prepare the EIA report. With the formation of this committee the scoping phase starts. This committee aims to define the scope of the EIA report to be prepared for the project.

The EIA scope is defined based on findings of the committee and the comments and suggestions received from a public consultation meeting to be held at the project site. The scoping phase is completed with a meeting of this committee during which the EIA scope is agreed on. Based on the agreed scope, the EIA studies are conducted and the report is prepared.

If the planned activity is in Annex II of the EIA Regulation (activities that require a Project Description File, e.g. projects such as run-off river type power plants with an installed capacity higher than 10 MW and less than 50 MW, wind energy power plants, etc.), a report is prepared in accordance with the format given in Annex IV of the Regulation, which a Local Environmental Committee evaluates and transfers to the Ministry of Environment and Forestry General Directorate of EIA and Planning who reviews the report and decides whether an EIS would be required or not.

After the submission of the EIS to the General Directorate of EIA and Planning of the Ministry of Environment and Forestry, the EIS was checked by this General Directorate with regard to the contents to decide whether the EIS is suitable for starting the review process. If the content of the EIS is found to be appropriate, the review period starts.

The start of the review period is publicized by the Ministry of Environment and Forestry, and the Governorate of the Province where the project would be realized, via various means. The EIA report is open to the review and comments of the public for a period of one month following this announcement.

A Review and Evaluation Committee is formed (the agencies that participated in the scoping phase are included in this committee and other agencies may be included as well) by the Ministry of Environment and Forestry. The Review and Evaluation Committee is formed by;

- the representatives of the Ministry of Environment and Forestry,
- representatives of relevant organizations selected by the Ministry of Environment and Forestry,
- proponent (owner of the project),
- representatives of the consultant that prepared the EIA Report.

The Committee reviews the EIA Report with respect to the following considerations:

- Are studies carried out detailed enough and based on realistic, sufficient data?
- Are appendices (tables, maps etc.) sufficient?
- Are the predicted environmental impacts realistic and complete?
- Are site, technology, process and no-action alternatives studied and explained clearly?
- Are relevant mitigation measures developed for the significant impacts?
- Is a sufficient monitoring program proposed?

During the review period, the Committee may need additional information or data. In such a case, the Committee may ask other organizations (mostly governmental) to

perform studies at the site or to supply additional information, or the Committee may call experts from universities, institutions, or independent consultants for their contribution to check the validity of information given in the report. They can also perform a local survey themselves, if they find it necessary. The committee members review the statement according to their scope of responsibilities. Representative governmental members of the Committee may include:

- The Ministry of Energy and Natural Resources (MENR) is responsible for the production and control of sustainable consumption of natural resources and energy, as well as for investigations of river discharges.
- The General Directorate of State Hydraulic Works (DSI) is an affiliate of the MENR. DSI is responsible for; the development of hydraulic resources for irrigation and hydropower, the prevention of adverse effects on the quality and quantity of surface and ground waters, on the fisheries in reservoirs and flood control. Also with regard to expropriation and resettlement, Department of Real Estate and Expropriation of DSI is responsible for; preparing policy and programs aiming at expropriation, right of passage, temporary possession/occupation, and purchase of land, preparing maps and other related documents for expropriation, applying for allocation of land for DSI projects from Undersecretary of Treasury or the Ministry of Environment and Forestry, and transferring basic information on population subject to resettlement due to the project of concern to Ministry of Public Works and Settlement (MPWS), and follow up studies on resettlement. The Ministry of Public Works and Settlement (MPWS) executes the resettlement process.
- Within the Ministry of Environment and Forestry, the General Directorate of Afforestation and Erosion Control, the General Directorate of National Parks Game and Wildlife and the General Directorate of Forestry conduct projects related to related to conservation of forests, erosion control, and identification, protection and management of National Parks, Natural Reserves, and Nature Parks. This Ministry is also responsible for obligations, prescribed by the Law on Forestry No. 6831 with respect to resettlement issues. This Law covers the resettlement of villagers whose incomes are based on forests, and give preference for their resettlement in the closest neighborhood within the boundary of a forest.
- The Ministry of Culture and Tourism is responsible for the preservation and promotion of cultural, historic, antique and national resources. In addition, determination of touristic sites and conducting projects regarding the protection of environment at these sites are under the responsibility of the Ministry of Culture and Tourism.
- The Ministry of Agriculture and Rural Affairs, with its affiliates; the General Directorates of Protection and Control, Agricultural Production and Improvement (TUGEM), Agricultural Research is responsible for the development of the policies that focuses on the development of the rural areas, improvement of the agricultural, livestock and fishery products, establishing infrastructure that will promote the development of the agriculture sector and rural areas. They conduct

projects related to environmental management, such as sewage systems and irrigation networks in rural areas. The Ministry is also responsible for the management of fisheries in lakes, rivers and seas.

- The Ministry of Public Works and Settlement (MPWS) is responsible for the resettlement of the persons specified under the Resettlement Law. Although the General Directorate of Rural Affairs (KHGM) was responsible for carrying out resettlement processes until now, after the acceptance of Law 5286 regarding the abolishment of the General Directorate of Rural Affairs in January 13, 2005, resettlement activities set forth in the law were turned over to MPWS. From this point on, MPWS will be referred to, for these processes. MPWS is empowered and authorized in resettling the people, who will lose their means of income either completely or partially due to the expropriation related to the public interest projects. MPWS also works on resettlement for; the people emigrated to Turkey from foreign countries and nomads living in the country. In addition, it provides credits to those who wish to construct their houses on their own land in rural areas. These activities aim to improve the lives of the inhabitants, providing them with sufficient accommodation and facilities to satisfy their social, economic and cultural needs.
- The Environmental Health Service of the Ministry of Health is responsible for health networks and, in particular, for the monitoring of air quality.
- The State Planning Organization, which is an affiliate of the Prime Ministry, is the main body responsible for the preparation of Five Year Development Plans and for annual implementation programs in all sectors of public activity. In late 1990s, this organization carried out the installation, accounting and survey for the development of environmental statistics. Its role might actually evolve towards a consultative-type function attached to the central government (Prime Minister's office).
- The Ministry of Tourism is responsible for the determination of touristic areas and financing the environmentally sound projects within these areas, as well as projects related to the preservation of environment.
- The Bank of Provinces is an affiliate of the Ministry of Public Works and Settlement, and is responsible for drinking water supply, sewerage and domestic water and wastewater treatment issues.

II.2. Compensation and Resettlement Related Legal Framework

Following section gives a brief overview and applicable laws and regulations concerning expropriation, compensation of losses and resettlement issues. These issues are in detail covered by the Resettlement Action Plan for the Project (ENCON 2005).

II.2.1. Expropriation Laws and Process

The property (land, houses etc.), which will be inundated by the realization of Yusufeli Project are going to be expropriated under Turkish Laws No. 2942 (November 4, 1983) and 4650 (April 24, 2001). People whose property would be expropriated for the proposed project are entitled to request from the Turkish State to resettle them under Law No. 2510 of June 21 1934, and its subsequent amendments.

In Turkish Constitution, under the heading “Social and Economic Rights and Responsibilities”, Article 46 deals with expropriation issues. The article states that whenever expropriation is required to serve public interests (regarding to the area requirements of development projects), the government and the governmental organizations are authorized to initiate and execute the process. Except under conditions specified by the expropriation law, expropriation payments are made in cash and in advance. More detailed description of these laws and their application are provided in the Resettlement Action Plan (ENCON, 2005).

For implementing land reform, major energy and irrigation projects, housing and resettlement schemes, afforestation, coastal protection and touristic facilities, expropriation law allow compensation payment for expropriation to be made in installments. In such cases, the payment period shall not exceed five years, payments shall be made in equal installments and an interest rate equivalent to the highest interest paid on the public debt shall be paid for the remainder of installments. However, compensation for the expropriated land of small farmers, who cultivate their own land, shall in all cases be paid in advance. In estimating the compensations, objective criteria, current value established by official assessment at the time of expropriation, unit prices and construction costs for real estate is used.

The expropriation process starts with obtaining the approval of the related Ministry (Ministry of Energy and Natural Resources in this case) provided that the project serves public interest. Then, expropriation plans are prepared, which includes cadastral surveys (e.g., determination of land plot boundaries, identification of real property owners, investigation of addresses etc.) and informing the affected people about the expropriation.

The locals in the area to be expropriated are notified and a commission from at least three members is formed to determine the value of immovable assets and resources in line with the criteria indicated in Article 11 of the Expropriation Law. This commission is called the “valuation commission.” The members of the commission are selected from the related departments of the agency performing expropriation.

This commission may obtain information from related experts, agencies or local estate agencies. The valuation of immovable assets is done in such a way that value of the property is realistically more than its current market price and it is at replacement cost.

After cadastral surveys have been completed for a village, and the commission has decided on the land value of each property, the agency (the General Directorate of State Hydraulic Works) returns to the village and negotiates with the owners of the properties to reach a compromise. At the end of this process, if a compromise is reached, the agency pays each owner in turn for his or her property. If the owner considers the amount to be too small, he/she can reject it. This abandons further action of the agency. In such a case the agency has to go to the court for the estimation of the expropriation cost of the property. The court decides on a new value by the help of experts that make a new valuation for the assets. The value decided by the court is accepted as the expropriation value. However, the owner of the property still has the chance to appeal this decision and/or to apply to the court according to Article 14 of the Expropriation Law. In such a case, the decision of the court related to this application is awaited and the expropriation value to be paid to the owner is decided by this court. Finally, the amount being awarded to the claimant is payable by the agency in advance as a whole, or first installment is paid in advance in accordance with Article 3 of the Expropriation Law, and in cash. Then, the property is registered to the name of the Administration and expropriation process is completed.

II.2.2. Resettlement Law and Process

The Resettlement Law lists four categories of people entitled to resettlement: farmers without land, or with limited land; victims of landslides, floods, or other natural disasters; persons living in overgrown bushlands, swampy areas, or hazardous areas and restricted military zones; and “those who have to be relocated because of agricultural, administrative, political, social, economic or military reasons”. People whose lands are expropriated for power projects fall into the last group. People who can request to be resettled by the government includes; people having their properties expropriated completely, people having their properties expropriated partially, but who have to leave these places, and people having no property, but having settled in the expropriated area, since at least 3 years before the cut-off date. Two types of resettlement are considered under the law;

- rural, and
- urban.

Relevant and essential capital items are provided to the resettlers, such as land, house, business premises, and operating capital on credit. In addition, the Turkish Government transports the people being resettled, along with their goods and animals. Rural settlers mainly receive; items such as sufficient land, animals for farming, equipment and tools, - seed, - barns, - storage areas and other facilities.

Settlers are obliged to liquidate within one year the movable and immovable property that they own in the place they have left, such as unflooded land, or other property.

Immovable property provided to the settlers by the Turkish Government cannot be sold, pledged or otherwise liened in any manner for a period of ten years in case state credit is used. The only exception to this rule is the use of such property as collateral to receive credits from the Turkish Agricultural Bank.

Settlers under Government sponsorship are exempt from building and land taxes for one year after the new properties are registered in their names. The Resettlement Law also states that for persons to be resettled, the concerned agencies will deposit their expropriation compensation into the Special Resettlement Fund (SRF). In practice, displaced property owners are actually paid their money, and must deposit it themselves into the Special Resettlement Fund.

The costs of resettlement are set against the amount paid into the SRF and if the amount paid into the SRF is greater than the resettlement cost (including the assets received), the difference is paid back to the settler. On the other hand, if the amount paid into the SRF is less than the resettlement cost, the Government provides long-term loans to the settlers. These loans are repayable over twenty years after an initial five years grace period and with no interest rate (0%).

Resettlement process follows the expropriation process, so following the DSI disbursement team, officers from the MPWS interview those who have accepted the expropriation amount, to ascertain whether or not they would like to be resettled. The MPWS staff explains what benefits are provided under their resettlement program, and if the person makes a positive choice, he is required to deposit the cash compensation received in a special account. After MPWS has ascertained a particular household's intention to be resettled the staff carries out a simple socio-economic survey of the household, its property and income earning activities.

People not opting for formal resettlement by the MPWS are free to go wherever they like, and do whatever they want, whether this means rebuilding their villages on land already owned or purchased, moving to stay with relatives in cities, purchasing an apartment, or constructing a house. It should be noted that, over and above the involvement of MPWS, Provincial Governors in affected areas often play a key role in assisting those engaging in self-resettlement, under various improvement programs.

It is important to note that because of the sequence of steps in the resettlement process it is not possible to prepare a detailed plan based on people's final resettlement decisions until after the cadastral surveys of land and officially identified inventories of property are complete, and values put on such property.

Based on the experience related to expropriation and resettlement, and the involvement of international lenders in large scale infrastructure projects in Turkey, Turkish Government brought a new approach to resettlement in the recent Five Year Development Plan prepared by DPT. This approach envisions the preparation of EIA and resettlement reports simultaneously with major construction projects. Under this approach the following issues are emphasized:

- Coordination between relevant organizations.

- Rehabilitation of resettlers and providing re-establishment for social, cultural and economic losses of the displaced people.
- Participation of resettlers and NGOs in the process and ensuring proper timing.
- Selecting the settlement site (arrival area) as close as possible to the departure area to minimize negative impacts (short distance resettlement).
- Developing employment opportunities and ensuring the integration of the resettlers and the present community (if any) in the arrival area.
- Protecting the environment.
- Integration and synchronization of the activities.

II.2.3. Institutions Related to Expropriation and Resettlement

The major agencies that are related to the expropriation and resettlement process for Yusufeli Project are summarized here. The detailed information regarding these can be found in the RAP. Turkish Government gives great importance to this subject and two committees (upper and technical committees) were formed to handle and coordinate these issues regarding the Yusufeli Dam and HEPP Project.

The Upper Committee includes six Ministers;

- Minister of Energy and Natural Resources,
- Minister of Finance,
- Minister of Justice,
- Minister of Interior,
- Minister of State responsible for Treasury, and
- Ministry of Public Works and Settlement

The Technical Committee was formed by the representatives of:

- Ministry of Public Works and Settlement
 - Bank of Provinces
 - General Directorate of Technical Research and Application
 - General Directorate of Disaster Works
 - General Directorate of Highways
 - General Directorate of Land Registration and Cadastre
- Ministry of Interior
 - General Directorate of Provincial Administration
- Ministry of Energy and Natural Resources
 - General Directorate of State Hydraulic Works
- Ministry of Environment and Forestry
 - General Directorate of Forestry

In addition, the following agencies also has role in the expropriation and resettlement process for the Yusufeli Project:

Undersecretariat of Treasury is responsible for providing finance for public development projects and related resettlement plans from national or international sources.

State Planning Organization (DPT) is the agency to ensure the coordination between all governmental agencies under the understanding of integrated project concept brought by current legislation. Thus, for Yusufeli Project, DPT will coordinate the cooperation among the organizations such as DSI, MPWS, and Ministry of Environment and Forestry to harmonize activities and increase efficiency of services. Also, it was the leading agency in the modification of strategy and implementation with regard to resettlement process together with DSI and MPWS.

Governorship of Artvin has the responsibility and mission to coordinate all local institutions and organizations administratively in accordance with the Law on Provincial Administration. The governorship will have an important role for coordination and control of all activities, related to the Yusufeli Project, to be implemented by various agencies that would affect the local people and environment. Cooperation of and coordination with the *Yusufeli Municipality* is also needed regarding especially the infrastructure services to be required for urban resettlement.