

SANITATION COUNTRY PROFILE

SLOVENIA

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- A. Basic Sanitation
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Decision-Making: The Government Office for Structural Policy and Regional Development (GOSPRD) coordinates the Government's work on sustainable development and is the focal point for contact with the UN Commission on Sustainable Development. In the Slovenian Council for Sustainable Development the following major groups are represented: NGOs, the private sector (Chamber of Economy and Chamber of Small Business), trade unions, Universities and the Academy of Science. The Slovenian Council for Sustainable Development was established in 1997 as an advisory body to the Slovenian government. The Minister responsible for Regional Development leads it, with relevant Ministers and representatives of other governmental bodies, the scientific community, universities, business and NGOs as members. The Council is a significant actor for assuring sustainable development in the country. It has a secretariat hosted by GOSPRD and members from all relevant sectors.

According to the Environmental Protection Act the Environmental Protection Council was established in 1994 by the Parliament to oversee the state of environmental protection. The Council has 11 members appointed by Parliament from the ranks of environmental protection experts. Even if one of the tasks of the Council is (by adopting positions and suggestions) to deal with the strategy leading from national environmental protection policy, its coordination with international trends, and the harmonization of development interests of the Republic, the Council has so far not taken a pro-active role in standing up for the interests of the environment.

Public participation in decision-making is not formalized yet. Slovenia has signed the Aarhus Convention on Access to Information, Public Participation and Access to Justice in Environmental Matters and its ratification is expected in 2004. In practice major policy and legal documents have been developed with public participation (at least consultation on the drafts) within the Ministry of Environment, Spatial Planning and Energy (MESPE). Other ministries do not have such a tradition of cooperation with the public.

In line with the Declaration on Environment and Development, the basic principles of sustainable development were incorporated in the Environmental Protection Act, adopted in 1993. This is a framework law, where in the provisions on the purpose of the Act it is stated that its objectives are: to satisfy the environmental needs of present and future generations, the aim of environmental protection is the preservation, improvement, and development of the integrity, diversity, and quality of natural elements, natural ecosystems, natural resources, and the natural treasure they represent; and regulate the development, the exploitation and use of space, and other activities affecting the environment must represent a balance between developmental and environmental needs as a basic condition of healthy and enduring development (i.e., sustainable development). Specific tools in order to achieve integration of environment offered by the Act are: Environmental Impact Assessments (EIAs, Article 55 and implementing regulations) are required where a project is likely to have significant environmental impacts. The regulations are fully harmonized with the EU legislation; Environment Vulnerability Studies (EVS, Article 51) should be the base of all planning, programs, and project activities, and for the provision of guidelines for development planning; and, Comprehensive Assessment of Environmental Impact (Article 54, equivalent to Strategic Impact Assessment studies, SIA) should be required before the Minister's consent can be given to any development planning acts of the Republic and local authorities.

Recently, new Environmental protection Act has been drafted and is expected to be adopted in May, 2004.

A. Basic Sanitation: In the field of wastewater collecting and treatment, coordination of activities and of different factors at the local and national levels is particularly important. According to the Environmental Protection Act (EPA), the state, i.e. the Ministry of Environment, Spatial Planning and Energy (MESPE), is responsible for the overall management of water (OG, 32/93), including wastewater collecting and treatment, while the municipalities, i.e. the local level of management, are responsible for the implementation of those activities. Efficient wastewater collecting and treatment therefore demand that

the existing two levels should cooperate at all stages of the strategic planning, preparation, implementation and management of concrete investments.

The preparation of the NEAP and action plans for individual sectors is provided for by the Environment Protection Act (OG, 32/93). Operational Program for the Urban Wastewater Collecting and Treatment With the Program of Water-Supply Projects has been prepared in accordance with the implementation timetable determined by the Decree on the Emission of Substances in the Discharge of Wastewater from Urban Waste Water Treatment Plants (OG, 35/96, 90/98) and the EU Urban Waste Water Directive (91/271/EEC).

B. Solid Wastes: The main actors in the field of solid waste are the government of the Republic of Slovenia, the Ministry of the Environment, Spatial Planning and Energy (MESPE), the Chamber of Commerce, local communities (municipalities), local public utilities and other companies. The responsibility for the preparation of strategic documents and waste legislation is mainly focused in the MESPE. Local communities are responsible for decisions on the management of solid waste (in accordance with strategies and legislative framework). The Environmental Agency is responsible for issuing permits and certificates for different modes of waste management (transport, export, removal, recovery, landfill etc.). The Agency is also responsible for reporting on waste. Non-governmental organizations are mainly present in the role of public control, which is limited by the availability of information on solid waste. Only recently the MESPE has started to try to actively involve NGOs and to create more possibilities for their participation.

In 2001 a regulation for Tax on Waste was adopted and came into force on 1 January 2002.

Environmental impact assessment in the transboundary context is governed by the act on the Ratification of the Convention on Environmental impact Assessment in the Transboundary Context, adopted in 1998.

C. Hazardous Wastes: The main actors on the field of hazardous waste management in Slovenia are the national government, ministries (environment, defense, economy and health), companies, Chamber of Commerce and local municipal companies. Non-governmental organizations are mainly present in the role of public control, which is limited by the information available to them on hazardous waste. Public pressure, exercised by the non-governmental organizations in the case of the illegally exported hazardous waste from two domestic companies from Slovenia to Colombia in the year 1994, has contributed to more rapid implementation of the provisions of the Basel Convention. The Ministry of Environment, Spatial Planning and Energy is solely responsible for the implementation and enforcement of the provisions of waste legislation. In recent years, as part of the EU approximation process, several legal acts on hazardous waste management obligations have been adopted. The main emphasis at the national level is given to the construction of the necessary hazardous waste management facilities. Activities in the field of minimization and source reduction of hazardous waste are mainly left to private and entrepreneurial initiatives.

The basic legal act is the Environmental Protection Act adopted in 1993. Additional legal acts have been adopted since: ordinances on PCB removal (2000), landfill of waste (2000), management of waste from titanium dioxide production (2000), waste oil management (1998), waste management (1998); statutes on import, export and transit of waste (1996), management of batteries containing hazardous materials (2000), management of waste containing asbestos (2001); regulations on air emissions from hazardous waste incinerators (2000) and some additional acts on waste from slaughterhouses (1998) and from medical facilities (1995). The Basel Convention on hazardous waste import, export and their removal was ratified by the Republic of Slovenia in 1993. The responsible national authority for the implementation of the Basel Convention is the Environment Agency, which issues the permits and licenses for export, import and transit of waste.

D. Radioactive Wastes: At the national level an adequate waste management structure for safe and environmentally sound management of radioactive waste has been established. According to national legislation, the safe management of radioactive wastes is the responsibility of the operators of the nuclear installations. The Slovenian Nuclear Safety Administration (SNSA) controls the operators. Some specific nuclear waste matters are also the responsibility of the Ministries of Health (Health Inspectorate); Defense (Administration for Civil Defense and Rescue); and Interior. A clearly defined role for a waste management organization is a precondition for efficient waste management. The Agency for Radioactive Waste Management (ARAO) was established by the government for the post operational management of radioactive waste. This Agency is primarily responsible for the safe handling and management of radioactive wastes after they are discharged from nuclear and other facilities. By the governmental decree of 1999, ARAO was assigned the public service for management of radioactive waste from small producers; at the same time the operation of the Central Interim storage system was also transferred to the Agency. The final decision on the strategy for the disposal of low and intermediate radioactive level waste (LILW) and the selection of a site for LILW repository will be approved in Slovenia by the year 2020. The options are the construction of repositories in Slovenia and/or Croatia. The disposal of nuclear waste in other countries will also be considered. The decision on long term spent fuel management is deferred. The decision whether to reprocess the spent fuel or to dispose it in a final repository has been postponed for several decades. In the interim, problems related to spent fuel management will be solved by the use or expansion of existing storage capacities and the provision of additional capacities for intermediate storage. Problems will be solved for the NPP Krško and RR TRIGA Mark II facilities separately. The bulk of spent fuel (218 from 313 fuel rods) from TRIGA reactor was returned to the USA in 1999. This return was possible because of the US decision to accept all spent fuel from research reactors which use US enriched uranium.

Programmes and Projects:

A. Basic Sanitation: The priority measures (programmes and investments) are further determined by detailed criteria contained in: Urban Wastewater Directive (91/271/EEC, 98/15/EC) or the Decree on the Emission of Substances in the Discharge of Wastewater from Urban Waste Water Treatment Plants (OG RS, 35/96, 90/98); the Drinking Water Directive (80/778/EEC), with supplements 81/858/EEC, 90/656/EEC and 91/692/EEC; and the following water quality decrees within the National Programme for the Adoption of the Acquis Communautaire, MOP 1998: Sewage Sludge (86/278/EEC); Groundwater (80/68/EEC), with supplements 90/656/EEC and 91/692/EEC; Nitrates (92/43/EEC); Integral Pollution Prevention Control (96/61/EC), with supplements 90/656/EEC and 91/692/EEC; Substances Dangerous to the Aquatic Environment (76/464/EEC), with supplements 90/656/EEC and 91/692/EEC; Mercury Discharges from Chlor-Alkali Industries (82/176/EEC); Cadmium Discharges (83/513/EEC); Other Mercury Discharges (84/156/EEC); HCH Discharges (84/491/EEC); List of Substances (86/280/EEC), with supplements 88/347/EEC and 90/415/EEC; Habitats (92/43/EEC); Bathing Water (76/160/EEC), with supplement 90/656/EEC; and, Water Framework Directive (2000/60/EC).

The institutional organization for the implementation of the Action Plan of Urban Wastewater Drainage and Treatment governed by the provisions of the Public Commercial Services Act (OG, 32/93), the Act on Local Government Organization (OG, 72/93, 14/95, 26/97), and the decrees and regulations in this sector. The program basis is given in the following strategies and programs: National Environmental Action Programme (NEAP), MESP 1999; National Programme for the Adoption of the Acquis Communautaire, MESP 1998; CRP V2-0139-97: Protection of Waters - legislation and other general environmental protection measures, MESP 1998; DISAE: SLO-107, Implementation of the Urban Wastewater Directive, 1998; GEF - Danube River Basin Pollution Reduction Programme, 1998; Planned Investments in Municipal Infrastructure and the Method of their Funding, Faculty of Economics, Dr. Mojmir Mrak, 1998; and, UN Recommendations to the Countries of Eastern and Central Europe (ECE) - Protection and Sustainable Use of Waters, Recommendation to ECE, UNO, 1995.

First projections show that building of wastewater treatment plants for settlements with less than 2000 inhabitants and for settlements with between 2000 and 15000 inhabitants will be carried out in the second phase of the implementation of the NEAP (after 2003). The building of these facilities is the responsibility of local communities therefore it is not possible to estimate the scope and costs of these activities. A new biodegradable waste landfill reduction program is expected to be adopted in April, 2004.

Sewage charges, municipal waste user charges, levies related to the management of nuclear waste, and landfill tax are in force.

B. Solid Wastes: The Slovene government has adopted Strategic guidance on waste management. Basic principles of the strategic guidance are: solving the problems of waste at source; the principle of prevention; separate collection of material waste flows; the principle of restoration to nature; rationality of the network of facilities and plants; rationality of environmental management, and preservation of the natural and cultural heritage; and neutralization of disposed waste and improvement of unmanaged tips and historical legacies. The National Environmental Action Programme, adopted in the year 1999, has confirmed four priority goals in the field of waste management: to reduce waste generation and its danger potential at source; to increase material and energy utilization of waste and reduce greenhouse gas emissions; to set up an effective waste management system; and to gradually eliminate old pollution sources (old burdens).

Since 1997 the main emphasis has been on setting up a waste management infrastructure. The Ministry of the Environment, Spatial Planning and Energy actively support regional cooperation among local communities and public local or regional utilities for building up regional waste management centers. In those centers sorting, composting (more MBO/MBS), processing and (regional) landfill facilities will be constructed. The Ministry also gives strong emphasis on constructing one (or two) regional municipal solid waste incinerator(s).

Programmes on dismantling waste cars, on reuse of construction waste and one baling facility were introduced. Operative waste programs on packaging waste, waste mineral oils, car batteries and PCB/PCT have been prepared.

C. Hazardous Wastes: In the year 1996 the national government adopted Strategic Directives on Waste Management. This strategic document also deals partially with hazardous waste. One of the priorities is set as: source reduction and minimization of the toxic potential of waste. The strategic document established several alternatives for future hazardous waste management: construction of a new central landfill; deposit of residues from the incineration or thermal treatment of hazardous wastes into landfills authorized to receive mixed wastes; underground storage facility; and export in the transition period.

The National Environmental Action Programme, adopted by the national parliament in 1999, confirmed the basic priorities and measures in the field of hazardous wastes laid out in the 1996 waste strategy. The waste issue is one of four national priorities. In the field of industrial waste (which implies also hazardous waste) emphasis was given on the construction of the required waste management infrastructure. In addition, several other measures were anticipated, especially those based on market mechanisms (e.g. environmental management schemes, introduction of taxation of waste producers, higher costs of landfill of waste, tax relief schemes for implementing measures, etc.). Initiatives were established for mass and energy recovery of waste and minimization of their toxicity by chemical, thermal or biological stabilization.

The Ministry of Environment, Spatial Planning and Energy co-financed projects on: waste oil management; thermal treatment (incineration) of municipal waste; and the degree of PCB contamination

in Slovenia. The Ministry of Health - Office for chemicals introduced some activities for the collection of waste pesticide packaging and pesticide residues and other toxic materials from the countryside. Operational waste programmes concerning car batteries, batteries, and wastes containing PCB/PCT are under preparation. On persistent organic pollutants (POP), the current status will have to be analyzed. Practical objectives can only be determined for affected areas.

D. Radioactive Wastes: The Slovenian Government approved two significant documents on high-level radioactive management in 1996: The Strategy on Spent Fuel Management and the Decommissioning Plan for the NPP Krško Facility.

In accordance with the law on the fund for the decommissioning of NE Krško and the disposal of radioactive waste, in 1996 the Ministry of Economy prepared "Decommissioning plan of NE Krško, with a review of the possible ways of realizing decommissioning and its financial needs." The decommissioning plan foresees revision of the plan every three to five years with all input data, in order to consider new knowledge and facts. This creates the basis for the new calculations of costs and the evaluation of the burden on every kWh produced in NE Krško. In the year 2000 a technical assistance group from IAEA visited Slovenia to check the decommissioning plan. They made some recommendations for the improvement of the plan. Their recommendations are considered in the preparation of the terms of reference for the planned revision.

In the year 2000 the Agency for Radioactive Waste Management prepared a proposal for the "Strategy of LILW management." The proposal was presented to the national government for adoption. The Strategy establishes goals for the management of LILW and gives an overview of the situation. The Strategy also identifies various possibilities on how to deal with radioactive waste in the future, by comparison with practice in other countries in order to select a durable solution for the disposal of LILW in Slovenia.

Status: *Socio-economic aspects:* In 1993 there were 50,341 unemployed persons, who were included in various measures of active employment policy, and in 1998 that number increased to 66,166; in the year 2000 the estimated figure was 88,270 unemployed persons (I, 25). In the first few years after Slovenia gained independence there was an extraordinarily strong wave of new enterprises; its peak was in 1992. Since then the number has decreased and in recent years the number has stagnated (I, 24). The social security level in Slovenia is relatively high, especially if we take into account the issues brought about after Slovenia gained its independence and after the new state was constituted (I, 12). The poverty line has increased during the transition period (1990s), but remained stable between 1993 and 1998. In 1993, the poverty rate was 13.5% (I, 85). With the transition into a market economy, income inequality is increasing. However, a significant increase in unemployment benefits and other social benefits reduced income inequality 1993-1998 (RE1, 97). The most disadvantaged groups exposed to poverty are: single households with elderly inhabitants, lone parent households on low income, and households with no income earners (e.g., unemployed) (I, 85). The scope of hidden and open homelessness in Slovenia is growing. Hidden homelessness concerns particularly the cases of individuals or families using their personal connections to bridge their housing problems caused by the sudden loss of their own accommodation. Most frequently these are women with children, people without citizenship, people with mental health problems and foreigners. This problem is all the more difficult to solve because there are no social flats available and no other facilities for provisional accommodation to bridge critical housing problems. This problem is made even worse by the fact that there is no adequate system of subsidizing rents (PE, 108).

For the Slovenian economy tourism is very important. It contributes about 9% to the GDP (by the method of satellite accounts) and 9% to the export of goods and services (52% of export of services). The tourism revenue is about 1 billion US\$ yearly, which means 500 US\$ per inhabitant, which is not trivial in comparison to big tourist states. Good tourism income per inhabitant is mostly the result of daily tourist

visits (day trips, casinos, shopping, recreation, inns etc). Our tourist resorts are small and so they are particularly suitable for sustainable tourism development. We have only one tourist resort with 1,000,000 tourist overnights per year and only 6 have more than 100,000 overnights. In 2000 the total number of tourist overnights was 6,718,998. The relation between domestic and foreign tourism is 50:50. The foreign tourism is growing at a high rate in Slovenia: in 2000 +24% and in 2001 +11%. Foreign tourists are visiting Slovenia because it is green, picturesque, safe, and hospitable and offers numerous possibilities of relaxation and recreation in intact nature. To preserve that, sustainable development is of the greatest importance.

Birth rate, life expectancy and net migration: The population of Slovenia has remained static recently: the birth rate is decreasing while life expectancy and the net migration balance are increasing slightly (RE9, 41). In 1993, a negative natural population increase was recorded for the first time in recent history. It was more evident in 1997, deteriorated further in 1998. Simultaneously, net migration has been slowing since the 1980s and was negative in 1991 for the first time. As a result, the Slovenian population has been static for several years and is also becoming older. According to statistical data, 16,8 % of Slovenians were below the age of 14 in 1998 and 13,4 % were older than 64 (RE9, 65-66). In the near future the ageing Slovenian population will cause a series of negative consequences, the most important being the lower proportion and ageing of the active population. The key reasons for the low birth rate lie in economic crises and the high unemployment rate, non-availability of suitable housing, high expenses for child-care services, inflexible working hours, a highly competitive labour market in which a woman may be forced to enter a employment contract that forbids her from having children; an important reason is also the development of individualism. Hence, in order to be able to record a higher birth rate enabling the renewal of generations, a number of measures helping young people to decide to have more children would have to be introduced. Migration policy is therefore the only measure at the moment that can change demographic developments in Slovenia. This is true of external (rising in number) and internal (distribution) migrations. Just to maintain the existing number of inhabitants, about 5.000 people should immigrate each year in a couple of years. After 1991, when the migration flows from ex Yugoslavia stopped, migration flows of mixed political and ethnic backgrounds appeared. In 1992 and 1993, Slovenia received more than 30.000 refugees from Croatia and Bosnia and Herzegovina. Actually, about 8.000 of them still remain. Since 1995 they have been included in the total population of Slovenia. Slovenia also faces a strong flow of illegal migrations; in most cases, immigrants wishing to continue their illegal journey through to Western Europe (RE8, 20, 21). By the presumption of stable economic development and an adequate level of social and health provision for the majority of people, Slovenian demographic statistic to the year 2020 predict an increase in life expectancy from the present 71,7 for man and 78,7 for women to 74,1 for man and 81,2 for women.

Spatial distribution of people: In Slovenia two basic groups of settlement patterns were formed. On one hand, relatively highly urbanized areas in plains and valleys, which are subject to intensive suburbanization, and on the other peripheral areas which are increasingly subject to depopulation and the decay of the cultural landscape. Slovenia is characterized by a moderate (official) rate of urbanization (approximately 51% in 1991), an above average concentration in suburban areas (two thirds of the population inhabit 12% of the land), and a static and ageing population in two thirds of the Slovenian territory. Regional development policy in the 1990s has not been sufficiently effective. Apart from traditional disparities between more or less developed areas, new forms of disparities have also appeared. These include the crisis in old, traditional industrial and mining areas. Depopulation and, consequently, economic lethargy, in numerous less attractive border and mountainous areas also raises concern. In addition, the disparities between bigger towns and urbanized areas on one hand and remoter rural areas on the other are increasing again. The most favorable conditions are in municipalities with prevailing tertiary or tertiary-secondary sectors, while the worst situation is found in those areas where agriculture is a predominant activity; areas which are remote and less accessible are also at a disadvantage.

Today more than a half of the Slovene population lives in urban areas; however, if we include suburban areas, the share increases to 3/4 of the Slovene population. During the transition period, concern about macro-economic performance as well as the shift away from some “social values” led to a stagnation in the quality of life and in the development of human settlements.

Agriculture: Agriculture contributes below 4% of GDP and employs about 6% of the active labour force, but its importance in the area of development, social and political issues is much higher than macroeconomic indicators can show. Agricultural production is characterized by a small-scale farming structure (an average of 5 ha agricultural land per farm; 85% of farms is smaller than 20 ha) and a large share (over 70%) of agricultural land in less favored areas, as well as a relatively low intensity of farming and a low share of full-time farmers (10%). On the other hand, crop rotation is very poor, with maize as the main crop (over 40% of arable land), used mainly as animal fodder. The number of certified organic farms in Slovenia is rising relatively quickly, from 44 in 1998 to 820 in 2001, although their share of the total number is still below 1%.

Geography: The total Slovenian territory covered by the Convention of the Alps amounts to 6.767 km². Slovenia was the Chairing State for 1994 to 1998. Slovenia is one of the most densely forested countries in Europe. The forest covers 1.1 million hectares or 55% of the territory of Slovenia, and dominates as much as three-quarters of the landscape. Desertification is not a major concern for Slovenia but problems related to drought are rising particularly in agriculture. Problems related to drought are rising. Therefore various programs and projects are still in an early phase, despite that some of them are already active. Most of the activities are focused in repairing and compensating for damage caused by drought and a little attention is made for prevention actions.

A. Basic sanitation: As the custodian of natural resources, the State is obliged to enforce the general principles of water management based on the environment and the economy and to take into account water as the crucial factor in sustainable development. The Action programme is focused: to reduce emissions from point sources - wastewater from industry and livestock farms and urban wastewater; to reduce emissions from diffuse sources - intensive agriculture, dispersed settlements without wastewater treatment facilities; on traffic; to restrict old pollution sources threatening the aquatic environment; and to prevent inappropriate activities affecting the aquatic environment

Activities for achieving the objectives focus on reducing emissions from industry and municipal wastewater treatment plants to aquifers and aquatic environments as well as controlling their impact on groundwater as a source of drinking water. Construction of new sewerage systems with wastewater treatment plants is imperative for settlements that are not yet connected to such systems. In areas which have been classified as sensitive due to eutrophic waters, a higher degree of wastewater treatment is required (tertiary treatment).

Owing to scattered settlement in Slovenia, only 53% of the population lives in areas covered by the sewage system. In addition, sewage pipes are not watertight, resulting in groundwater pollution. The capacity for treating wastewater is 190 mio m³ / year (45%). The technological needs in this area include secondary and tertiary treatment. Only 30% of the population have connections to the sewage system followed by purification plants, and only 18% of wastewater is treated biologically - a treatment method, which is the basic required level of purification. The inflow of storm water into the sewage system is a problem and the sewage systems are not flood-protected to prevent additional pollution from direct discharge. Some natural lakes, karstic underground streams and slow water flows already show signs of eutrophication and water bloom/blooming of algae. Pollution of the majority of surface waters exceeds the allowed limit (29% - 3rd and 4th grades) and has been spreading towards river headwaters. The quality of groundwater has been declining recently. The most polluted groundwater with nitrates are found in the areas with intensive agricultural use, improperly maintained sewerage systems and thin cover

layers. However, point sources of pollution of water have been improved to the desired extent. Wastewater is treated to some extent for approximately 75% of the population, of which 15% is secondary wastewater treatment, 12% coarse mechanical treatment and 48% primary treatment, including septic tanks.

Many industrial plant and facilities still discharge wastewater into watercourses without any prior treatment. The Decree on the Water Pollution Tax issued in 1995, established an economic mechanism forcing polluters to look for more suitable solutions.

Among the diffused sources of water pollution are intensive agriculture, certain industrial sectors, traffic and dispersed settlements without wastewater collecting systems. Agriculture is responsible for the bulk of groundwater pollution caused by nitrates, phosphates and pesticides (mainly due to intensive arable farming in the north-eastern part of Slovenia) and by organic substances and ammonia compounds generated by livestock farms. Industry bears the main responsibility for pollution caused by heavy metals (in conjunction with traffic), phenols and organic solvents.

The management of wastewater collection or sewerage systems is provided by 53 companies in Slovenia, 33 of which also provide wastewater treatment (and the management of treatment plants). These companies also provide their activities outside the communities in which they are based, i.e. in neighboring communities. In two cases, sewers are managed by local communities, and in one case the local community also manages the treatment plant.

The inadequately developed system of supervision of measures aimed at achieving the goals of comprehensive wastewater collecting and treatment, which should encompass the full range of instruments - from the securing of efficient institutional regulation, to legislation, to information systems - is the main cause of the poor effectiveness of the policy of the implementation of the adopted laws, decrees and strategic programmes. As regards the effectiveness of environmental inspection, the main problem is the inadequate number of staff able to deal competently with the largest polluters alone.

B. Solid Wastes: Waste management and control is one of the issues that call for the most attention in the framework of Slovenian environmental protection. Separated municipal waste collection from households is organized only in some of the municipalities.

Industry sites usually dispose off their waste in combination with the municipal waste, since rarely the company has its own disposal site — There are 27 disposal sites for industrial waste. (Some dangerous waste is exported in the compliance with Basel Convention. Some companies have on site incineration plants as a part of technological processes in some cases the technology used is co-generation, the heat is used in the local heating systems.)

The annual quantity of municipal solid waste is approaching 870.000 tones. Official data clearly show that the total waste stream is increasing. On the other hand, it was only in the year 2000 that weighing of waste at the landfill entrance become obligatory. In Slovenia there is more than 60 recorded solid waste landfills (52 operating sites in the year 2001). Some specific solid wastes from different parts of industry and the energy sector are landfilled on mono-disposal sites (sites for only one type of waste, mainly in the energy sector) and some industrial disposal sites. There are 27 industrial landfills (as identified in the year 2000). Available capacity of existing landfills is very scarce. In addition, nearly all of the closed landfills represent active pollution sources (old burdens). More than 89% of the population is currently serviced by regular collection of municipal waste. Reconstruction or construction of eight waste landfills has been made in recent years. Separate collection of waste is currently covering around 35% (official estimate) of the population included in some kind of waste collection scheme. Mainly two parts of the municipal

waste stream are collected separately - paper and glass. Data on separately collected materials are not available at the national level.

Municipal solid waste is mainly landfilled untreated at the local waste disposal site. Currently there is no municipal waste incineration facility in Slovenia.

Municipalities and municipal administrations in Slovenia play an important role in the management of public utilities and local public environmental protection services. Currently there is no regional administration, although it would be needed for solving certain environmental problems (e.g. water protection); therefore it is of great importance that municipalities cooperate in addressing common problems. The introduction of a regional level of administration will result in decentralization and transferal of responsibilities for solving environmental problems from the national to the regional level, so municipalities will have to transfer to the regional level those tasks which they can not are incapable of or unwilling to carry out. Only a few municipalities have applied an active environmental protection policy and they continued to do so after the reform of local self-government. Municipal policy is generally restricted to the construction of local (public utility) infrastructure.

C. Hazardous Wastes: In Slovenia around 124,000 tons of hazardous waste is generated per annum in industrial activities (estimation for 1999). In this estimation quantitative data on the hazardous waste component in municipal solid waste and from the energy sector are not included. (In steel, paint and metal production quantities of hazardous waste are decreasing, because of the drop in production together with process modernization.)

A realistic evaluation of the presence of PCBs in Slovenia, made by the Ministry, is around 500 tons of PCB waste (from transformers and big condensers) and 100 tones of contaminated oils with PCB concentrations over 50 ppm (from transformers). In Slovenia, there exists an organized collection system and some take-up facilities for waste oils. In the past, waste oil was mainly regenerated. Today, waste oil is mainly co-incinerated, or used as an additional fuel. One problem still remains: only a small proportion of the waste oil generated annually is currently collected - only 14% of the lubricating oils sold annually are collected as waste oils. Our experience in evaluation shows that 50% of sold oils could be collected later as waste. Annually 12.770 tons of waste oils are generated and 3.200 tons are collected and reused or 25%. 9.570 tons or 75% of waste oils remain out of control (in accordance with data for 1998).

Export of some types of hazardous waste (e.g.. used paints, lacquers) is organized in accordance with the Basel Convention. In most cases it is the only way to manage industrial hazardous waste. Some companies have their own incinerators as a part of their industrial process. Incineration of waste in industrial thermal processes is on a small scale, although some technical possibilities exists (e.g. incineration in cement kilns). In the Republic of Slovenia most used car-batteries (lead) are imported. They are used in the lead-smelter in Mežica. In the years between 1995 and 1998 that import reached ca. 21.000 tons per year. There is only one technically suitable hazardous waste landfill in Slovenia: in Metava by Maribor.

There are several facilities for incineration, co-incineration or energy recovery of some types of hazardous wastes (Salonit Anhovo, Energetika Ravne, LEK Lendava, Pinus Race, Alpos Šentjur). There are also some other facilities for managing hazardous waste (MPI Mežica, OPTE Ptuj, Cinkarna Celje, Opekarna Novo mesto and others).

D. Radioactive Wastes: The radioactive wastes generated in nuclear installations and other facilities in Slovenia are stored at the sites. The only exceptions are interim storage of low and intermediate-level waste from medicine, industry and research organizations. There are no special treatment facilities for radioactive waste. The only treatment takes place at the Krško NPP with solidification, compaction,

supercompaction and IDDS (in drum drying system). In 2000 approximately 20 t of LILW was sent to Sweden for incineration.

In Slovenia at present there are 19 organization registered for the use of open radiation sources and more than 100 organizations which are using closed radiation sources. More than 300 companies are using fire alarms containing radioactive sources.

The following is a list of nuclear facilities and radioactive waste sites in Slovenia. NPP Krško: twin-loop pressurized water reactor; installed power: 632 Mw; start-up: 1981; supplier: Westinghouse Electric, USA; spent fuel storage capacity: 828 fuel assemblies; status: 594 spent fuel elements stored (as of end of 2000); intermediate-level waste storage capacity: 2240 m³; status: 2158 m³ occupied (as of end of 2000). Reactor Center of the Institut Jozef Stefan Ljubljana (Brinje): swimming pool research reactor TRIGA Mark II, thermal power (steady): 250 kW; thermal power (pulse): 1800 MW; start-up: 1966; supplier: General Atomics, USA; spent fuel storage for TRIGA fuel capacity: 1000 fuel assemblies; status: The pool is empty. In the year 1999 all used fuel rods (215) were re-exported to USA; Central Interim Storage of low- and intermediate-level waste from medicine, industry and research; capacity: 800 m³; status: 60-70 m³ (end of 2000). Žirovski vrh Mine, Gorenja vas: (Uranium mine under decommissioning); in operation: 1985-1990; lifetime production: 607,700 tons of ore, 452.5 tons (Uranium equivalent) of yellow cake; surface storage of 1,548,000 tons of mine waste, ore waste, and red mud; surface storage of 593,000 tons of mill tailings. Zavratac by Idrija: temporary low- and intermediate-level non-licensed (illegal) waste storage, containing 14 m³ of materials contaminated with 10 mCi of Radium-226. Radioactive material was relocated to the interim storage at Institut Jozef Stefan in 1999. Rehabilitation of the Zavratac storage site was completed by the year 2000. Radioactive waste was relocated to the interim storage in Brinje. Rehabilitation of Zavratac was completed and it was returned to the local community.

Capacity-Building, Education, Training and Awareness-Raising:

A. Basic Sanitation: In the period 1997–2002 numerous projects were supported, such as “Water Detective” and “Eco-school” providing environmental information, awareness raising and education in the field of water sanitation. Numerous publications have also been produced (newsletters, handbooks, posters and so forth). In preparation for the World Summit on Sustainable Development a special information campaign was carried out under the banner “Slovenian Initiative for Sustainable Development - Today I am shaping the future”.

B. Solid Wastes: Both strategic guidance and the National Environmental Protection Programme are foreseeing implementation of special educational measures for minimization and recycling of waste (brochures, leaflets, TV and radio shows, posters, etc.). One national level awareness-raising campaign was organized in the year 1998. Its content was mainly connected with regional waste management centers as a preparatory (more PR) move to gain support from the local population for siting the centers. Other educational activities on the new waste legislation (seminars, lectures, etc) are being organized. The Ministry actively co-finance events on waste issues (conferences, etc).

A new communication programme as a support for the construction of new regional waste management centers was prepared in the year 2001. Environmental non-governmental organizations were asked to actively participate in those activities. Several workshops were organized in cooperation with different stakeholders on waste, introducing some new methods and approaches, in the year 2001 - basically because the standard "public relation" approach was clearly unsuccessful. More in-depth and broad educational and awareness-raising activities are being organized by the local public utilities. There are immense differences in intensity of awareness raising and education from one local community to another. The implementation of the strategy strongly depends on creative cooperation among all those who have a role or task in efforts to improve the quality of the environment: state bodies, municipalities, the

commercial sector and NGOs. A quarter of municipalities cooperate with non-governmental organizations, although many municipalities are not familiar with non-governmental organizations operating in their area. Some NGOs with public financial support are playing a crucial role especially in the fields of training and Awareness Raising. Their basic purpose is to make the public in Slovenia understand and support the idea of sustainable development as much as possible. The main goals are: high level of information; to encourage needs for target information; to provide reliable, easily available and comprehensible information about water in the context of SD; to stimulate new lifestyles in agreement with sustainability principles; to inform and educate the public through media and open and improve public discussion on the specific water and SD theme. In order to achieve these goals it is particularly important to provide the public with information based on facts and provided in time to be useful.

Expectations concerning environmental improvements are great, as most of the Slovene citizens wish to live in a healthy and pleasant environment. However, managing disproportion/imbalance does not allow quick solutions to problems.

C. Hazardous Wastes: In recent years many companies have specialized in managing different types of hazardous waste. Anybody who wants to deal with hazardous waste has to be accredited or certified by the Ministry of Environment. There are several types of certificates: for receivers, transporters, processors, disposers and exporters.

Intensity of education, training and awareness-raising on national level is low. Because of new legislation on hazardous waste (and waste in general) RS Environmental Agency (former Nature Protection Office) has prepared a set of four interpretative brochures on different pieces of legislation. Some training activities (mainly for industry representatives) have been organized. In the field of hazardous waste as a part of the municipal (solid) waste some intensive educational and informative activities have been organized by the local municipal companies (public utilities). Those activities were in connection with programmes including separate collection of hazardous waste from households.

There is no integrated education and awareness-raising programme on hazardous waste at the national level.

D. Radioactive Wastes: Nuclear experts are regularly participating in the education programmes of the IAEA. The Agency for Radioactive Waste Management is continuously working on awareness raising and education of the public on radioactivity and radioactive waste. The Agency has published several publications with the intention of informing the general public about radioactivity, radioactive waste and the Agency's activities (books: "Radioactive waste-With Knowledge Against Fear, The Most Frequent Questions and Answers about RAW," "Radioactive Waste - a Guide for Journalist," booklets on RAW, managing RAW and its disposal, video cassettes and CDs about radioactive waste management in Slovenia and elsewhere, newspaper Raopis). The Agency has established the Information Center on Radioactive Waste, which is situated in the Educational Center for Nuclear Technology in Brinje. The Agency has also prepared some workshops on the procedure for the selection of the disposal site for LILW, including multi-parameter decision-making methodologies, and the role of geology in finding disposal site for LILW.

Information:

A. Basic sanitation: The Hydro-meteorology Unit within EARS is the government body responsible for coordinating and collecting wastewater information at the state level. State monitoring of the quality of water has already been established, as well as the water sources register and the register of emissions into water.

B. Solid wastes: New waste legislation has made weighing of waste obligatory for all landfills. Also, waste generators, transporters, separators and removers are obliged to report to the public authority about

their quantities of waste. A new digitized database on waste has been established. It contains data on waste from more than 900 companies, and on about 100 companies which are active in the waste management field.

Data show that around 450 kg of municipal waste per inhabitant is generated each year in Slovenia. Owing to the changed methodology of data collection, it is not possible to identify any trend. According to data from the European Environment Agency, there is a trend of growth in the generation of municipal waste in the member states (for 1999 the average quantity was 500 kg/inhabitant/year).

Waste management methods are still dominated by land filling, at 51 active municipal landfills. In line with the regulations on landfill of waste the operation of 21 landfills is due to cease by 2004, and a further 13 landfills will cease operation by 2009. After 2008 a total of 17 landfills should still be operating, and by then they will have adjusted to the prescribed demands. Only one hazardous waste landfill is operating in Slovenia (Metava), and this takes around 500 t of waste each year (mainly from the greater Maribor area).

On the web sites Statistical office (<http://sigov.si/zrs>) are aggregated data about waste quantities by type of waste handling. Statistical office of the RS collects data directly from enterprises and organizations. It also carrying out statistical surveys: 2 surveys on waste—Public removal and waste disposal, Waste from manufacturing and services sectors in the year 1992, 1995, 1998; survey Water 1 has been carrying on for 15 years which contains industrial water pollution; and, data on gross fixed capital formation and current expenditure for environmental protection are the result of annual surveys.

Basic data banks, such as basic records, registers and cadasters, are the most important parts of information systems and it is because of them that information systems are built. The main purpose of these banks is to offer a basis for determining the state and trends of environmental pollution and for understanding and knowledge of ecosystems and natural resources in relation to socio-economic indicators. The second purpose is to provide relevant data to support decision-making processes, public information and the preparation of environmental education programmes. These banks are also a basis for environmental statistics and analyses and for various publications (including in electronic form - Internet) which provide the public with information. These data collections are designed to serve as a basis for identifying the status and trends of the process of reduction of discharges from sources of pollution.

Another intended use of data collections is to provide relevant data to support decision-making processes and the monitoring of the implementation of rehabilitation programmes at a local level, i.e. the implementation of the measures (programmes, investments) provided by the Action Plan. Furthermore, the data collections form the basis for preparing environmental statistics and analyses for various uses - publications, informing the public via electronic (Internet) and other information media, etc.

C. Hazardous Wastes: New legislation on waste management from the year 1998 has established an obligation on industry to report the quantities and types of waste, generated. On the basis of reports from facilities, the RS Environmental Agency is preparing and publishing an annual "Report on hazardous and other waste which is generated, collected, treated and removed." In the report, aggregated data on all types of generated, collected, treated and removed wastes are published. The report is also available at the Agency home-page (<http://www.arso.gov.si/>).

Human activities produce each year 1.7 million tons of waste, or 873 kg per inhabitant. The generation of hazardous waste is growing. A major increase was recorded in 2001 compared to 2000 (by 43,503 t).

Information, gathered from the issuance of export, import and transit of hazardous waste permits in accordance with the provisions of the Basel Convention, is annually collected, digitized and send to the

Basel Convention Secretariat in the form of an annual report, The report is also available on the agency home-page (<http://www.arso.gov.si/> at the national EIONET focal point). In 2000 a total of 4702 tons of hazardous waste were exported, only to EU countries (Austria, Germany, Belgium and the United Kingdom). Of this, 4177 tons of hazardous waste were exported for removal procedures and only 525 tons for recycling. In 2000 a total of 22,326 tons of hazardous waste were imported from Croatia, Hungary and Romania for recycling, of which 22,280 tons were waste lead batteries sent at MPI Mežica and 45.6 tons were acid and base solvents at the Celje zinc works.

Almost all of public data are available in aggregated form and are suitable merely for decision-making processes at the national level. More segregated data on quantities, types and composition of hazardous waste on local level are not available and are difficult to access by local communities.

D. Radioactive Wastes: SNSA is publishing all annual reports on nuclear issues in Slovenia in various media. All reports are available to the public on the internet or in paperback edition. The Agency for Radioactive Waste Management produces an annual report. All reports are available to the public on the internet or in paperback edition.

Research and Technologies: Project Regional Innovation and Technology Transfer Strategies for Slovenia aims at the enhancing the innovative capacity of the EU region of Slovenia with the help of the better collaboration between SMEs, research institutions, Universities, public sector and the development agencies in Slovenia. The project will provide a basis and infrastructure and know how which will facilitate development of innovations. As mentioned already the project does focus only on the EST but these technologies will be represented. It could be suggested that similar programs, which would focus entirely on the EST should be developed as a follow up stage from the existing programme.

Eco-fund provides favorable loans to the business to facilitate the transfer of EST (call for proposals is focusing on two broad areas: environmentally sound technologies and products and on devices and technologies for environmental protection). Few success stories (funding in new varnishing technologies in appliances and wood industry) have been recorded so far. In the near future it is expected that investments will be required for new technologies for reducing packaging waste, due to fact that the legislation regulating this area will enter into the force. The Eco-fund is preparing a new funding scheme (its launch is anticipated in mid 2002), which will support individuals to invest into renewable energy resources and energy efficiency.

A one year project "Cleaner Production 2001" is funded partially by the Ministry of Economy, Chamber of Commerce and Industry and most likely also by the government of Austria. Its aim is introduction of the Cleaner production approach in the selected companies (13 involved in the project in the year 2001/02).

A. Basic Sanitation: The research activities are on-going on development for new cleaning wastewater, waste management, recycling, and clean production.

No systematic research has yet been conducted on the relation between the degree of water pollution and the health condition of the Slovene population and biodiversity.

A continuous activity is to limit the economical and justified exploitation of fresh water resources, especially those of high-quality. This can be achieved, for example, by introducing dry technologies, etc. Industry is among the largest water users. Its requirements regarding water quality and quantity differ regarding the type of production and technology. Currently the use of water is excessive, not complying with best available technology (BAT) directives which suggest the reduction of water use in industry

through the introduction of economical technologies and reuse of treated industrial wastewater in technological processes (closed cycle).

Another activity for water quality protection is to introduce environmentally and economically effective methods for the protection of the aquatic environment using technologies adjusted to the natural conditions and material capacities of Slovenia.

In the assessment of waste water treatment projects the selection among the proposed solutions must ensure the introduction of environmentally sound and economical methods of disposal of sludge. The Hydro-meteorology Unit within EARS is the government body responsible for coordinating and collecting wastewater information at the state level. State monitoring of the quality of water has already been established, as well as the water sources register and the register of emissions into water.

B. Solid Wastes: Some demonstration and pilot programs to optimize waste minimization measures or material and energy recovery, were implemented in the past. Unfortunately there is no data center on waste research issues at the national level. According to available information, the main research centers in Slovenia (National Chemistry Institute, Mining Institute, Geological Institute, Institute Josef Stefan, and both Universities) and some specialized companies (IBE d.d., KIV d.o.o., etc) have also been involved in additional technology research activities. In the year 2000 the Ministry of the Environment and Spatial Planning supported a cooperative project on establishing the Development and Research Center on Environmental Technologies (DRCET or RCOT), sited in Celje and organized as a cooperative among local communities, research institutes, and companies. In the field of research there is an expert technical basis for the determination of eutrophication areas and development of the methodology for integrated assessment of impact on the aquatic environment.

C. Hazardous wastes: In the field of waste minimization, and reduction of resource and toxics use, some projects have been carried out during the past eight years. In the Republic of Slovenia there is no operating clean production center, although the national government has supported (by decision) such an initiative and financial resources have been promised. Any initiatives on technological changes and improving material flows with the objective of minimization of resource usage at the production level is mainly left to cooperation among industry, the scientific community and research institutions.

D. Radioactive Wastes: Research and technologies include a Research reactor TRIGA Mark 11. Most activities on this reactor are run by the Jozef Stefan Institute. The Agency for Radioactive Waste Management is currently performing a series of research activities on LILW, establishing links with international experiences and maintaining good international cooperation with exchange of information. Good exchange of information was established with countries that have more experience with planning and developing disposal sites which are designated for LILW. The complete research programme is strictly related to LILW.

Financing:

A. Basic Sanitation: A Water effluent charges, sewage charges, levies related to the management of nuclear waste, water extraction charges and landfill tax are in force. In 1995, a regulation introducing a wastewater tax was adopted. The tax is proportional to the pollution loads of the wastewater.

From 1995 to 2000, 66 capital projects for wastewater treatment were financed with budgetary funds amounting to US\$ 5,5 million, together with 129 capital projects for sewerage system construction worth US\$ 7,8 million and 91 capital projects for water supply totaling US\$ 4,7 million. From 1994 to 2000 the public Eco Fund approved loans to local communities for the construction of sewerage systems to the amount of US\$ 5,5 million, and US\$ 3,8 million for the construction of wastewater treatment plants.

At the end of 2000, ISPA (EU fund for large infrastructural investments in environment and transport) financing memoranda were signed on environment - technical assistance in drafting the documentation necessary for the construction of WWTP and sewerage systems (Litija, Zagorje ob Savi, Trbovlje and Hrastnik - US\$ 0.2 million, Celje and Lendava- US\$ 0.3 million. In the implementation period before 2020 there is a need for investments of US\$ 575,2 million for water quality projects (municipal WWTP and the enlargement of sewerage systems, industrial WWTP and compliance of existing installations: municipal wastewater, textile industry, metal industry, leather industry and other).

It is expected that nearly 51% (US\$ 742,9 million, source almost 100 % public sector) of the funds earmarked for the implementation of the NEAP measures in the period 1999-2003 are and will be needed in the fields of water protection.

According to preliminary estimates, investments in the field of wastewater collection and treatment will be financed from the following potential domestic sources: wastewater tax; sewerage connection fee (municipal contribution) and sewage service charge; grant funds from the national and municipal budgets and loans by the Eco Fund earmarked for the building of water protection infrastructure which is the responsibility of local communities.

B. Solid Wastes: The implementation of environmental legislation already adopted that requires considerable investment in waste treatment and disposal and treatment of wastewaters will be very demanding. The first estimates of the costs of implementing legislation harmonized with the EU and carrying out the NEAP indicate that about 2,3 billion US\$ will be required for environmental infrastructure alone. Considerable investment in institutions, infrastructure and executive mechanisms will be needed, which will entail new demands upon very limited sources of funds. To this end it will be necessary to introduce additional financial schemes for the involvement of the national budget, municipal budgets, environmental taxes, the Environmental Development fund, the new Phare programme, international financial institutions, and capital from domestic banks and the private sector. It will be particularly important in the years ahead and in the coming decade to raise the share of public budget funds, principally the national budget, spent on promoting environmental investment in the public sector.

The field of waste management, construction, sanitation of landfills and other secondary objects or facilities (f.e. sorting, composting, recovery facilities), 24 projects have been successfully co-financed through the annual national public tender for co-financing obligatory local public utilities in the period between 1998-2001. The value of the programme was more the 2,1 billion SIT. The national budget covered on average 40% of the project value (total 800 million SIT). In the period between 1995 and 1997, the national budget offered around 417 million SIT in the same programme for local infrastructure.

The Ecological Development Fund, as a public fund, has assured more than 795 million SIT in credit schemes in the period from 1994 - 2000 for new systems on managing waste. From the state budget or funds merely projects on managing waste were co-financed. Small emphasis was made on prevention, minimization or source reduction measures. There is no active programme on prevention or minimization of waste at the national level.

In the year 2001 a new tax on landfilling biodegradable waste (paper, cardboard, wood, food, etc) was introduced. The tax should be understood as an incentive for separate collection of biodegradable waste in Slovenia. The money collected from the tax will be primarily spent on waste management infrastructure. A significant financial resource for the construction of municipal infrastructure is the wastewater pollution tax. Since its introduction in 1996 until 2000 US\$ 99 million was raised and invested in over 700 projects for wastewater disposal and treatments, which were approved, based on adequate feasibility studies.

Other available sources are foreign funds, including EU grants and credit funds from international financial institutions and the private banking sector.

C. Hazardous Wastes: In the period 1995-2001 the Ecological Development Fund (Eko Sklad, a public fund) has co-financed some projects on minimization of hazardous waste in industry (mainly by technology changes and introducing measures for more efficient material flows).

D. Radioactive Wastes: The financing of radioactive waste management in nuclear and other facilities is included in the costs of operation. Safe radioactive waste management will be financed by the government when a facility ceases operation or when radioactive wastes are discharged from nuclear and other facilities. The only exception is the future decommissioning of the NPP Krško facility where the required funds are collected through special additional costs, assessed to be 0.6! SIT per kWh, and added to the tariffs for the electricity generated.

There are also private sector investments, mainly under concession agreements, for waste management centres, which enables higher-quality and cost-effective services (B.O.T. models).

Cooperation:

A. Basic Sanitation: There are also foreign private sector investments —mainly under concession agreements, for wastewater treatment projects.

Slovenia is primarily orientated towards solving the environmental problems independently and in cooperation with neighboring regions and countries. Nevertheless, it should plan its global activities, particularly in relation to developing countries. Many of these countries are the weak links in the world chain of environmental problems; on the other hand though, they might significantly alter the global distribution of economic and political power in the coming decades. Slovenia, as a member of the Danube convention, is also adopting the international early warning system, which is already in operation. Slovenia has a number of bilateral agreements with neighboring countries such as Italy, Austria, Hungary, and Croatia regarding shared water sources. It is also a party to the Convention on cooperation for the protection and sustainable use of the Danube River, the Barcelona Convention and the Convention on the protection and use of transboundary watercourses and international lakes.

Slovenia ratified international conventions including Rotterdam, PIC.

B. Solid Wastes: Exchange of information on waste management is a regular practice with several countries. Occasionally there is an exchange of experts or other forms of cooperation to meet specific needs. Several experts participate in international educational programs; some are recipients of international scholarships. Good cooperation was established with EU institutions and with other accession countries. At the local level international cooperation basically comprises organized excursions (facility sightseeing) for local decision-makers.

Approximately 15% of Slovenian municipalities cooperate with municipalities in other countries (mostly transboundary cooperation with Austria, Italy and Hungary).

C. Hazardous Wastes: The Republic in Slovenia cooperates in the activities on issues relating to the import, export and transit of hazardous waste, organized by Basel Convention Secretariat and actively takes part at the meetings of the parties of the Convention. Slovenia is not an OECD country and it has been attempting to become listed in Annex VII of the Basel Convention.

D. Radioactive Wastes: Slovenia, as part of the former Yugoslavia, initiated international agreements with Italy, the Czech Republic, the Slovak Republic, Hungary, and Poland. These agreements cover

cooperation in the peaceful uses of nuclear energy. After its independence, Slovenia has concluded additional agreements in the field of nuclear related matters with Hungary, Canada, Austria, and the United States Nuclear Regulatory Commission.

Slovenia is also a party to several international and regional conventions or agreements, among other also to the CTBT (ratified in 1999) and non-proliferation of nuclear weapons.

In the year 2001 Slovenia become the first non-OECD party of the Paris convention on responsibility to third persons in the field of nuclear energy.

SNSA and ARAO cooperate well with almost all international institutes and agencies in the field of radioactive waste management. ARAO actively participates in various programs run by the EU and the IAEA. Since 1998 it has been a member of the Club of Agencies, which links European agencies for radioactive waste management.

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