



APPENDIX

1. AGRICULTURE AND FORESTRY

Q1: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S	T	State and Trend
Agriculture and Forestry	Number of farms and Utilized Agricultural Area		To provide an estimate of the land area actually used for productive farming. The UAA comprises cropland, permanent meadows and pasture land, timber crops, family vegetable gardens and chestnut orchards.	★ ★ ★	I, R	1990, 2000, 2003	☹
		D/P					
	Distribution of fertilizers in farming (including soil improvers and conditioners)		To analyse and compare over time the quantities of different types of fertilizers (fertilizers, soil improvers and conditioners) placed on the market and the nutrients they contain, distributed by hectare of fertilized area.	★ ★ ★	I, R	1971,1981, 1985,1990, 1991-2005	☹
		P					
	Distribution of pesticides for agricultural purposes (herbicides, fungicides, pesticides, acaricides)		To analyse and compare over time the quantities of the different types of plant health products, and the active ingredients they contain, used to protect crops from parasites (especially insects and mites) and pathogens (bacteria, viruses, fungi), with a view to controlling the development of weeds and ensuring high quality standards for farm produce.	★ ★ ★	I, R	1997-2004	😊
		P					
	Use of pesticides by type of crop		To provide a picture of the average dosage of the plant health products employed and, consequently, of the active ingredients they contain and the average number of applications to the principal crop types by hectare of treated area.	★ ★	I	2003-2004	😊
		I/R					
	Farm soil management		To define the extent of the use of crop succession and soil cover practices.	★ ★ ★	I, R	1990, 2003	😊
		D/P					
	Water management		To provide information on farmland irrigation.	★ ★ ★	I, R	1998-2003	☹
		D/P					
	Farms implementing ecologically oriented and organic farming techniques		To provide a measure of the adoption, by Italian farms, of farming techniques deemed most consistent with environmental quality and the healthiness of the foods and fibres produced	★ ★ ★	I	1990-2004	😊
		R					
	Livestock breeding farms		To provide information on the size of the populations of major livestock species and their distribution by class and region	★ ★ ★	I	1960,1970 1980,1990, 1995-2005	😊
	P						
Eco-efficiency in agriculture		To analyse the capacity of domestic agriculture to boost economic growth, while at the same time mitigating its pressure and impact on the environment.	★ ★ ★	I	1990-2003	☹	
	R						
Farmland concerned by the deliberate output, for experimental purposes, of genetically modified plants (GMPs)		To quantify the number of experimental tests involving Genetically Modified Plants (GMPs) carried out, and the area of land concerned, between 1999 and December 2005, in Italy.	★ ★ ★	R, P	1999-2005	😊	
	P						

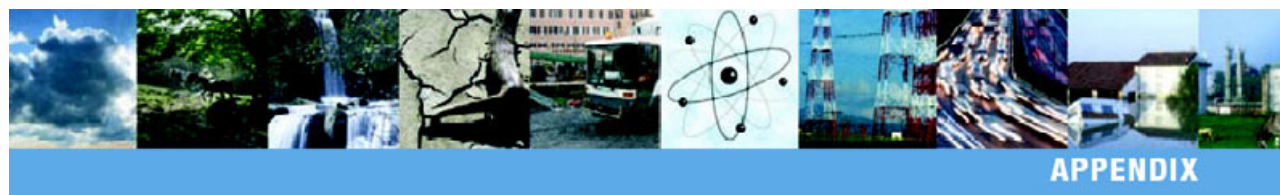


APPENDIX

Q1: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S T	State and Trend	
Agriculture and Forestry	Wood and non-wood forest production		To provide a picture of the Italian forestry sector, with respect to production-related and socio-economic, and not just environmental, aspects.	★ ★ ★	I	1970, 1975, 1980, 1985, 1990, 1995, 2000, 2004	😊
		D/P					
	Certification of sustainable forest management		To describe the certification activities of the examined forms of forest management (on a voluntary basis).	★ ★ ★	I	1998-2005	😊
		R					

2. ENERGY

Q2: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S T	State and Trend	
Energy	Total emissions of greenhouse and energy-related gases	P	To assess the role of energy processes in GHG emissions	★ ★ ★	I	1990-2004	☹️
	GHG emissions from energy-related processes, by economic sector	P	To assess the trends in GHG emissions from energy-related processes by economic sector	★ ★ ★	I	1990-2004	☹️
	Sulphur dioxide emissions, in total and from energy-related processes	P	To assess the role of energy-related processes in sulphur dioxide emission	★ ★ ★	I	1980-2004	😊
	Nitrogen oxide emissions, in total and from energy-related processes	P	To assess the role of energy-related processes in nitrogen oxide emission	★ ★ ★	I	1980-2004	😊
	Final and total energy consumption by economic sector	D	To assess the trends in total energy consumption at national level and by economic sector	★ ★ ★	I, R	1990-2004, 2005 ^a	☹️
	Final consumption of electrical power by economic sector	D	To assess the trends of electrical power at national level and by economic sector	★ ★ ★	I, R	1990-2004, 2005 ^a	☹️
	Ratio of final to total energy consumption	R	To assess the overall efficiency of the conversion of primary energy from the various sources of usable energy	★ ★ ★	I	1990-2004	😊
	Average specific fuel consumption for producing electricity from fossil fuels	R	To assess the efficiency of conversion of primary energy from fossil sources to electricity for end consumption	★ ★	I	1996-2005	😊
	Gross generation of electrical power by cogeneration plants	R	To assess the contribution of cogeneration plants to the total production of electrical power	★ ★ ★	I	1997-2005	😊
	Final energy intensity, by sector and in total	R/D	To assess the energy efficiency of economic systems	★ ★ ★	I	1990-2004, 2005 ^a	☹️



Q2: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S	T	State and Trend
Energy	Overall energy consumption by primary sources	D/R	To assess the contribution by the various primary energy sources to the production of energy	★ ★ ★	I	1990-2005	☹
	Production of electrical power by source	D/R	To assess the contribution by the various energy sources to the production of electrical power	★ ★ ★	I	1990-2005	☹
	Gross energy production from renewable sources in equivalent fossil fuel	R	To assess the contribution by clean and non-exhaustible energy sources to total energy production	★ ★	I	1991-2004	☹
	Gross electricity production from renewable sources	R	To assess the contribution by clean and non-exhaustible energy sources to total electrical power production	★ ★ ★	I	1991-2005	☹
	Energy product prices	D/R	To assess the effects of international energy market trends and energy sector policies on energy product prices	★ ★	I	1990 - 2005	☹
	Tax revenue from oil products	R	To assess the extent to which taxation affects external costs and can foster the use of cleaner products	★ ★ ★	I	1990, 1995-2005, 2006	☹
	External energy production costs	I	To assess the environmental and social costs entailed by energy production	★	I	1997,1998	-
a - Provisional data							

3. TRANSPORT

Q3: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S	T	State and Trend
Transport	Energy consumption by the transport sector	D	To quantify fuel consumption by the transport sector, in order to reduce and/or diversify it.	★ ★ ★	I	1990,1995, 2000-2004	☹
	Greenhouse gas emissions from the transport sector	P	To assess GHG emissions by the transport sector, to assess compliance with national and international emission reduction targets by 2010.	★ ★ ★	I, R	1990,1995, 2000-2004	☹
	Air polluting emissions by the transport sector	P	To assess atmospheric pollutants emissions by the transport sector, to assess compliance with the EU and international emission reduction targets by 2010.	★ ★ ★	I, R	1990,1995, 2000-2004	☺
	Traffic noise: exposure and disturbance	I	To monitor the number of persons exposed to high road traffic noise levels, such as to threaten health and the quality of life.	★	I	1997	☹
	Transport accident rates	P	To determine mortality and morbidity rates associated with the various transport modes to increase transport safety.	★ ★ ★	I	1990,1995, 2000-2004	☹



APPENDIX

Q3: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S	T	State and Trend
Transport	Accidental and illegal oil spills into the sea	P	To quantify oil spills into the sea by tankers, in order to eliminate oil pollution and prohibit illegal discharges.	★	I	1993,2002	☹
	Road vehicle waste	P	To monitor the production of road vehicle waste, with a view to improving prevention, through re-use and recycling .	★ ★ ★	I	1995, 2000-2005	☹
	Passenger transport demand and intensity	D	To assess passenger transport demand and to compare the relevant trends with economic growth trends; to compare the different modes of transport and their internal development dynamics, with a view to achieving modal rebalance.	★ ★	I	1990,1995, 2000-2004	☹
	Freight transport demand and intensity	D	To assess freight transport demand and to compare the relevant trends with economic growth trends; to compare the different modes of transport and their internal development dynamics, with a view to achieving a more efficient modal split..	★	I	1990,1995, 2000-2005	☹
	Access to services	R	To assess access to transport means and services, with a view to increasing access levels, especially with regard to collective transport modes.	★ ★	I	2000, 2004-2005	☹
	Transport infrastructure network capacity	D	To quantify certain values for monitoring transport networks, in order to optimise use of the existing transport network and improve certain transport modes, such as rail transport.	★ ★ ★	I	1990,1995, 2000-2004	☹
	Transport prices	D	To describe the dynamics of passenger and freight transport prices, highlighting the trends over time of this important transport demand driving and its modal split.	★ ★ ★	I	1997, 2000-2005	☹
	Taxes and fees in the transport sector	R	To monitor the trends of prices and fees in the transport sector, in order to determine prices in a fair and efficient manner among the transport modes.	★ ★ ★	I	1990,1995 2000-2006	☹
	Expenditure for personal mobility	D	To assess how people spend for transport and if they spend a fixed proportion of their budget for this sector.	★ ★ ★	I	1990,1995 2000-2005	☹
	External costs of transport	P	To estimate and cut external transport costs.	★	I	1997-2004	☹
	Energy efficiency and specific CO ₂ emissions a	P	To compare the different modes of transport, with regard to energy efficiency and GHG emissions, in order to reduce energy consumption per passenger-km and per tonne-km	★	I	2002	😊
	Specific pollutant emissions a	P	To quantify and compare pollutant emissions by vehicle type and mode of transport.	★ ★	I	2002	😊
	Diffusion of greener and alternative vehicle fuels	D	To measure the diffusion of less polluting vehicle fuels, with a view to fostering their use.	★ ★ ★	I	1990,1995 2000-2002	☹



APPENDIX

Q3: SYNOPTIC TABLE OF INDICATORS

SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Transport	Vehicle fleet size		To monitor an important "driving factor" for road transport demand and the relative environmental pressure.	★ ★ ★	I	1990, 1995 2000-2004	☹
	Average age of vehicle fleet	D	To accurately monitor the average age of vehicles, in order to assess the time required to spread new and less polluting technologies.	★ ★	I	1990, 1995 2000, 2004	☹
	Proportion of vehicle fleet meeting certain emission standards	D	To monitor the proportion of the vehicle fleet meeting the more recent emission standards for new vehicles.	★ ★	I	2004	☹

²¹ - This indicator has not been updated, compared to the 2004 Yearbook, either because the relevant information is supplied according to intervals of more than one year, and/or because the information was not made available in useful time. Therefore, the relative indicator fact sheet is not contained in this edition of the Yearbook.

4. TOURISM

Q4: SYNOPTIC TABLE OF INDICATORS

SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Tourism	Tourist infrastructures		To quantify the accommodation capacity of hotels, complementary facilities and D&Bs	★ ★ ★	I, R	1991-2005	☹
	Tourist flows by mode of transport	D	To highlight the different forms of transport used for tourist purposes	★ ★ ★	I	1996-2005	☹
	Tourist intensity	D	To determine the carrying capacity of tourism on the country	★ ★ ★	I, R	1991-2005	☹
	Household expenditure for tourism	D	To determine the trends in household expenditure for tourism purposes and its influence on the Gross Domestic Product (GDP)	★ ★ ★	I	2000-2005	-

5. INDUSTRY

Q5: SYNOPTIC TABLE OF INDICATORS

SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Industry	Industrial Production Index		To assess the level of industrial production compared to its environmental pressure	★ ★ ★	I	1995-2005	☹
	R&D expenditure in the manufacturing industry	R	To assess R&D expenditure by enterprises	★ ★ ★	I	1998-2005	😊
	INES register: number of plants and IPPC activities	P/R	To identify the IPPC plants generating the highest air and water emissions, i.e. those which, at national level, most contribute to industrial emissions	★ ★	I, R, P	2003, 2004	-
	INES register: air emissions	P	To supply qualitative and quantitative information on air emissions generated by IPPC activities reported in the INES register	★ ★	I, R	2003, 2004	-



Q5: SYNOPTIC TABLE OF INDICATORS

SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S	T	State and Trend
Industry	INES register: water emissions	P	To supply qualitative and quantitative information on water emissions generated by IPPC activities reported in the INES register	★ ★	I, R	2003, 2004	—
	Number of establishments subject to integrated environmental authorisation/authorisations issued	R	To assess progress in the introduction of the integrated environmental authorisation process, as a tool for pollution prevention and mitigation	★ ★	I, R	2003	—
	Specific emissions in the chemical industry	P	To assess the specific emissions generated by a manufacturing unit in the chemical industry	★ ★ ★	I	1990, 1995, 2000-2004	☹
	Specific emissions in the iron and steel industry	P	To assess the specific emissions generated by the iron and steel industry	★ ★ ★	I	1990, 1995, 2000-2004	☹
	Specific emissions in the paper industry	D/P	To assess the environmental performance of the industry as a whole.	★ ★ ★	I	2000-2005	☹

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6. ATMOSPHERE

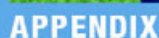
Q6: SYNOPTIC TABLE OF INDICATORS

SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S	T	State and Trend
Emissions	GHG emissions (CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆): trends and sectoral breakdown	P	To estimate national emissions and assess the contribution of each sector, in order to monitor the achievement of the established targets	★ ★ ★	I	1990-2004	☹
	Production of stratospheric ozone depleting substances (CFCs, CCL ₄ , HCFCs)	D	To assess the production of stratospheric ozone depleting substances, in order to monitor the achievement of the targets set out in the Montreal and subsequent protocols	★ ★ ★	I	1990-2004	☺
	Acidifying substance (SO _x , NO _x , NH ₃) emissions: trends and sectoral breakdown	P	To estimate national emissions and assess the contribution of each sector, in order to monitor the achievement of the established objectives	★ ★ ★	I, R	1980, 1985, 1990-2004	☺
	Tropospheric ozone precursors (NO _x and NMVOC) emissions: trends and sectoral breakdown	P	To estimate national emissions and assess the contribution of each sector, in order to monitor the achievement of the established objectives	★ ★ ★	I, R	1980, 1985, 1990-2004	☺
	Particulate matter (PM ₁₀) emissions: trends and sectoral breakdown	P	To estimate national emissions and assess the contribution of each sector, in order to monitor the achievement of the established objectives	★ ★ ★	I, R	1990-2004	☺



Q6: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	Aim		QI	Coverage		State and Trend
		DPSIR			S	T	
Emissions	Carbon monoxide (CO) emissions: trends and sectoral breakdown	P	To estimate national emissions and assess trends, in connection with the measures implemented to mitigate emissions, especially by road traffic and heating systems	★ ★ ★	I, R	1900, 1905 1990-2004	😊
	Benzene (C ₆ H ₆) emissions: trends and sectoral breakdown	P	To estimate national emissions and assess the contribution of each sector, in order to monitor the achievement of the established objectives	★ ★ ★	I	1990-2004	😊
	Emission of persistent organic compounds (POA, dioxins and furans): trends and sectoral breakdown	P	To estimate national emissions and assess the contribution of each sector, in order to monitor the effectiveness of the emission mitigating measures and policies	★ ★ ★	I	1990, 1995-2004	😊
	Emission of heavy metals (Cd, Hg, Pb, As, Cr, Cu, Ni, Se, Zn): trends and sectoral breakdown	P	To estimate national emissions and assess the contribution of each sector, in order to monitor the effectiveness of the emission mitigating measures and policies	★ ★ ★	I	1990, 1995-2004	😊
	Local (regional and/or provincial) recordings of air emissions (existence and distribution of the relative registers) ^a	R	To verify whether or not the local (regional and/or provincial) authorities have implemented local registers of air emissions (existing or undergoing implementation)	★ ★	I	2003	😐
Air quality	Ambient air quality: air quality monitoring stations		To provide a fact-based picture of monitoring stations in the country, in relation to the transmission of air quality data in accordance with the European regulations.	★ ★ ★	I, R18/20	2004	😊
	Ambient air quality: PM ₁₀ particulate matter	S	To provide information on the state of air quality, using the statistical parameters referred to in the Eol directive and by controlling compliance with the daily and annual limit values set out in DM 60/02.	★ ★	I, R17/20	2004	😞
	Ambient air quality: tropospheric ozone (O ₃)	S	To provide information on the state of air quality, using the statistical parameters referred to in the Eol directive and by controlling compliance with the limit values set out in D.Lgs. 183/2004	★ ★ ★	I, R17/20	2004	😞
	Ambient air quality: nitrogen dioxide (NO ₂)	S	To provide information on the state of air quality, using the statistical parameters referred to in the Eol directive and by controlling compliance with the hourly and annual limit values set out in DM 60/02.	★ ★ ★	I, R17/20	2004	😞
	Ambient air quality: benzene (C ₆ H ₆)	S	To provide information on the state of air quality, using the statistical parameters referred to in the Eol directive and by controlling compliance with the annual limit values set out in DM 60/02.	★ ★ ★	I, R15/20	2004	😊
	Ambient air quality: sulphur dioxide (SO ₂)	S	To provide information on the state of air quality, using the statistical parameters referred to in the Eol directive and by controlling compliance with the hourly and daily limit values set out in DM 60/02.	★ ★ ★	I, R16/20	2004	😊
	Regional air quality improvement plans	R	To provide an analysis of the measures implemented by the regional and autonomous provincial authorities to ensure compliance with the limits referred to in the guidelines and regulations on air pollution.	★ ★	I, R	2001, 2002, 2003	😐

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7. BIOSPHERE

Q7: SYNOPSIS TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S T	State and Trend	
Biodiversity trends and changes	Level of threat for animal species		To provide an overview of the level of threat for animal vertebrate species and the taxa subject to the highest risk of losing their biodiversity, and to assess the level of threat for the various systematic groups	★ ★ ★	I	1997, 1998, 2002-2005	☹️
		I/S					
	Level of threat for plant species		To provide an overview of the threat for Italian plant species, focusing especially on vascular plants; to identify the areas most at risk of losing their biodiversity, through an analysis of the regional contingent of endemic, exclusive and naturalized exotic plants and of regional protected flora.	★ ★ ★	I, R	2005	☹️
		I/S					
	Hunting pressure		To assess the regions of the country subject to the highest hunting pressure	★ ★	I, R	2000-2003	😊
		P					
	Fishing pressure		To provide an overview of overall fishing trends, by analysing how the fishing fleets have changed over the years, as an indicator that can be related to the pressure on fish resources	★ ★ ★	I	1993-2005	😊
		D/P					
	Principal habitat types present in the protected areas		To estimate the distribution of the main types of habitat in the protected areas and indirectly assess the effectiveness of the biodiversity conservation measures undertaken for each habitat.	★ ★ ★	I	2003	-
		S/R					
	Principal habitat types present in the (approved and proposed) Sites of Community Importance (SCI/pSCI)		To highlight, for each region, the different types of habitats in that region, with respect to SCI/pSCIs, to assess their representativeness for conservation purposes	★ ★ ★	I, R	2006	😊
		S/R					
State of conservation of the SCI/pSCI		To assess the conservation of the natural and semi-natural habitats under the Habitat Directive existing in the Italian SCI/pSCI	★ ★	I, R	2006	😐	
	S						
Number of cetaceans present in the Marine Mammal Sanctuary		To make an estimate of the size and trends of the cetacean communities in the Marine Mammal Sanctuary	★ ★	I	1990-2000	-	
	S						
Effects of climate change	Changes to glacier fronts		To assess trends in glacier front changes and any other anomalies due to global change	★ ★	I	1958, 1978-2003	☹️
		S					
	Glacier mass balance		To assess trends in glacier mass balance and any anomalies due to global change	★ ★	I	1967-2005	☹️
	S						



APPENDIX

Q7: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	Aim		QI	Coverage		State and Trend
		DPSIR			S	T	
Protected areas	Protected terrestrial areas	R	To assess the proportion of the country's land occupied by protected terrestrial areas	★ ★ ★	I, R	2003	☹
	Protected marine areas	R	To assess the proportion of Italian coastal waters concerned by protected marine areas	★ ★ ★	R	2000-2003	☹
	Special Protected Areas (ZPS)	R	To assess the percentage of land (at national and regional level) concerned by Special Protected Areas (ZPS), also in relation to a breakdown by bio-geographical zones.	★ ★ ★	I, R	2006	😊
	Approved and proposed Sites of Community Importance (SCI/pSCI)	R	To assess the proportion of the country's land concerned by (approved or proposed) Sites of Community Importance (SCI/pSCI), also in relation to a breakdown by bio-geographical zones.	★ ★ ★	I, R	2006	😊
	Pressure by communication infrastructures in protected areas	P	To assess the development of the principal communication networks in protected areas, as a measure of human pressure	★ ★ ★	I, R	2005	–
Wetlands	Wetlands of international interest	S/R	To assess the area of wetlands of international interest, compared to the country's area, and to define the habitat types	★ ★ ★	I, R	1976-2005	☹
	Human pressure on wetlands of international importance	P	To assess the pressures potentially interfering with the state of conservation of wetlands of international interest	★ ★ ★	I, R	2006	☹
Forests	Forest area: current situation and trends	S	To build a picture of forestation over the years, according to forest type, regional distribution and type of management	★ ★ ★	I, R	1948-2004	😊
	Extent of forest fires	I	To build a picture of forest fires, highlighting the characteristics and trends in time	★ ★ ★	I, R	1970-2005	☹
	Critical loads of total acidity and relevant exceedances	S	To measure the impact of atmospheric fallout of acidifying substances on the plant ecosystems at national level	★ ★ ★	I, R	2005	☹
	Critical loads of nitrogen nutrients and relevant exceedances	S	To measure the impact of atmospheric fallout of eutrophying nutrient on the plant ecosystems at national level	★ ★ ★	I, R	2005	☹
	Critical loads of cadmium and lead and relevant exceedances	S	To measure the impact of atmospheric fallout of cadmium and lead on the plant ecosystems at national level	★ ★ ★	I, R	2005	☹
	Defoliation of the tree canopies of forest species	I	To highlight the level of resilience or susceptibility of forest species to the impact of atmospheric fallouts and gas pollutants affecting the forest ecosystems	★ ★ ★	I	1997-2005	😊



APPENDIX

Q7: SYNOPTIC TABLE OF INDICATORS

SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Forests	Carbon fixed by forests in Italy		To provide an estimate of the carbon dioxide fixing capacity of forests in Italy and their role in climate change mitigation	★ ★ ★	I	1990-2005	😊
		S					
Landscape	Protected landscapes		To assess the extent of measures imposing restrictions to protect the environment and landscapes, specifying the areas in each region subject to restrictions under DLgs 42/04	★ ★ ★	I, R, P	2005	😐
		R					
Landscape	Regional governments that have approved and introduced landscape plans		To assess the implementation, by the regional governments, of superordinate and planning coordination schemes, in particular with regard to landscape plans	★ ★	R	2005	😊
		R					

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8. HYDROSPHERE

Q8: SYNOPTIC TABLE OF INDICATORS

SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Water quality	Marine trophic index (TRIX)		To determine the trophic index of coastal seawater	★ ★ ★	R.c. ¹	2004-2005	😊
		S					
	Index of bacteriological quality (IBQ) a		To measure the level of human (civil and agricultural) contamination of bathing waters	★ ★ ★	C.c. ²	1999-2002	😐
		S					
	Bathing water quality a		To determine the quality of bathing waters, from a hygienic and health protection viewpoint, based on the applicable statutory regulations	★ ★ ★	C.c. ² R.c.	2000-2002	😊
		I					
	Quality required for shellfish waters	S	To assess compliance with specific functional targets	★	R.c.1, 9/15	2002-2003	-
	Number of days of anoxia in transition waters a	S	To assess and classify the ecological quality of lagoons and coastal lakes	★ ★ ★	-	-	-
	Macrodescriptors (75 th percentile)	S	To characterize the chemical and microbiological quality of rivers	★ ★ ★	R 17/20	2000-2005	😐
	Levels of pollution by macrodescriptors (LPM)	S	To assess and classify the level of chemical and microbiological pollution of rivers	★ ★ ★	R 18/20	2000-2005	😐
	Extended biotic index (EBI)	S	To assess and classify the biological quality of rivers	★ ★ ★	R 17/20	2000-2005	😐
	Ecological state of rivers (ESR)	S	To assess and classify the ecological quality of rivers	★ ★ ★	R 17/20	2000-2005	😐
	Ecological state of lakes (ESL)	S	To assess and classify the ecological quality of lakes	★ ★	R 12/20	2005	😐
	Quality of waters needing protection to support the fish life	S	To assess compliance with specific functional targets	★ ★	R 15/20	1997-2003	-
	Chemical state of underground waters (CSUW)	S	To determine the chemical quality due to natural or human causes	★ ★	R 10/20	2000-2005	-



APPENDIX

Q8: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Water resources and sustainable uses	Water abstraction for potable uses ^a	P	To measure the quantitative impact of water harvesting	★ ★ ★	R 10/20	1993-1998 1999-2001	☹
	Discharges	S	To determine river flows	★ ★ ★	B.n. ³ 4/11	1921-1970, 2002	-
	Air temperature ^a	S	To assess climate trends	★ ★ ★	R	1960-2001	-
	Rainfall ^a	S	To determine rainfall	★ ★ ★	R	1960-2000	-
Water pollution	Average nutrients towards the river mouths	P	To characterize rivers and their content of pollutants	★ ★ ★	B. ⁴	2000 -2005	☹
	Potential organic matter content ^a	P	To determine the pressure exercised on water quality by potential pollutants	★	R	1990, 1996, 1999	-
	Waste water treatment plants: compliance of collecting systems	R	To determine the compliance of collecting systems with the Directive 91/271/EEC, requirements transposed into national law by DLgs 152/99 as amended and supplemented	★ ★ ★	R 18/20	2005	😊
	Waste water treatment plants: compliance of urban wastewater treatment systems	R	To determine the compliance of the wastewater treatment plans with the Directive 91/271/EEC requirements, transposed into national law by DLgs 152/99 as amended and supplemented	★ ★ ★	R	2005	😊
	Programmes of measures for drinking water	R	To determine the effectiveness of the programmes for improving surface waters for potable uses	★ ★ ★	R 16/20	2000-2004	☹
	Programmes of measures for bathing waters	R	To determine the effectiveness of the programmes for improving bathing water quality	★ ★ ★	R ⁶ 11/17	2004	☹
	First intense rainfalls	P	To monitor short and intense rainfalls, characterised by a rain height of 2.5-5 mm falling in the space of 15' and preceded by 48 hours of dry weather	-	-	-	-
Physical state of the sea	Seawater temperature	S	To assess climate change	★ ★ ★	M ⁵ 6/7	1989-2004	😊
	Swell and tide	S	To assess sea-atmosphere exchanges	★ ★ ★	M ⁵ 6/7	1989-2004	☹
Venice Lagoon	Astronomical tide height in the Venice Lagoon	I/S	To monitor the long-term variations in the high tide characteristics inside the Venice Lagoon, as indicators of the morphological evolution of the lagoon.	★ ★ ★	-	1912-1940 2002-2004	☹
	High tide delays in the Venice Lagoon	I/S	To monitor the long-term variations in the high tide characteristics inside the Venice Lagoon, as indicators of the morphological evolution of the lagoon.	★ ★ ★	-	1912-1940 2002-2004	☹
	Average sea level rise (ICLMM)	I	To measure the medium-to-long term variations of the average annual sea level.	★ ★ ★	-	1872-2005	☹

^a This indicator has not been updated, compared to the 2004 Yearbook, either because the relevant information is supplied according to intervals of more than one year, and/or because the information was not made available in useful time. Therefore, the relative indicator fact sheet is not contained in this edition of the Yearbook.

1 R. c. = Coastal regions, even though the data is collected at certain sampling points
2 C. c. = Coastal local administrative units
3 B. n. = National basins
4 B. = Hydrological basins (12 rivers and 5 lakes)
5 Seas
6 Regions required to submit improvement programmes



APPENDIX

9. GEOSPHERE

Q9: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S	T	State and Trend
Soil quality	Percentage of organic carbon (CO) in topsoil layers (30 cm)	S	To describe the quantity of organic carbon (CO), expressed as a percentage of the weight, found in topsoil layers in Italy (30 cm)	★ ★	I	1988-2003	—
	Total content of heavy metals in farmland	S	To describe the content of heavy metals present in farmland, due to natural or human causes	★ ★	R 11/20	2005	☹
	Balance of nutrients in the soil (Input/Output of nutrients)	S	To determine whether there is a deficit or surplus of nutrient substances in the soil, per unit of cropland	★ ★ ★	R	1994, 1998, 2000, 2002	☹
Physical and biological development of soils	Desertification	P	To identify any desertification sensitive areas, in accordance with the definition of the UN Convention on combating Drought and Desertification	★ ★	I R 4/20	2004	☹
	Soil compaction risk, with respect to the number and power of farm machinery	P	To estimate the risk of soil compaction, based on the repeated passing of farm machinery	★ ★ ★	I R	1967, 1992, 1995, 2000	☹
	Water erosion	I	To estimate the risk of soil erosion due to running water	★ ★	I	2004	☹
Soil contamination	Livestock breeding effluents a	P	To measure the production of nitrogen (N) from livestock breeding and related effluents, based on the size of the livestock population	★ ★ ★	R	1994, 1998, 2000, 2002	☹
	Areas used for intensive farming a	P	To measure the intensive UAAs, which generally represent a major risk of pollution, soil deterioration and loss of biodiversity	★ ★ ★	R	1995-2000	—
	Use of water treatment sludge in farming areas a	P	To determine the contribution of nutrients and heavy metals from the use of water treatment sludge in agriculture	★ ★ ★	R	1995-2000	☹
Contaminated sites	Contaminated sites	P	To provide the number of areas requiring clean up measures for the soil and /or surface water and groundwater	★ ★	R	2005	☹
	Contaminated sites of national interest	P	To provide information on the progress made in cleaning up the soil and/or surface water and groundwater in national interest sites	★ ★	I, R	2005	☹
	Remediated sites a	R	To highlight the number of remediated sites by region	★ ★	R	2003	—
Land use	Updating official geological maps	S	To provide updated knowledge of the geology of the country through geological maps	★ ★ ★	R	2005	☹
	Primary mineral-extraction sites (mines)	P	To measure human "primary mineral extraction" activities featuring a high impact on the environment and the landscape	★ ★ ★	R	1870-2005	☹
	Secondary mineral-extraction sites (quarries)	P	To quantify the number of quarries nationwide	★ ★	I, R	2001-2006	—
	Extraction sites of energy resources	P	To measure human "energy resource extraction" activities featuring a high impact on the environment and the landscape	★ ★ ★	I R 14/20	1982-2005	☹



APPENDIX

Q9: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Land use	Potential use of groundwaters		To monitor and control the use of groundwaters over increasingly larger areas of the country, and to collect data in ever greater detail	★ ★ ★	I, R	1985-2005	—
		P/S					
	Land use		To describe the type and extent of the principal human activities locally, allowing the survey of changes in land use in agriculture and urban areas, and the development in land coverage of semi-natural systems	★ ★ ★	I, R	1990-2000	☹
		S					
	Urbanization and infrastructures		To represent the extent of urbanization and infrastructure construction, which are the principal forms of irrecoverable loss of land	★ ★ ★	I, R	1990-2000	☹
		p					
Land use	Urbanization in coastal areas		To measure the changes in the areas of soil use generated by human impacts in coastal areas, which are historically focal points of urban planning and biological abundance as ecotone areas	★ ★ ★	I, R	1975-1992, 2000	☹
		S					
	Soil sealing		To define the degree of soil sealing, caused by urbanisation, nationwide	★ ★ ★	I, R	2000	☹
		P					

^a - This indicator has not been updated, compared to the 2004 Yearbook, either because the relevant information is supplied according to intervals of more than one year, and/or because the information was not made available in useful time. Therefore, the relative indicator fact sheet is not contained in this edition of the Yearbook.

10. WASTE

Q10: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Waste generation	Total waste generation and by GDP unit		To measure the total waste generated and the relationship between waste generation and economic development	★ ★ ★	I, R	1997-2003	☹
		p					
	Municipal waste generation	p	To measure the total waste generated	★ ★ ★	I, R	2003-2004	☹
	Hazardous and non-hazardous waste generation	p	To measure the total waste generated	★ ★	I, R	2003	☹
Waste management	Quantity of equipment containing PCB	p	To measure the amount of equipment and machinery containing PCB	★ ★	I, R	2003-2004	☹
	Separate collection of municipal waste	R	To determine the achievement of the separate waste collection targets set out in article 24 of DLgs 22/97	★ ★ ★	I, R	1999-2004	☹
	Amount of waste sent to composting and biological-mechanical treatment	P/R	To assess the effectiveness of the policies aimed at encouraging the recovery of materials from waste	★ ★ ★	I	1999-2004	😊
	Amount of hazardous and non-hazardous waste recovered	P/R	To assess the effectiveness of waste management policies, especially with regard to encouraging the recovery and re-use of waste, for producing materials or energy	★ ★	I, R	1997-2003	😊



APPENDIX

Q10: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Waste management	Landfill disposal, in total and by type of waste		To determine the progress made in achieving the goal of reducing the use of landfills for disposing of waste, as provided by DLgs 22/97, providing indications on the effectiveness of waste management policies	★ ★ ★	I, R	1997-2003	☹
		P/R					
	Number of landfills		To collect information on the number of landfills throughout the country	★ ★ ★	I, R	1997-2003	😊
		p					
Production and management of packaging	Incineration, in total and by type of waste		To determine the amount of waste disposed of by incineration	★ ★ ★	I, R	1997-2003	☹
		P/R					
	Number of waste incineration plants		To determine the availability of waste combustion plants, at national and regional level	★ ★ ★	I, R	1997-2004	☹
		p					
	Packaging production, in total and by type of material a		To measure the quantities of packaging produced nationwide (in total and by type of packaging material)	★ ★ ★	I	1993-2003	☹
		p					
	Placing on the market of packaging, in total and by type of material		To measure the quantity of packaging placed on the national market, to determine the proportions of recovery and recycling, in support of the monitoring activities conducted to assess achievement of the targets set out in the EU regulations and strategy documents	★ ★ ★	I	1998-2004	☹
		p					
	Recovery of packaging waste by type of material		To measure the total quantity of packaging waste recovered (recycling + energy recovery), to determine the recovery proportions in support of the monitoring activities conducted to assess achievement of the targets set out in the EU regulations and strategy documents	★ ★ ★	I	1998-2004	😊
		R					

^a - This indicator has not been updated, compared to the 2004 Yearbook, either because the relevant information is supplied according to intervals of more than one year, and/or because the information was not made available in useful time. Therefore, the relative indicator fact sheet is not contained in this edition of the Yearbook.



APPENDIX

11. IONIZING RADIATIONS

Q11: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S	T	State and Trend
Radiazioni ionizzanti	Work activities with Naturally Occurring Radioactive Materials (NORM) a	D	To survey the environmental pressure sources relating to NORM	★ ★ ★	I	2003	☹
	Facilities authorized to use radioisotopes	D	To document the number of facilities, by type, authorized to use radioactive sources, limited to the uses under category A (within the meaning of DLgs 230/95 as amended and supplemented), and their nationwide distribution	★ ★ ★	R 11/20	2005	☹
	Scrap metal treatment plants (collection, storage, melting) a	D	To monitor the number of scrap metal treatment plants and assess the amount of scrap metal treated there	★ ★	I, R	2003	☹
	Nuclear power plants: activities of radioisotopes released in the air and water	P	To monitor radioactive emissions, in the air and water, in normal operating conditions of nuclear power plants	★ ★ ★	I	2005	☹
	Quantity of radioactive waste stored	P	To document the type and quantity of radioactive waste, according to distribution in the storage sites	★ ★ ★	I R 10/20	2005	☹
	Indoor radon activity concentration	S	To monitor one of the principal sources of exposure to radioactivity of the population	★ ★ ★	I R	1989 - 2005	😊
	Gamma dose rates in air, from exposure to cosmic and terrestrial radiations	S	To document the size and distribution of the effective dose due to exposure to gamma radiations of cosmic and terrestrial origin (two of the sources of exposure to natural radioactivity), in order to assess its impact on the Italian population. To document any accidental events or situations that may entail increased exposure of the population to radiation	★ ★ ★	I R	1970 - 1971 1986 - 2005	☹
	Artificial radionuclide activity concentrations in the environment and foodstuffs (atmospheric particulate matter, wet and dry airborne fallout, milk)	S	To determine the average annual artificial radionuclide activity concentration in atmospheric particulate matter, wet and dry airborne fallout and milk, aimed at controlling environmental radiocontamination	★ ★	I	1986 - 2004	☹
	Annual average effective dose per person	I	To assess the contribution of the sources of exposure to radioactivity (of natural or man-made origin) of the population	★ ★	I	2005	☹
	Implementation of the environmental radioactivity monitoring networks	R	To assess progress in the implementation of environmental radioactivity monitoring networks in Italy, with respect to the existing networks, in conformity with the national and international quality assurance programmes	★ ★ ★	I, R	1997-2005	☹

^a - This indicator has not been updated, compared to the 2004 Yearbook, either because the relevant information is supplied according to intervals of more than one year, and/or because the information was not made available in useful time. Therefore, the relative indicator fact sheet is not contained in this edition of the Yearbook.



APPENDIX

12. NON-IONIZING RADIATIONS

Q12: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S	T	State and Trend
Electromagnetic fields	Density of broadcasting and telecommunications facilities and sites and overall power throughout the country a	D/P	To measure the principal sources of pressure on the environment by RF fields	★ ★	R 11/20	2003	–
	Length in kilometres of power lines, broken down by voltage and number of transformer stations and primary power cabins, by geographical area a	D/P	To measure the principal sources of pressure on the environment by ELF fields	★ ★ ★	I, R	1991-2003	☹
	Broadcasting and telecommunications sites found to exceed the statutory limits, and relevant remedial actions a	S/R	To determine any non-conformities relating to radiofrequency sources (RTV and RBS), found in connection with the monitoring activities carried out by the ARPA/APPA agencies, and the progress of the remedial actions undertaken	★ ★ ★	R 13/20 R 12/20	1998-2003	–
	Power lines found to exceed the statutory electric and magnetic field limits, and relevant remedial actions a	S/R	To determine any non-conformities relating to the ELF sources, and the remedial actions undertaken	★	R	1996-2002	☹
	Number of early opinions and controls on RF field sources	R	To measure compliance with the regulatory requirements, with regard to monitoring and supervisory activities of RF plants (radio and television broadcasting facilities, mobile telephone radio base stations)	★ ★	R 14/20	2004	–
	Number of early opinions and controls on ELF field sources	R	To measure compliance with the regulatory requirements, with regard to monitoring and supervision of ELF facilities (power lines, transformer rooms)	★ ★	R 13/20	2004	–
	Monitoring unit for compliance with regional regulations a	R	To assess the regulatory response relating to non-ionizing radiation sources, also with regard to the Framework Law 36/01	★ ★	R	1988-2004	😊
Light radiations	Relative brilliance of night sky a	S	To monitor the brilliance of the night sky, in order to assess the effects on the ecosystems of light pollution	★ ★ ★	I	1971, 1990	☹
	Proportion of the population living in areas where the Milky Way is no longer visible a	I	To assess the deterioration of the visibility of the night sky	★ ★ ★	I, P	1998	☹

^a - This indicator has not been updated, compared to the 2004 Yearbook, either because the relevant information is supplied according to intervals of more than one year, and/or because the information was not made available in useful time. Therefore, the relative indicator fact sheet is not contained in this edition of the Yearbook.



APPENDIX

13. NOISE

Q13: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Noise	Number and capacity of airport infrastructures	D	To determine the number and size of airport infrastructures	★ ★	I R	2004	–
	Number and capacity of port infrastructures	D	To determine the number and size of port infrastructures	★ ★	I	2004-2005	–
	Airport traffic	P	To determine the size of airport traffic, as one of the principal sources of noise pollution	★ ★ ★	I R	2003-2004	☹
	Rail traffic	P	To determine the size of rail traffic, as one of the principal sources of noise pollution	★ ★ ★	I R	1998-2002	☹
	Road traffic	P	To determine the size of road traffic, as one of the principal sources of noise pollution	★ ★ ★	I R	1990-2004	☹
	Population exposed to noise	S	To determine the proportion of the population exposed to noise above certain prescribed thresholds	★	C 48/8101	1996-2006	☹
	Monitored noise sources and percentage of those found to exceed the statutory limits at least once a	S	To assess noise pollution, in terms of both quantity and quality	★ ★ ★	R 19/20	2000-2003	☹
	State of approval of the municipal noise zoning plans a	R	To assess the implementation progress of the national regulations on noise, with reference to the activities carried out by the local authorities, with regard to the prevention of and protection from ambient noise pollution	★ ★	C 7692/ 8101 R 19/20	2003	☹
	State of implementation of the reports on the municipal acoustic state a	R	To assess the implementation progress of the national regulations on noise, with reference to the activities carried out by the local authorities, with regard to municipal acoustic state reporting	★ ★	R 19/20	2003	☹
	State of approval of the municipal noise abatement plans a	R	To assess the implementation progress of the national regulations on noise, with reference to the activities carried out by the local authorities, with regard to noise abatement planning and programming measures	★ ★	C 7628/ 8101 R 19/20	2003	☹
	Monitoring unit for compliance with regional regulations a	R	To assess the regulatory response relating to noise pollution, with regard to the Framework Law 447/95	★ ★ ★	R	2003	☹
	Percentage of km of the national rail network featuring excess noise levels	S	To assess noise pollution, in terms of both quality and quantity, in locations near rail infrastructures	★ ★ ★	I	2004	–
	Approval status of noise containment and abatement plans for the rail network	R	To assess the implementation progress of the national noise guidelines and regulations by RFI, the national rail operator, by means of an analysis of the measures introduced	★ ★ ★	I	2004	–

^a - This indicator has not been updated, compared to the 2004 Yearbook, either because the relevant information is supplied according to intervals of more than one year, and/or because the information was not made available in useful time. Therefore, the relative indicator fact sheet is not contained in this edition of the Yearbook.



APPENDIX

14. NATURAL RISK

Q14: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage S	T	State and Trend
Tectonic and volcanic hazards	Surface faulting (capable faults)		To identify the areas subject to major seismic hazards, providing key information and data for regional planning and land management purposes	★ ★	I	2003-2005	-
		S					
	Seismic events		To define the seismicity of Italy, in terms of maximum expected magnitude, return times, local effects, useful information for correct regional planning and land management purposes	★ ★ ★	I	2004-2005	-
		S					
	Seismic zoning		To provide an updated picture of the seismic zoning of Italy, according to the seismic hazard, with corresponding earthquake protection standards for building construction purposes	★ ★ ★	R	2005	😊
		R					
Hydrogeological hazards	Volcanic eruptions		To determine the environmental risk, in Italy, of volcanic activities	★ ★ ★	R	2004-2005	-
		S					
	Floods		With regard to hydrogeological degradation, to provide an updated national database of the number of floods, primarily those due to intense rainfall	★ ★	I	1951-2005	-
		IP					
	State of implementation of the Land and Water Improvement Schemes (PAI)		To determine the implementation of Land and Water Improvement Schemes (LWIS), aimed at identifying areas subject to major hydrogeological hazards, and bounding the areas that must undergo safeguarding measures	★ ★ ★	I	Bacini	😊
		R					
	Progress of the hydrogeological risk mitigation projects financed under DL 180/98 (as amended and supplemented)		To highlight the progress of the urgent hydrogeological risk mitigation projects	★ ★ ★	R	Marzo 2006	😊
		R					
	Progress of urgent projects in areas affected by fires (pursuant to article 3 of OM 3073/00)		To highlight the progress of urgent projects in areas affected by fires	★ ★ ★	R 9/9 ^a P 19/19 ^a	2003-2005	😊
		R					
	IFFI Project: the Italian landslides inventory		To provide an exhaustive and uniform picture of landslides in Italy	★ ★ ★	R 19/20 P 96/103	2005	-
		S					
	Areas subject to sinkholes		To define a geological-structural and hydrogeological context subject to sinking	★ ★	I	2005	-
		S					
	Municipalities concerned by subsidence		To provide an overall picture of subsidence and its impact on the country	★ ★	C 643/8101	2005	-
		S					
	Reservoirs		To provide an updated database of the number of reservoirs and their operating conditions and national distribution	★ ★	R	Giugno 2006	-
		S/R					

^a - The data refers to the regions/provinces included in the relevant action programmes.



APPENDIX

15. ANTHROPOGENIC RISK

Q15: SYNOPTIC TABLE OF INDICATORS								
SINAnet theme	Indicator	DPSIR		Aim	QI	Coverage		State and Trend
						S	T	
Industrial hazards	Number of establishments liable to be affected by a major accident hazard			To determine the risk to which the atmosphere, soil, subsoil, aquifers and surface waters are subject due to the presence of establishments liable to be affected by a major accident hazard	★ ★ ★	I, R, P	2005	☹
		p						
	Local Administrative Units (LAUs) with 4 or more establishments liable to be affected by a major accident hazard			To provide initial elements for identifying areas with a high concentration of such establishments	★ ★ ★	I, R, P, C	2005	☹
		p						
	Typology of establishments liable to be affected by a major accident hazard			To determine the prevailing risks to which the atmosphere, soil, subsoil, aquifers and surface waters are subject due to the presence of certain types of establishments liable to be affected by a major accident hazard	★ ★ ★	I, R, P, C	2005	☹
		p						
	Quantities of hazardous substances and preparations stored by establishments liable to be affected by a major accident hazard			To determine the prevailing risks to which the atmosphere, soil, subsoil, aquifers and surface waters are subject due to the presence of certain hazardous substances in the establishments liable to be affected by a major accident hazard	★ ★ ★	I, R, P, C	2005	☹
		p						
	Quantities of hazardous substances and preparations present in each municipality (Risk phrases R 50 or R 51/53)			To provide initial elements for identifying areas potentially subject to pollution of the soil, subsoil, underground and surface waters due to the presence of environmentally hazardous substances stored by establishments liable to be affected by a major accident hazard	★ ★ ★	I, R, P, C	2005	☹
		p						

16. ENVIRONMENTAL QUALITY OF ORGANISATIONS, ENTERPRISES AND PRODUCTS

Q16: SYNOPTIC TABLE OF INDICATORS								
SINAnet theme	Indicator	DPSIR		Aim	QI	Coverage		State and Trend
						S	T	
Environmental quality of organisations enterprises and products	Number of EMAS-registered organizations			To describe the development of environmental awareness by organizations and undertakings	★ ★ ★	I	1997-2006	😊
		R						
	Number of UNI-EN-ISO 14001 certifications			To describe the development of environmental awareness by organizations and undertakings	★ ★	I	1999-2006	😊
		R						
	Number of Ecolabels licences awarded			To describe the development, in recent years, of environmental awareness applied to products and services in Italy	★ ★ ★	I	1998-2006	😊
		R						



APPENDIX

17. MONITORING AND CONTROL

Q17: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Monitoring	Number of ARPA/APPA network laboratories a	R	To collect information on the actual monitoring and control potential of the Environment Agencies	★ ★ ★	I R	2002, 2004	–
	Number of samples analysed by the ARPA/APPA laboratories for information requests a	R	To assess the level of implementation of the regulations providing for different application phases according to the local characteristics	★ ★	R 19/20	2001	☹
	Number of accredited ARPA/APPA laboratories	R	To measure the laboratories' capacity to operate on a quality basis. To collect information on the number of laboratories conducting analytical tests accredited by the competent authorities.	★ ★ ★	I R	2004, 2005	☹
	Number of laboratories taking part in the interlaboratory comparison programme organized by APAT	R	To assess the participation (in absolute and percentage terms) of the ARPA/APPA agencies in the specific projects aimed at improving the quality of national environmental measurements, compared to the total number of existing Environment Agency laboratories	★ ★	I R	2003 - 2005	☹
	Number of actions implemented by APAT/ARPA/APPA for data quality purposes a	R	To follow up on the actions implemented by the Environment Agency system to achieve the goal of ensuring the quality of the analytical information produced by its laboratories	★ ★	I	2002-2004	☹
	Environmental radioactivity monitoring	R	To quantify the the number of activity concentration measurements, relating to a number of different environmental and food matrixes, conducted by the RESORAD radioactivity monitoring network	★ ★ ★	I	2004	☹
Control	Control activities by environmental matrix	R	To quantify the degree of knowledge of ecosystems as a whole and of the relevant resources	★ ★	I ^c	2002-2004	☹
	Measurements and penalties for illegal actions	R	To assess compliance with the applicable environmental guidelines and regulations	★ ★ ★	I ^c	2001-2004	☹
	Bathing water controls	R	To assess the pollution of the coastline and the sea	★ ★ ★	P.c. ^b	2005	😊
	Controls by type of establishment	R	To quantify the control activities relating to the different types of establishments, with a view to assessing the effectiveness of the implemented measures	★ ★	I ^c	2004	–

a - This indicator has not been updated, compared to the 2004 Yearbook, either because the relevant information is supplied according to intervals of more than one year, and/or because the information was not made available in useful time. Therefore, the relative indicator fact sheet is not contained in this edition of the Yearbook.

b - Coastal provinces

c - Spatial coverage



APPENDIX

18. PROMOTING AND SPREADING AN ENVIRONMENTAL CULTURE

Q18: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	DPSIR	Aim	QI	Coverage		State and Trend
					S	T	
Environmental information	Number of environmental-related publications	R	To survey the amount of publications dedicated to disseminating environmental information	★	I R	2004-2005	-
	Library services and user resources	R	To assess accessibility by users to library services and environmental information resources	★	I R 9/20	2004-2005	-
	Environmental information and the mass media	R	To estimate the dissemination, by the mass media, of environmental data/information	★	I R 11/20	2004-2005	-
	Environmental information on the Internet	R	To assess the supply of environmental information on the Web, as a means of improving environmental knowledge and awareness implemented by the government and other competent authorities	★	I R 9/20	2004-2005	-
Environmental communication	Environmental communication activities	R	To provide an overview of the environmental communication activities put into place at national level	★	I R 9/20	2004-2005	-
	Environmental communication on the web	R	To assess the supply of web-based communication and interaction services by the institutional authorities in response to the environmental information needs of users	★	I R	2003-2005	-
Environmental capacity	Environmental capacity-building supply	R	To provide an overview of the environmental capacity-building implemented projects	★	I R 9/20	2004-2005	-
	e-learning supply	R	To provide an overview of the environmental capacity-building by e-learning projects	★	I R 9/20	2004-2005	-
Environmental education	Environmental education supply	R	To describe the state of the art of environmental education projects implemented to date	★	I R 8/20	2004-2005	-
	Working capacity of the local environmental education network	R	To provide an overall representation of the networking capability of the Agencies and of their integration in the local environmental education systems	★	I R 8/20	2004-2005	-



APPENDIX

19. ENVIRONMENT AND HEALTH

Q19: SYNOPTIC TABLE OF INDICATORS								
SINAnet theme	Indicator	DPSIR	Aim	OI	Coverage		State and Trend	
					S	T		
Sustainable town and country planning	Road accident rate		To meet the growing demand for information on road accidents, involving economic and socio-demo-cultural factors. Every year, road accidents cause high social and human costs for society. The estimated social cost alone of road accidents, at European level, is 2% of the GDP of the EU. Monitoring road accident rates, therefore, can help policy makers and planners, with regard to implementing integrated management measures in regional planning	★ ★ ★	I R	1997-2004	☹	
		S						
	Road accident injury rate		To monitor road safety and how it develops over the years, thus providing objective information on its direct impact on health, with a view to planning local projects integrating environmental, economic and social factors. The featured data are disaggregated at the various geographical levels (regions), to meet the planning and programming needs in the different contexts	★ ★ ★	I R	1997-2004	☹	
		I						
	Road accident death rate		To support the assessment relating to the effectiveness of the road safety policies undertaken in recent years, providing planners and researchers with useful information on the future decisions and projects to be implemented in the field of infrastructures, regional planning and land management, vehicle safety and healthcare facility effectiveness, road safety and traffic management regulations	★ ★ ★	I R	1991-2004	😊	
		I						
	Implementation of regional plans and programmes		To provide exhaustive facts, in relation to the progress made in planning and programming, at the various geographical levels, so as to assist the public and private sector stakeholders with respect to the definition of the policies and measures, to be implemented at the local level concerned, to foster enhanced efficiency, effectiveness and consistency in the pursuit of sustainability objectives. Moreover, the nationwide assessment of regional planning tools that may potentially affect the environment also allows the monitoring of the extent and manner of implementation, at local level, of the sustainable development guidelines issued under EU and domestic legislation	★ ★	R	2006	☹	
		R						



APPENDIX

Q19: SYNOPTIC TABLE OF INDICATORS							
SINAnet theme	Indicator	Aim		QI	Coverage		State and Trend
		DPSIR			S	T	
Environment and health	Overcrowding a		To assess the degree of overcrowding in houses, indicating a condition that can affect the health and well-being of the occupants	★ ★	I R	1991,2001	☹
	Potential years of life lost (PYLL) for road accidents	D	To highlight the weight of road accident death rate on the younger age groups. The potential years of life lost due to road accidents are an indicator of premature mortality. Compared to the death rate, it takes account of the age of the population involved. It therefore represents a valid support to policymakers, with respect to the choice of prevention and planning priorities, in relation to mobility and transport	★ ★ ★	I	1997-2002	☹
		I					
	Exposure of children to outdoor airborne atmospheric pollutants - PM ₁₀		To show exposure of the population (in this specific case, of children) to the concentrations of PM ₁₀ in city air, by comparing the situation in a number of different cities and/or general exposure over time. To provide information on the efficacy of the policies implemented to mitigate air pollution, with respect to the health of the general population.	-	-	-	-
		I					
a - This indicator has not been updated, compared to the 2004 Yearbook, either because the relevant information is supplied according to intervals of more than one year, and/or because the information was not made available in useful time. Therefore, the relative indicator fact sheet is not contained in this edition of the Yearbook.							

Legend:

The bold print shows the indicators featured in the Yearbook Summary.

Geographical coverage:

Indicates the level of geographical coverage of the data used to build the indicator.

"I": Nationwide: the data are aggregated and representative of only the country as a whole;

"R x/20": Regional: the data enable the information to be represented at regional level and are available for an x number of regions;

"P y/103": Provincial: the data enable the information to be represented at provincial level and are available for an y number of provinces;

"C z/0100": Local Administrative Units (LAUs): the data enable the information to be represented at local level and are available for a z number of LAUs.

Time coverage:

Indicates the period of the available historical series and/or the data shown in the table.

DPSIR model:

For the definition of each component of the model, see structure of the document at pag. XIV

Information quality:

For the definition of each component of the model, see structure of the document at pag. XIV

State and Trends

For the definition of each component of the model, see structure of the document at pag. XIV