STANDARD SUMMARY PROJECT FICHE PROJECT NUMBER LT 01.06.02 TWINNING NUMBER LT 2001/IB/EN/02

1. Basic Information

1.1. Desiree No.

1.2. Title:	Radiation Protection
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- **1.3. Sector:** Environment/Health
- **1.4. Location:** Radiation Protection Centre of the Ministry of Health

2. Objectives

2.1. Overall Objective:

The overall objective of this \in 2.45 Million project is the transposition and implementation of the Acquis in the field of radiation protection.

2.2. Project Purpose:

- Workers exposed to radiation, radiation protection supervisors, radiation protection officers and members of public educated in matters of radiation protection
- System of assessment of radiation exposure of exposed workers and members of the public functioning, including estimation of doses to patients due to medical exposure, workplace monitoring, measurements of radioactive contamination of foodstuff, drinking water and other objects
- System of authorization and inspection of practices using sources of ionising radiation created and fully functioning

2.3. Accession Partnership/NPAA Priorities:

The project reflects the short-term priority of the 1999 Accession Partnership to *ensure institutional strengthening in the area of environment both at central and local level, particularly by establishing structures to ensure implementation of the Radiation Protection Law.* In addition, Lithuania is required to *complete transposition and continue implementation of the environmental acquis according directive-specific pre-defined timetable in nature protection, air, water and industrial related directives, waste, chemicals and genetically modified organisms, ozone depleting substances and radiation protection.*

Radiation protection, and the strengthening and further development of the Radiation Protection Centre have been defined as NPAA priorities. The following measures have been planned:

- Education of radiation protection professionals, establishment of the sector of public information in the Radiation Protection Centre, public information
- Monitoring of occupational exposure, radioactive contamination of foodstuff, their raw materials and substances, which may influence exposure, evaluation of indoor radon situation in regions with higher radon risk, estimation of doses to the members of control group due to Ignalina NPP, estimation of doses to workers, which take part in decommissioning of Ignalina NPP, accreditation of the laboratory of the Radiation Protection Centre
- Establishment of the sector of prevention, estimation and prognosis of nuclear and radiological accidents, re-arrangement of the Radiation Protection Centre.

3. Description

3.1. Background and justification

The Lithuanian Radiation Protection Law came into force in 1999, and the State Radiation Protection programme has been adopted by Government with Decree No.674 of 1 July 2000. The programme defines a series of specific measures, which are to be implemented by 2004. The following problems need to be addressed:

- Further development of the radiation protection legislation
- Establishment of a system of authorisation and inspections of practices as required by Directive 96/29 Euratom
- Estimation of doses to radiation workers, members of public and patients required by Directives 96/29, 90/641 Euratom and 97/43 Euratom,
- Establishment of systems for early information exchange and radiation protection in the case of radiological emergency as required by Directives 87/600/Euratom and 89/618/Euratom
- Control of radioactive contamination of foodstuff as required by the Commission Regulations 90/770/Euratom, 94/3034/EC, 95/686/EC, and 1661/1999/EC.
- Radiation protection as required by Directives 96/29 and 97/43 Euratom to enable Lithuania to implement the EURATOM Treaty chapter III, articles 33, 35, 36 and 37 requirements.

A special problem is the current lack of an accredited laboratory, which *inter alia* would perform measurements of doses, concentrations of radionuclides, quality control of medical radiological equipment, workplace monitoring, and measurement of radioactive contamination of some food items (see Annex II of Commission Regulation No. 1661/1999/EC). The Radiation Protection Centre has the prerequisites for accreditation of such laboratory.

All the above problems and the resulting tasks have been confirmed by an EC expert team after screening the radiation protection legislation in 1999. Their report defined as major tasks the transposition and enforcement of the framework legislation in radiation protection, the institutional strengthening in the area of environment both at central and local level, and, particularly, the need to establish structures to ensure implementation of the Radiation Protection Law.

3.2. Linked activities:

The area of radiation protection has benefited from a range of bilateral and multilateral assistance programmes.

The International Atomic Energy Agency helped creating the legal basis for radiation protection and setting up the regulatory authority. This made it possible to create the prerequisites for a radiation protection system, which complies with EC requirements.

Technical help has also been received from the Swedish Government through the Swedish Radiation Protection Institute SSI. It provided basic equipment for laboratory measurements, helped train radiation protection professionals in specific areas, supported seminars and training courses on quality assurance and radioactive waste management, and supported the national indoor radon survey.

3.3. Results:

- Drafts of legal documents concerning radiation protection that are completing transposition of the EC legislation
- Strenghtening of the Radiation Protection Centre as a regulatory authority for authorization and inspection of practices using sources of ionizing radiation both on central and regional levels. For this, a united and permanent system including all departments of the Radiation Protection Centre must be in force that will include the information exchange between all the concerned bodies according to their competence in radiation protection. Thus, the following specific results will be achieved:
 - System of authorization and inspection of practices using sources of ionising radiation set up
 - Staffing and equipping the Centre for inspections of practices using sources of ionising radiation
 - Emergency response service in the Radiation Protection Centre set up with properly trained staff and the necessary equipment and protective devices
 - Information exchange system established linking the competent departments of the Radiation Protection Centre to other regulatory institutions in Lithuania and to the appropriate institutions of the EU
 - Report on general data relating to disposal of radioactive waste as it is required by Article 37 of the Treaty.
- Introduction of training and education systems addressed to enterprises using sources of ionising radiation, radiation workers, radiation protection supervisors, radiation protection officers and the general public all of whom need to be instructed in radiation protection matters. An important feature of the system is to achieve a dependable partnership between radiation protection inspectors and users of ionising radiation sources.
- Introduction of an assessment system incorporating the assessment of exposure of members of public and exposed workers; estimation of doses to patients due to medical exposure; workplace monitoring; and the measurement of radioactive contamination of foodstuff, drinking water and other objects. This will include the following specific results:
 - Development of the system
 - Setting up the laboratory for radiological measurements and dosimetric service, including internal dosimetry,
 - Accreditation of the laboratory.

3.4. Activities

The Project will be implemented through one Twinning arrangement and one international supply tender for the procurement of technical equipment.

3.4.1 Twinning package

Guaranteed results/expected outputs

The Twinning Arrangement will support the Radiation Protection Centre in continuing the adoption and implementation of the radiation protection *Acquis*. It will produce the following results:

- Draft strategies and action plans to apply the legal provisions following further harmonisation of national radiation protection legislation with EC requirements.
- Plans and proposals for strengthening the system of authorization and inspection of practices using sources of ionising radiation, emphasising the role of the Radiation Protection Centre as a regulatory authority both at central and regional levels. The proposals will be based on a detailed needs analysis assessing present emergency preparedness standards in Lithuania against the background of best EC practice. This will help defining the instrumentation needs for dosimetric control under radiological accident, and for the modernization and obtaining of protective facilities.
- Plans for an improved organisation of the Radiation Protection Centre including staffing, equipment (office, laboratory, and measuring equipment), and funding.
- Concepts for the radiation protection training directed at exposed workers, radiation protection professionals, and members of the public, including schedules, teachers, and requirements for examinations. The following specific results will be accomplished:
 - Ten seminars for enterprises and exposed workers on EC radiation protection legislation
 - Publication of a book on ionising radiation, uses of sources and measures taken by the EC to protect population from hazards of ionising radiation,
 - o Training of 70 teachers for radiation protection
 - System of examinations on radiation protection introduced
 - Three seminars on radiation protection for radiation protection professionals carried out
 - Study trips for 20 radiation protection professionals to Member States
 - Public information service set up in the Radiation Protection Centre.
- Plans and proposals for the exposure assessment system including the following specific results:
 - Evaluation of the current situation and detailed needs analysis
 - Specification of laboratory equipment for monitoring of contamination with radionuclides of air, drinking water, foodstuffs and raw materials, building materials, as well as other bodies, which may be a source of exposure of humans
 - Proposals for quality assurance measures leading to compliance with the ISO standards,
 - Assistance in tendering and contracting concerning monitoring equipment
 - Training of specialists in order to improve their qualification for the adaptation of European standards
 - Advice on reaching the compliance with EN ISO/IEC 17025.
- Plans and proposals for the monitoring of internal contamination including the following specific results:
 - Advice on preparing the premises for the laboratory

- Establishing a system for staff education and training
- Specification of hardware and software for internal exposure assessment using measurement results
- Design, development and implementation of internal exposure monitoring programs, techniques, and guidelines.

Scope of the twinning and profile of the PAA

One PAA with good administrative skills and good knowledge of written and spoken English for 21 months. The PAA will be responsible for the co-ordination of STA and all reports associated with the project. He/She will possess the following qualifications:

- general background in radiation protection,
- training on preparedness for radiological and nuclear accidents
- creation of the system for estimation of exposure.

It is very important to organize training for technical staff of laboratory. The target group would consist of workers engaged in radiological analysis, sampling and evaluation of measurements results. The PAA shall help prepare and carry out action plans and strategies concerning strengthening the state monitoring and control in the field of radiation protection.

Required inputs

One PAA for 21 months, expatriate short-term advisers for ten person/months, and local experts/assistants for 24 person/months

Short-term experts/Project assistants

All the experts should be fluent in English. Short-term expert inputs of about ten person/months duration will be directed at

- Legal matters
- Information management
- Software development, education
- Personal dosimetry
- Nuclear measurements (with emphasis of quality assurance)
- Accreditation of testing laboratory
- Emergency preparedness
- Radiological laboratory management, and
- Supervision and control of shipments of radioactive waste.

Local experts/assistants will support the management of the project for some 24 person/months. Local experts must have a good track record in project management, possess common knowledge in radiation protection, and be fluent in English and Lithuanian

Operating environment of the twinning

The Radiation Protection Centre will be the counterpart institution for the twinning project. To ensure smooth operations, it will provide office accommodation and the usual office equipment to the project. It will also contribute to covering the expenses of training events in Lithuania and of local travel (contact details in point 6.2).

3.4.2 Supply Contract

The Radiation Protection Centre will be equipped to achieve accreditation in the areas of personal (both external and internal) dosimetry, measurements of radioactivity in foodstuff and other bodies, measurements of indoor radon concentrations, and quality control of radiological equipment. The supply tender will cover the equipment requirements of the Centre including its departments in the regions. A detailed needs analysis will be undertaken with the support of a Technical Assistance team. It will lead to the preparation of technical specifications and the draft tender dossier. The following are the main items required:

- Gamma spectrometers,
- Whole body counter,
- TLD reader of personal doses,
- Counting system for determination of gross beta activity,
- Dose and dose rate monitors for workplace monitoring,
- System for determination of doses received in computed tomography,
- System for quality control in radiation therapy,
- Accessories for radiochemical analysis,
- Equipment for data analysis and information exchange.

4. Institutional framework

By law, the Ministry of Environment is authorizing and controlling releases of radioactive substances. Besides, the Ministry is performing environmental monitoring, issuing permissions for import, export and transportation of radioactive substances.

The Department of Civil Protection at the Ministry of Defence is entitled to organise and co-ordinate actions of state institutions and municipalities in the cases of off-site radiological and nuclear accidents.

The Radiation Protection Law mandates the Radiation Protection Centre of the Ministry of Health to

- Co-ordinate *the activities of executive and other bodies of public administration and local government* in the field of radiation protection
- Perform state supervision and control of radiation protection, and
- To monitor exposure due to different sources, both artificial and natural.

According to the Governmental Resolution No. 578 of 12 May, 1998 *on Procedure on the Dosimetric Control in the Case of the Radiological Accident*, the Radiation Protection Centre is responsible for organisation of dosimetric control, its implement ation, co-ordination and control in the case of radiological accident. It is also charged with the licensing (authorization) of practices with ionising radiation sources, and for the supervision and control of compliance with the requirements laid down in the k-gal acts on radiation protection.

In line with these legal requirements, the main tasks and activities of the Radiation Protection Centre include at present the following:

- Preparation of drafts of laws and other legislation on radiation protection,
- Licensing of users of sources of ionising radiation,
- Inspection of legal persons and enterprises on compliance with the radiation protection requirements, enforcement in the case of noncompliance,
- Monitoring of contamination by radionuclides of air, drinking water, foodstuffs and their raw materials, building materials and their products as well as other objects which may results in the exposure of humans,
- Preparation of reviews on radiation protection and proposals on radiation protection to the executive bodies of public administration, control institutions and municipalities, providing of information to public,

- Monitoring of exposure of members of public, exposed workers and separate risk groups under normal conditions and in the event of radiological or nuclear accident, assessment of impact of ionising radiation on humans,
- Investigations and state expertise of situation in radiation protection,
- Investigation of radiological accidents, forecast of their consequences and preparation of proposals for their prevention and mitigation,
- Co-operation with international and national organizations in the field of radiation protection,
- Keeping of the State Register of Sources of Ionising Radiation and Exposure of the Workers.

The Centre is headquartered in Vilnius and has departments in Kaunas, Klaipeda, Šiauliai and Panevežys. It has a staff of over 50 professionals including hygiene doctors, engineers, radiochemists, and technicians.

Project Components	Investment Support	Institution Building	Total Phare (I+IB)	National Co- financing ^{*)}	IFI	TOTAL
Twinning		0.75	0.75			0.75
Supply Con- tract	1.25		1.25	0.45		1.70
TOTAL	1.25	0.75	2.00	0.45		2.45

5. Budget (MEUR)

*) The national co-financing part is included in the state investment programme 2001-2003 in the section of the Ministry of Health.

The Phare amount is binding as a maximum amount available for the project. The ration between the Phare and national co-finance amounts is also binding and has to be applied to the final contract price. The national co-financing commitment is a taxexcluded net amount.

An amount not exceeding 5 percent of the total project budget can be used for supervision activities.

6. Implementation Arrangements6.1. Implementing Agency

The CFCU will be the Implementing Agency responsible for tendering, contracting, and accounting.

PAO: Mr. Z. Pajarskas, CFCU Director

J. Tumo-Vaizganto 8A/2- 2600 Vilnius- Lithuania

Tel: +370/2/791 487, Fax: + 370/2/225 335, e- mail: cfcu@takas.lt

For the beneficiary, Mr. Albinas Mastauskas, Director of the Radiation Protection Centre will be responsible for technical preparation and control. His contact address is Albinas Mastauskas, Director, Radiation Protection Centre of the Ministry of Health, tel. +370 2 763633, fax: +370 2 754692, e-mail: rsc@rsc.lt

6.2 Twinning

The Twinning Team will primarily be located at the Vilnius headquarters of the Radiation Protection Centre. The Counterpart of the PAA will be Mr. Albinas Mastauskas, Director, Radiation Protection Centre of the Ministry of Health, tel. +370 2 763633, fax: +370 2 754692, e-mail: rsc@rsc.lt

6.3 Non-standard aspects

PRAG rules and procedures and Twinning Manual guidelines will be strictly applied.

6.4 Contracts

There will be two operations as follows: Value of Twinning Covenant Value of international supply tender

€0.75 Million €1.70 Million

7. Implementation Schedule

Component	Start of Tende ring	Start of Project Activity	Project completion
Twinning Arrangement	3Q/01	2Q/02	2Q/04
Supply contract for SPPS	2Q/02	4Q/02	3Q/03

8. Equal opportunity

Equal opportunity principles and practices ensuring equal gender participation in the Project will be guaranteed.

9. Environment

All equipment supplies will respect the relevant environmental standards of the European Union. No special provisions.

10. Rate of Return

The investment elements of the project refer to institutional development activities for which rates of return are not calculated.

11. Investment Criteria	
11.1. Catalytic effect:	The project will finance activities that will help the beneficiary institutions to comply with EU standards and other international requirements in early 2004. Without Phare support, full compliance could be achieved only much later.
11.2. Co-financing:	Lithuanian government institutions will contribute $\in 0.4$ Million or about 25 percent of the investment component of the project.
11.3. Additionality:	No other financiers will be displaced by the Phare intervention.
11.4. Project readiness and size:	The necessary project strategies have been completed with Phare support. Preparation for Phare tendering and contracting can commence immediately.
11.5. Sustainability:	Relevant government policies ensure sustainability. The beneficiary institution is in a position to operate the project and the procured equipment effectively in the long run. All acquired equipment will respect the standards applicable after Lithuania's accession to the Union.
11.6. Compliance with state aids provisions:	The state aids provisions of the Europe Agreement will be respected.

11.7. Contribution to	Not applicable
National Development	
Plan:	

12. Conditionality and Sequencing

The project is conditional on the availability of local co-finance. The project will be sequenced as shown in the Implementation Schedule.

Annexes to Project Fiche

- 1. Logframe Matrix
- 2. Detailed Implementation Chart
- 3. Cumulative Contracting and Disbursement Schedule for the Project
- 4 List of Relevant Laws and Regulations

LOGFRAME PLANNING MATRIX FOR		Programme Name: PHARE	Radiation Protection
Project:		Number: LT 01 06 02	
Radiat	Contracting Period Expires: 09/2003	Disbursement Period Expires: 09/2004	
		Total Budget: €2.45 Mil- lion	Phare Budget: €2.0 Million
Overall Objective : Transposition and implementation of the Acquis in the field of radia- tion protection	Objectively Verifiable Ind cators: All performance indicators equal or better than in comparable member states	 Source of Verification Regular Reports Screening Reports 	
 Project Purpose: Workers exposed to radiation, radiation protection supervisors, radiation protection officers and members of public educated in matters of radiation protection System of assessment of radiation exposure of exposed workers and members of the public established and functioning as planned System of authorization and inspection of practices using sources of ionizing radiation created and fully functioning 	 Objectively Verifiable Indicators: Raditation protection awareness reaches levels as in Member States Documented protection practices similar to practices in Member States Accreditation of the laboratory for radiological measurements and dosimetric service, including internal dosimetry 	 Source of Verification Specific surveys on radiation protection 	 Assumptions Continued political commitment to meet the EU accession re- quirements Overall commitment to the proc- ess of reform in the pre-accession period Remainder of the radiation pro- tection Acquis adopted
 Results Legal documents concerning radiation protection drafted in line with EC legislation Radiation Protection Centre ready to perform its role as regulatory authority for authorization and inspection of practices using sources of ionizing radiation Radiation protection training systems operational Radiation exposure assessment system established 	 Objectively Verifiable Indicators Legal texts approved by competent Lithuanian authorities Documented system of authorization and inspection of practices using sources of ionizing radiation, staff and equipped the Centre for inspections of such practices, emergency response service in the Radiation Protection Centre staffed and equipped, and information exchange system 10 seminars on EC radiation protection legislation, book on ionizing radiation, training of 70 teachers for radiation protection, documented system of examinations on radiation protection, 3 seminars on radiation protection, study trips for 20 radiation protection Protection Centre. Documented radiation exposure assessment system 	 Source of Verification Reports by PAA and Project leaders CFCU reports Handing-over notes 	 Assumptions. Legal drafts accepted by competent authorities Accreditation of the Radiation Protection Centre achieved Trained officers can be retained within the system. Sufficient funds for the operation of all systems available.
 Activities Develop concepts and proposals for further harmonization of Lithuania's radiation protection legislation strengthening the system of authorization and inspection of practices emphasising the Radiation Protection Centre as a regulatory authority an improved organisation of the Radiation Protection Centre radiation protection training exposure assessment system monitoring of internal contamination accreditation of the Radiation Protection Centre 	Means One Twining Arrangement with the Radiation Protection Centre of the Ministry of He sation, and one international supply contract + short term expertise	alth as Lithuanian partner organi-	Assumptions Local co-financed available when required
			 Preconditions Availability of local co-finance for the project confirmed High quality project management

Radiation Protection

Detailed Implementation Chart

Year				2001				2002									2003					2004														
Month	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
Twinning																																				
Supplies																																				



design tendering implementation

Radiation Protection

Cumulative Contracting and Disbursement Schedule (Phare Contribution only - €2.0 Million)

			20	02			2004					
	30/06	30/09	31/12	31/03	30/06	30/09	31/12	31/03	30/06	30/09	31/12	31/03
Contracting												
• Twinning					0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
• Supplies							1.25	1.25	1.25	1.25	1.25	1.25
Total contracting (cumulative)					0.75	0.75	2.00	2.00	2.00	2.00	2.00	2.00
Disbursement												
• Twinning					0.05	0.20	0.30	0.40	0.50	0.60	0.65	0.75
• Supplies							0.20	0.50	1.00	1.25	1.25	1.25
Total disbursement (cumulative)					0.05	0.20	0.50	0.90	1.50	1.85	1.90	2.00

Annex 4

Radiation Protection

Lithuanian legislation	The EC document to which the Lituanian legislation refers
The Radiation Protection Law, adopted on January 12, 1999	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation
	Council Directive 97/43/EURATOM of 30 June 1997 on Health Protection of In- dividuals Against the Dangers of Ionizing Radiation in Relation to Medical Expo- sure, and repealing Directive 84/466/EURATOM
The Radioactive Waste Management Law, adopted on May 20, 1999	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation
The Governmental Resolution No. 653 On Regulations of Licensing the Prac- tices with Ionising Radiation Sources, adopted on May 25, 1999	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation
The Governmental Resolution No. 651 On Establishment of the State Register of the Sources of lionizing Radiation and Exposure of Workers, adopted on May 25, 1999	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation
The Governmental Resolution No. 578 On General Provisions on Dosimetric Control in Case of Radiation Accident, adopted in 1998	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation
Order No. 219 On the Monitoring of the Foodstuffs Contamination, adopted in 1997 by the Minister of Health	Council Regulation of 22 March 1990 on the conditions governing imports of agri- cultural products originating in third countries following the accident at the Chernobyl nuclear power-station. (90/737/EEC).
Order No. 600/528/1063 On the Informa- tion Exchange in the Case of Usual Situations and at Emergencies" adopted	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and

List of Relevant Laws and Regulations

in 1997 by the Minister of Health, Min- ister of Defence and Minister of Internal Affairs	the General Publics Against the Dangers Arising from Ionizing Radiation Council Directive of 27 November 1989 on informing the general public about health protection measures to be applied and to be taken in the event of a radio- logical emergency (89/618/EURATOM
Order No. 146 On Procedure of Verifica- tion of Compliance with Radiation Pro- tection Requirements, adopted on March 31, 1999 by the Minister of Health	96/29/EURATOM of 13 May 1996 Basic Safety Standards for Council Directive Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation
Order No. 302 On the Procedure of Pre- senting the Information about Nuclear, Radioactive Materials and other Sources of Ionising Radiation, that goes through the State Border of Lithuanian Republic, adopted on June 23, 1999 by the Minister of Health	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation
Order No. 335 On the Procedure of Pre- senting the Information to the State Reg- ister of the Sources of lionizing Radiation and Exposure of Workers about the Sources of Ionising Radiation and the Data on Exposed Workers, adopted on July 20, 1999 by the Minister of Health	Directive Council 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation
Order No. 397 On the Procedure of Import, Export, Transit and Transportation in the state of Radioactive Substances and Radioactive Waste and the Procedure of Returning of Spent Sealed Sources, adopted on December 13, 1999 by the Minister of Environment	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation
Order No. 197 On the Procedure of Monitoring of the Exported Foodstuffs Radioactive Contamination, adopted on April 29, 1999 by the Minister of Health, supplement No. 542, adopted on Decem- ber 2, 1999	Commission Regulation 1661/1999/EC of 27 July 1999 laying down detailed rules for the application of Council Regulation (EEC) No 737/90 on the con- ditions governing imports of agricultural products originating in third countries following the accident at the Chernobyl nuclear power-station.
Order No. 44 On the Procedure of Moni- toring of Radiation Exposure and Work- places, adopted on December 31, 1999 by the Director of the Radiation Protection Centre	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionising Radiation
Hygiene Regulations HN 73 -1997 "Basic	Council Directive 96/29/EURATOM of

standard of radiation protection", adopted by the Order No. 708 on December 24, 1997 by the Minister of Health	13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionising Radiation
Hygiene Regulations HN 31:1998 "Ra-	Council Directive 96/29/EURATOM of
diation protection and safety in medicine	13 May 1996 Basic Safety Standards for
X-rays diagnostic practice", adopted by	Protection of the Heath of Workers and
the Order No. 786 on December 28, 1998	the General Publics Against the Dangers
by the Minister of Health	Arising from Ionizing Radiation
	Council Directive 97/43/EURATOM of 30 June 1997 on Health Protection of In- dividuals Against the Dangers of Ionizing Radiation in Relation to Medical Expo- sure, and repealing Directive 84/466/EURATOM
Hygiene Regulations HN 52:1999 " Ra-	Council Directive 96/29/EURATOM of
diation protection and safety in industrial	13 May 1996 Basic Safety Standards for
radiography", adopted by the Order No.	Protection of the Heath of Workers and
379 on August 16, 1999 by the Minister	the General Publics Against the Dangers
of Health	Arising from Ionising Radiation
Hygiene regulations HN 54:1998 "Raw materials and foodstuffs. Maximum ra- dionuclide permitted levels of chemical contaminants and	Council Regulation 90/737/EEC of 22 March 1990 on the Conditions Governing Imports of Agricultural Products Origi- nating in Third Countries Following the Accident at the Chernobyl Nuclear Power Station
Hygiene Regulations HN 77:1998 "Ra- diation protection and safety in nuclear medicine practice", adopted by the Order No. 720 on December 7, 1998 by the Minister of Health	Council Directive 97/43/EURATOM of 30 June 1997 on Health Protection of In- dividuals Against the Dangers of Ionizing Radiation in Relation to Medical Expo- sure, and repealing Directive 84/466/EURATOM
Hygiene Regulations HN 78:1998 "Qual-	Council Directive 97/43/EURATOM of
ity control in medical x-ray diagnostics.	30 June 1997 on Health Protection of In-
General requirements and evaluation cri-	dividuals Against the Dangers of Ionizing
teria", adopted by the Order No. 736 on	Radiation in Relation to Medical Expo-
December 10, 1998 by the Minister of	sure, and repealing Directive
Health	84/466/EURATOM
Hygiene Regulations HN 83:1998 "Ra-	Council Directive 90/641/EURATOM of
diation protection and safety of outside	4 December 1990 on the operational
workers", adopted by the Order No. 756	protection of outside workers exposed to
on December 21, 1998 by the Minister of	the risk of ionizing radiation during their
Health	activities in controlled areas
Hygiene Regulations HN 84:1998	Council Directive 87/3954/Euratom of 22
"Maximum permissible levels of radioac-	December 1987 Laying Down Maximum
tive contamination of foodstuffs and	Permitted Levels of Radioactive Con-

feedingtuffs following a nuclear or ra-	tamination of Foodstuffs and of Feed-
diological emergency", adopted by the	ingstuffs Following a Nuclear Accident
Order No. /39 on December 11, 1996 by	or any Other Cases of radiological Eller-
Order No. 739 on December 11, 1998 by the Minister of Health	or any Other Cases of radiological Ener- gency Council Directive 89/2218/Euratom of 18 July 1989 amending Regulation (EURATOM) No. 3954/87 Laying Down Maximum permitted Levels of Radioac- tive Contamination of Foodstuffs and of Feedingstuffs Following a Nuclear Acci- dent or any Other Cases of Radiological Emergency Commission Regulation 90/770/ EURATOM of March 1990 laying down Maximum Permitted Levels of Radioac- tive Contamination of Feedingstuffs Fol- lowing a Nuclear Accident or any Other Cases of Radiological Emergency Commission Regulation 89/2219/ EURATOM of 18 July 1989 on Special Conditions for Export Foodstuffs and Feedingstuffs Following a Nuclear Acci- dent or any Other Cases of Radiological Emergency Commission Regulation 89/944/ EURATOM of 12 April 1989 laying down Maximum Permitted Levels of Ra- dioactive Contamination in Minor Food- stuffs Following a Nuclear Accident or
	gency
Hygiene Regulations HN 85:1998 "Natu- ral exposure. Standards of radiation pro- tection", adopted by the Order No. 787 on December 28, 1998 by the Minister of Health	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation
Hygiene Regulations HN 94:1999 "Re- quirement of quality control in computed and conventional tomography and in mammography screening", adopted by the Order No. 567 on December 31, 1999 by the Minister of Health	Council Directive 97/43/EURATOM of 30 June 1997 on Health Protection of In- dividuals Against the Dangers of Ionizing Radiation in Relation to Medical Expo- sure, and repealing Directive 84/466/EURATOM
Hygiene Regulations HN 86:1999 "Non Medical Nuclear and X-rays Equipment", adopted by the Order No. 572 on Decem- ber 31, 1999 by the Minister of Health	Council Directive 97/43/EURATOM of 30 June 1997 on Health Protection of In- dividuals Against the Dangers of Ionizing Radiation in Relation to Medical Expo- sure, and repealing Directive 84/466/EURATOM

Hygiene regulations HN 88:2000 "Ra- diation protection and safety non medical unsealed sources"	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionising Radiation
Hygiene Regulations HN 95:1999 "Ra- diation protection and Quality control in radiotherapy", adopted by the Order No. 566 on December 31, 1999 by the Min- ister of Health	Council Directive 97/43/EURATOM of 30 June 1997 on Health Protection of In- dividuals Against the Dangers of Ionizing Radiation in Relation to Medical Expo- sure, and repealing Directive 84/466/EURATOM
Hygiene regulations HN 99:2000 "Pro- tective actions of public in the case of radiological and nuclear accident"	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionising Radiation
Hygiene regulations HN 87:2001 "Radia- tion protection in nuclear power plant"	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionising Radiation
Hygiene regulations HN 89:2001 "Man- agement of radioactive waste"	Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionising Radiation