1. Basic Information
   1.1. CRIS Number: 2005/017-488.01.06
   Twinning No.: PL2005/IB/SO/01
   1.2. Title: Strengthening of State supervision and monitoring system of exposure to electromagnetic fields
   1.3. Sector: Occupational Medicine
   1.4. Location: Poland

2. Objectives

2.1. Overall objective
Reinforcement of the state supervision of electromagnetic field (EMF) exposure monitoring system in Poland by increasing the capacity of regional structure of the Chief Sanitary Inspectorate (the existing network of 16 voivodship sanitary stations) and the Chief Labour Inspectorate (state labour inspectorates) – through providing high-quality training, consultations and promotion.

2.2. Project purpose
Reinforcement of the state monitoring of EMF exposure within 0 Hz – 300 GHz through:
1) Implementing the EU methodology and practice in the state system of protection against EMF and strengthening its work,
2) Improving competencies of the state sanitary inspection (SSI) personnel, the state labour inspection (SLI) personnel, scientific and didactic units and bodies of opinion in the scope of workers and population and the third bodies’ safety and health protection through courses implementing the EU methodology and practice in the state system of protection against EMF.

2.3. Justification

European Community Treaty
Chapter 13
In the area of health and safety at work, legislative shortcomings persist with regard to the Framework Directive as well as to individual directives like physical agents (EMF) at work. SSI and SLI are in place, but further strengthening, in terms of both staffing and technical facilities, is needed. There is also a need for enhanced co-operation among the Sanitary Inspectorate, the Labour Inspectorate and the authorities responsible for health and safety at work issues in order to assure that risk assessments are done in comprehensive way. Improving competencies of SSI personnel (voivodship level) in this scope and supervising exposure to EMF monitoring system in Poland should be reinforced.

The Comprehensive Monitoring Report on Poland’s preparation for membership
Chapter 13
In the field of occupational and public health [...] it is necessary to continue the policy aiming at improvement of human health as well as to allocate adequate funds on prophylactic activities within safety and health protection of workers and population exposed to EMF.
Moreover, it is necessary to place special attention to assessment of occupational risk, management and risk information in the above mentioned group of people.

3. Description

3.1. Background and justification

The Council’s Directive 89/391/EEC of 12\textsuperscript{th} of June 1989 called “framework directive” (general) is a principal EU act and refers to implementing instruments in order to improve safety and health of employees during performing their duties at work. Council’s 18. Individual Directive 2004/40/EC was published 30\textsuperscript{th} April 2004. It concerns minimum requirements for safety and health protection of employees under EMF exposure within 0 Hz-300 GHz.

The Ministry of Economy and Labour’s Regulation of 29\textsuperscript{th} November 2002 regulates current aspects of health and safety protection of workers against EMF in the field of the highest acceptable concentration and intensity of health harmful agents at workplace. Attachment no. 2, Part E (Register No. 217, art. 1833).

The work conditions and workers’ health protection control is conducted by SSI through the network of 16 voivodship sanitary-epidemiological stations (SSI-net) and their branches in the highly industrialised towns and cities. The State Sanitary Inspection (SSI) is controlled by the Chief Sanitary Inspector and Chief Sanitary Inspectorate (basis: the Act of the State Sanitary Inspection, Register No. 98.90.575). Institutions using equipment emitting EMF are controlled by personnel of the station, who can also carry out measurements at workplace for exposure to the field assessment purposes. On the basis of the above described actions “The Voivodship Database of EMF Sources” is conducted.

Since 1995 on behalf of the Chief Sanitary Inspector the Nofer Institute of Occupational Medicine has been conducting the actualised annually register of EMF sources called “the Central Register of EMF Emission Sources for Hygienic and Sanitary Purposes”. The computer monitoring system of EMF sources containing “the Database of EMF Sources” is a main module of the Register. Conclusion of the data gathered the report entitled “the Annual Report on Protection Against EMF 0 Hz – 300 GHz at Workplace” has been developed. The Central Register described above takes its data from voivodships’ registers with their evidence of work places where the EMF sources are used and a number of the EMF sources according to the structure of classification of economic activity, and a number of workers exposed according to EMF exposure indicators and results of environmental measurements at workplace. The Central Database and Voivodship Databases of EMF Sources constitute a base for a monitoring system of the EMF sources in Poland.

Until now the EMF control assessment has been conducted due to the national legislation. In 2001 – 2003 Polish regulations referring to Maximum Admissible Intensities (MAI) for EMF within 0 Hz – 300 GHz were modified: regarding exposure of employees new values for MAI in EMF were published in 2001, new Polish Standards (PS) for terminology and methods of measurement and assessment of exposure to EMF were published in 2002, new acceptable standards of EMF for environmental protection (i.e. general population) purposes were published in 2003.

As a new member of the European Union Poland is obliged to respect requirements of the European Communities. The existing national monitoring system of EMF exposure has been working since the beginning of the 70\textsuperscript{’s}, however, its resolutions and provisions need to correspond with the requirements of appropriate Directives after joining EU by Poland. In 2004 the 2004/40/EEC directive was published. It referred to minimum safety and health
The Strengthening State Supervision and monitoring system of exposure to electromagnetic fields project activities will contribute to increasing its capacity in occupational risk assessment and in effective fulfillment of legal requirement in force resulting from the Framework Directive and from the Specific Directive with accordance with its article 16, in particular concerning EMF (0 Hz – 300 GHz) in the working environment through implementation of the methodology and EU practice of the EU member states.

“The Central Register of EMF Emission Sources for Hygienic and Sanitary Purposes” including “the Database of EMF Sources” conducted by the Nofer Institute of Occupational Medicine in Lodz is a unique method for generating information about EMF sources and exposure to EMF and operating as a rich information source for conducting mainly retro and prospective analyses of exposure to EMF in many parallel planes. The EMF sources monitoring system with “the EMF Sources Database” is a modern information instrument about risk and risk management like of EMF exposure, which remains one of the WHO priorities. On changing the national exposure to EMF monitoring system according to the EU directives the already working “Central Register,” needs to be modernised in order to adjust it to requirements of the modified exposure to EMF monitoring system.

In order to guarantee the high credibility of the measurement results at workplace fulfilling the measuring procedures criteria in EU the high class monitoring and measuring equipment is necessary. Both SSI and the Nofer Institute of Occupational Medicine in Lodz work on used and old equipment, which makes it impossible to conduct measurement in accordance with the EU required range as the equipment does not meet the minimum requirements necessary to realise acquis compliant work.

3.2. Linked activities:
(1) In Poland providing implementation of the EU methodology and practice within risk assessment of exposition of employees and population to EMF through full adjusting Polish law and the law accepted by EU and harmonising them in the area referring to safety and health protection of the workers and population exposed to EMF of 0 Hz – 300 GHz in terms of the ‘General’ Council Directive 89/391/EEC and 18th Directive 2004/40/EEC.
(2) Strengthening state supervision of EMF exposure monitoring system on the national level through improving competencies of the personnel responsible for its control by professional training courses and workshops.
(3) Modernising and adjusting the annually actualised already working register “the Central Register of EMF Emission Sources for Hygienic and Sanitary Purposes” being an instrument for assessment and risk management like exposure to EMF at workplace to requirements of the EU Directives.

Linked activities under the PHARE program:
1. **PL 01.02.09 Chemicals directives and administration**
   The objectives and results of the project were focused on improving the protection of human and environment against adverse effects of chemicals through:
   - implementation of transparent rules of placing chemicals on the market and their use, as well as by
   - surveillance of placing chemicals on the market and their use
   The expected result of the twinning project with the Swedish National Chemicals Inspectorate was to improve substantially the system and operational practices of chemicals control in Poland.
   The Sanitary Inspection and other Inspections (Environmental, Labour and Trade Inspections) were reinforced in order to enable them to comply with supervisory responsibilities with...
regard to the classification and labelling of dangerous substances and preparations, as well as to the marketing and use of certain dangerous substances.

2. 2002/000-580.02.02 Strengthening of administrative capacity for risk assessment and chemicals control

Project started in October 2003 and will be finished in June 2005.

The main objective of this project is to ensure better protection of humans and environment against adverse effects of chemicals through further improvement of surveillance of placing chemicals on the market and their use. The immediate objectives are as follows:

1. Further development of the human resources and infrastructure of State Sanitary Inspection through:
   - providing selected voivodship sanitary inspectorates with analytical equipment (4 gas chromatographs GCMS with additional equipment, 4 gas chromatographs with FID and ECD detectors, as well as 4 spectrophotometers UV/VIS/IR)
   - improvement of the capabilities of the Chief Sanitary Inspectorate staff through long term study visits in selected EU Member States and other local training programmes (3 study visits, 4 local training rounds for inspectors)

   Improvement of the management of chemicals through further strengthening of intersectoral cooperation (Pilot Exercises carried out between State Sanitary Inspection and Trade Inspection).

3. 2002/000-58-01-06 Occupational Health and Safety regarding biological agents at work

The a.m. project is a Twinning project between the German Ministry of Economics and Labour represented by the Federal Institute for Occupational Safety and Health and the Polish Ministry of Health represented by the Chief Sanitary Inspectorate in Warsaw in cooperation with the Nofer Institute of Occupational Medicine in Lodz. The main project objective is to create legal, organisational and educational bases for effective health protection for workers exposed to biological agents at work. Project activities are focused on the implementation of the directive 2000/54/EC. The project implementation period is set from the beginning of February 2004 up to the beginning of July 2005.

4. PL 01.05.05 Protection against radiation to diagnostic radiology

The aim of the project was to create a national system for quality assurance and health protection standardisation against radiation in diagnostic radiology. The project is related to the implementation of the directive 97/43/EURATOM as well as to the implementation of quality assurance and control system of X-ray equipment. Project’s immediate objective was to provide the Secondary Standard Dosimetry Laboratory, located within the structures of the Nofer Institute of Occupational Medicine, as well as Departments of Radiation Hygiene in Voivodship Sanitary and Epidemiological Stations, with equipment for performing quality tests in X-ray sets, together with training the staff of the State Sanitary Inspection within the scope of performing such tests on the equipment provided in the course of the present project.

In the Fifth Framework programme the following projects have been realized:

- NOISEHEM, QLK4-CT-2000-00293, “Noise and Industrial Chemicals: Interaction effects on hearing and balance”
- PINCHE, QLK4-CT-2002-02395, “International network on Children’s Health, environment and safety”
- EUROPIT, QLK4-CT-2001-00211, “Toxicological evaluation of the immune function on pesticide workers: a European wide assessment. Extension of existing QOL contracts to include partners from the Newly Associated States”
Strengthening of State supervision and monitoring system of exposure to electromagnetic fields

- ESSCA-DC(NAS 1), QLK4-CT-2001-00343, “European surveillance System on Contract Allergies-Data Centre”

In the Sixth Framework programme the following projects are mainly realized:
- DIEPHY, FOOD-CT-2003-505609, “Dietry exposures to polycyclic aromatic hydrocarbons and DNA damage”
- DEVNERTOX, FOOD-CT-2003-506143, “Toxic threats to the developing nervous system: in vivo and in vitro studies on the effects on mixture of neurotoxic substances potentially contaminating food”
- 9/TCGPCC/CIO-P-BIP, “Topic centre on good practice-candidate countries”

3.3. Results
The planned results of the project are as follows:
(1). Establishment of the criteria of EU methodology and practice implementation in the national monitoring system of exposure to EMF,
(2) Preparation of a report on the way of adjusting EU directives requirements to the national monitoring system of exposure to EMF:
- improving qualifications of SSI, SLI and Nofer Institute of Occupational Medicine employees
- purchasing of specialised measuring equipment
- on the basis of “Central and Voivodship Databases of Exposure to EMF Emission Sources for Hygienic and Sanitary Purposes” facilitating the EMF exposure risk assessment

3.4. Activities:
In order to conduct the project correctly the following actions should be taken:

CONTRACT 1 – Twinning
1. In order to implement EU requirements, a group of experts needs to be established choosing them among personnel of the State Sanitary Inspection (the Chief Sanitary Inspectorate, network of 16 voivodship sanitary – epidemiological stations), the State Labour Inspection (the Chief Labour Inspectorate) and Nofer Institute of Occupational Medicine (NIOM) assisting the Chief Sanitary Inspector as well as national experts for safety and health protection against EMF (these are representatives of institutes and national commissions dealing with EMF). Consequently, the knowledge obtained at training abroad will be disseminated among the employees of sanitary inspection, labour inspection and environmental protection inspection. Ensuring the public health of the whole society remains the main objective of the State Sanitary Inspection (SSI) as this Inspection deals with risk at workplace and in the natural environment.

The training actions described above in implementation and strengthening function principles of the exposure to EMF monitoring system, will be conducted according to the 89/391/EEC Council Directive 16th article and corresponding 2004/40/EEC Individual Directive referring to minimum safety and health protection requirements under the EMF exposure of 0 Hz – 300 GHz frequency range.
- Analysing the basic principles of the existing state supervision of EMF exposure monitoring system with a view of its adjustment to the EU methodology and practice – done by experts of the Nofer Institute of Occupational Medicine and EU and
national advisers – experts in order to harmonise it with requirements of 89/391/EEC and 2004/40/EEC EU Directives.
- Developing procedures implementing the changes in the state system with further its implementation on national level done by the referred above experts. The action will be taken in a form of developing projects about measuring and exposure to EMF assessing methods using the EU methodology and practice.
- Preparing a procedure book about work of the state supervision system adjusted to the EU Directives.

2. Improving work of personnel at the Institutions supervising the EMF exposure monitoring system, i.e. the Chief Sanitary Inspectorate (CSI) and NIOM as an CSI advisor, the Chief Labour Inspectorate (CLI) after its change. The action will cover participation in 20 professional training courses conducted in the EU leading institutions working on the described above problems in different ways of using EMF sources. Ten is the total number of the employees trained. The area covered by the training will refer to methodology and practice in assessment and management of the exposure to EMF risk in different national economy branches (health protection, radiocommunication, energy, industry, science). The results of training of the referred above persons will ensure the strengthening of competencies in national practice implementation, well-operating modified exposure to EMF supervision system.

3. Improving competencies of personnel at offices responsible for supervision of safety and health protection regulations of workers and population exposed to EMF 0 Hz – 300 GHz through co-operation between personnel at chosen competent offices and institutions of the EU member states realising: six 2-week fellowships for 4 employees of NIOM, 2 CLI, 2 CSI employees and 2 national experts at competent offices and institutions of chosen EU member states and ten 1-week study visits for 25 SSI-net and 10 SLI employees on voivodship level. The trained personnel will work as an expert group with the aim at disseminating the gained experience at training courses in Poland, workshops and promotion courses about the modified state supervision of EMF exposure monitoring system for personnel supervising safety and health protection conditions at workplace and for users of the EMF sources (4 courses in Poland – about 100 employees to be trained at user level).

4. Improving competencies of personnel at the existing networks of the SSI stations responsible for implementation data in “the Database of EMF Sources” building the “Voivodship Database of EMF Exposure for Hygienic and Sanitary Purposes” after modernising programme for the referred above “Database” and modification in the state supervision of EMF exposure monitoring system. The action will be covered in the form of 3 professional training courses about: relation structure of the modernised “Database” and workshops about administration programme of “the Database of EMF Sources”. We intend to train 25 employees from the network of SSI stations. The training will be conducted by the specialists from NIOM and representatives of the company preparing the modernised programme of the referred above “Database of EMF Sources”

In order to ensure fulfilment of the tasks listed in the project, a Resident Twinning Advisers (RTA) assistance and short-term experts assistance will be necessary.

RTA will be responsible for supervision and co-ordination of the project’s fulfilment and should include:
- analysis of the Polish system of exposition to EMF control and consulting its further harmonisation according to EU Directives;
Strengthening State supervision and monitoring system of exposure to electromagnetic fields

- preparing procedure for the above system;
- professional training for administrative personnel of the offices responsible for supervision of the system;
- consulting in the scope of purchasing modern measurement –control equipment for verification of EMF environmental assessment;
- consulting in the scope of improving the supervision of EMF exposure monitoring system, also “the Central Register of EMF Sources for Hygienic and Sanitary Purposes”, also its extension in the field of adding to the database workers exposed to EMF and possibility to Internet access to “the Central Database...” by the SSI-net personnel;
- assistance in elaborating publications / guide-books/ reports regarding methodology and practice assessment, management and information about the exposition to EMF risk.

RTA should meet the following criteria:
- capacity in collaboration in creation the exposition to EMF control system,
- knowledge connected with EMF,
- experience in research and assessment of occupational and environmental exposition to EMF in a wide range of frequency
- frequency and organisation of training in this subject,
- good command of English or Polish.

Short term expert will be responsible for advice and training:
- experience in research and assessment of occupational and environmental exposition to EMF in a wide range of frequency
- frequency and organisation of training in this subject,
- good command of English or Polish.

CONTRACT 2 – investment – equipment

Equipping the SSI-net units and NIOM with modern measuring and monitoring devices for the needs of the above described system and verification of the research results of EMF intensity on workers and population conducted by state and commercial laboratories other than the SSI-net units and NIOM. Equipping NIOM with modern measuring devices for the above mentioned control purposes of EMF exposure standards in a wide range of frequency and a recorder for parallel EMF standards acquisition and time of exposition to EMF, analogically to the one used in laboratories of the respective leading institutions of the EU member states (see Annex I).
CONTRACT 3 – Institution Building – Service Contract - professional software (modernisation of the existing “Database of EMF Sources”)

On modifying the state supervision of EMF exposure monitoring system, i.e. adjusting it to the EU methodology and practice, it will be necessary to modernise the software for the existing “Central and Voivodship Databases of EMF Sources for Hygienic and Sanitary Purposes” (see Annex II).

3.5. Lessons learned:
The implementation of the above mentioned EU project has offered Poland a number of measurable benefits. First of all it enabled acquaintance with the methods of implementing the requirements of particular directives in the countries that had participated in the twinning contract. The twinning partners offered counselling on ways of transferring their experience to the Polish field of the already existing regulations, as well as of the experience acquired through practice within already existing structures of surveillance and control. The Beneficiary of the project was the State Sanitary Inspection in Poland, an institution that undertakes activities in order to ensure health and safety protection against unfavourable impact of detrimental conditions and inconveniences occurring in work environment, such as actions within the scope of the prevention against occupational diseases. Due to the said projects the State Sanitary Inspection has been provided with more laboratory and measuring equipment as well as its employees trained. All the above mentioned factors have strengthened the competence of the staff as well as have reinforced capabilities of measuring control of the SSI units. This in turn has a positive influence on the implementation of the EU requirements. It is estimated that the actions taken within the scope of protection against EMFs shall prove equally successful.

4. Institutional Framework

- Ministry of Health;
- Chief Sanitary Inspectorate;
- Nofer Institute of Occupational Medicine
- Sanitary-Epidemiological Stations;
5. Detailed Budget

<table>
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<th>Transition Facility Support</th>
<th>Co-financing</th>
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<tr>
<td>Twinning Contract 1</td>
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<td>(training – component 1)</td>
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<tr>
<td>Contract 2</td>
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<td>Investment - Equipment</td>
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<td>Contract 3</td>
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<tr>
<td>Service Contract – professional software</td>
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<tr>
<td>Total</td>
<td><strong>565 000</strong></td>
<td><strong>950 000</strong></td>
<td><strong>1 515 000</strong></td>
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(*) contributions form National, Regional, Local, Municipal authorities, FIs loans to public entities, funds from public enterprises  
(**) private funds, FIs loans to private entities

The amount for co-financing for Contract 1 is entirely parallel co-financing. All costs for study visits outside Poland as part of the Twinning will be borne by the beneficiary country.

Contracts 2 and 3 will be jointly co-financed.

In the case of Joint Co-financing, where the final overall cost is lower than foreseen in the project fiche, the National Public and Transition Facility Co-financing are reduced proportionally so as to maintain the agreed rate of co-financing. In the case of Parallel Co-financing, where the final cost is lower than foreseen in the project fiche, it must be shown that the overall objectives of the project have been fully achieved.

6. Implementation Arrangements

6.1 Implementing Agency
PAO: Mr. Tadeusz Kozek, Under-Secretary of State at the Office of the Committee for European Integration; Al. Ujazdowskie 9, 00-918 Warsaw; phone +48 22 455 52 41, fax +48 22 455 52 43.  
CFCU: Foundation Co-operation Fund, CFCU Director, ul. Górnośląska 4a, 00-444 Warsaw, tel. +48 22 450-98-90, 450 99 00, fax. +48 22 450 99 05.
CFCU is responsible for handling tendering, contracting and payments of contracts on behalf of the Minister of Health, who is responsible for preparation and implementation of the projects.

6.2 Twinning
One RTA and a number of short-term experts will assist in project implementation:
- one RTA - consultations continually throughout 14-month stay in Poland
- short-term experts – consultations on specific issues specified by the beneficiary.
Beneficiary institution – the Ministry of Health, Chief Sanitary Inspectorate, the Nofer Institute of Occupational Medicine, Sanitary-Epidemiological Stations.
Contact: Halina Aniołczyk, Nofer Institute of Occupational Medicine in Lodz, phone (0-42) 631-45-58

6.3 Non-standard aspects
N/A.

6.4 Contracts
Three contracts will be provided for, including one for institution building and two for investment.
Contract 1 – Twinning – 900,000 € + 75,000 € Polish co-financing;
Contract 2 – Investment 1 – 565,000 € (gross value) + 140,500 € Polish co-financing
Contract 3 – Institution Building - Service Contract – 50,000 € (gross value) + 13,500 € Polish co-financing

7. Implementation Schedule
7.1 Start of tendering: I quarter 2006
7.2 Start of project activity: III quarter 2006
7.3 Project completion: III quarter 2008

8. Sustainability
Financial means for maintenance of the equipment and software purchase are predicted. The staff to its service is also ensured. The beneficiaries will cover cost for maintenance of the IT equipment and software with their own funds.

9. Conditionality and sequencing

9.1. Conditionalities:
- Co – financing available;
- Tender dossier for contract elaborated.

9.2. Sequencing:
The particular tasks will be carried out in following periods:

Contract 1 - Twining
Task 1. Establishing criteria for the EU methodology and practice implementation in the state supervision of EMF exposure monitoring system. Additionally, its testing
Iq. 2006 – IIq. 2007
Task 2. Developing training programmes in UE countries for SSI-net, CSI nad NIOM experts in the field of organisation, management and supervision of the national system (1 person a week, 10 persons in total).
II g. 2006 – II g 2007.
Task 3. Developing training programmes in UE countries for personnel CSI, SSI and NIOM in the field of methodology and practice in the EU countries (1 person a 2 weeks, 31 persons in total).
II g. 2006 – II g 2007.
**Task 4. Developing training programmes in Poland for personnel CSI, SSI and NIOM in the field of the modernised “Databases...” operation**
I q. 2007 – IV q. 2007
Task 5. Complete implementation of the modified national monitoring system.
IV q. 2007 – III q. 2008

Contract 2.- Investment - equipment

Equipment tender and purchase
I q.2006 – IV q. 2006

Contract 3 – Institution Building –professional software
Professional software for the modernised existing “Databases” tender.
I q. 2007 – IV q. 2007
Improving the Administrative Supervision of the Exposition to Electromagnetic Fields Control System in the Country

Strengthening of State supervision and monitoring system of exposure to electromagnetic fields

Annexes to project fiche

1. Logframe

Logframe planning matrix for:

<table>
<thead>
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<th>Project</th>
<th>Strengthening of State supervision and monitoring system of exposure to electromagnetic fields</th>
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<table>
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<tr>
<th>Overall objective</th>
<th>Objectively Verifiable Indicators</th>
<th>Sources of Verification</th>
</tr>
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| Reinforcement of the state supervision of electromagnetic field (EMF) exposure monitoring system in Poland by increasing the capacity of regional structure of the Chief Sanitary Inspectorate (the existing network of 16 voivodship sanitary stations) and the Chief Labour Inspectorate (state labour inspectorates) – through providing high-quality training, consultations and promotion. | - Implementing 89/391/EEC Directive and 2004/40/EEC Directive up to the end of 2008. | • Proper decisions of:  
  - the Health Minister  
  - the Labour Minister  
  - the Environment Protection Minister |

<table>
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<th>Project purpose (Immediate Objectives)</th>
<th>Objectively Verifiable Indicators</th>
<th>Sources of Verification</th>
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| • implementing the EU methodology and practice in the state system of protection against EMF and strengthening its work and modernising “the Central Register of EMF Emission Sources for Hygienic and Sanitary Purposes” including “the Database of EMF Sources “,  
• improving competencies of the state sanitary inspection (SSI) personnel, the state labour inspection (SLI) personnel, scientific and didactic units and bodies of opinion in the scope of workers and population and the third bodies’ safety and health protection through courses implementing the EU methodology and practice in the state system of protection against EMF,  
• improving knowledge regarding the methodology and practice in the EU state system in the scope of workers and population’s safety and health protection when exposed to EMF for SSI, SLI and state environmental protection inspection (SEPI) or other interested. | - Improving the exposure to EMF management control system by the Chief Sanitary Inspectorate by:  
  a. Improving qualifications of the SSI and SLI personnel;  
  b. Improving instruments for risk assessment, risk management and risk information in a form of verified "Register of EMF Emission Sources for Hygienic and Sanitary Purposes" conducted by the NIOM and appropriate network SSI units.  
- Modernisation of software of database of EMF sources and occupational exposure to EMF. | • Proper decisions of the Chief Sanitary Inspectorate  
• Software of database of EMF sources  
• Chief Sanitary Inspectorate’s documents;  
• Report on training at trainer and user level  
• Reports of the network of SSI documents  
Reports on modernisation of software of database of EMF sources and occupational exposure to EMF |

<table>
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<th>Results</th>
<th>Objectively Verifiable Indicators</th>
<th>Source of Verification</th>
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<th>Contracting period expires</th>
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<td>Disbursement period expires</td>
<td>IV quarter 2008</td>
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<tr>
<td>Total budget</td>
<td>1 744 000 EUR</td>
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<td>TF Budget</td>
<td>1 515 000 EUR</td>
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Improving the Administrative Supervision of the Exposition to Electromagnetic Fields Control System in the Country

### Activities

1. Elaboration of the basic principles of the state supervision of EMF exposure monitoring system with a view of its adjustment to the EU methodology and practice.

2. Training of the employees of CSI, CLI and NIOM. The training will assure strengthening, at trainer level, competencies in national practice implementation, well-operating modified exposure to EMF supervision system.

3. Improving competencies of employees of NIOM, CLI, CSI, national experts and SSI (10 persons at six 2-week courses in EU states), about 35 employees of SSI and SLI (10 1-week study visits in the EU states). The trained personnel will work as an expert group with further aim at passing the gained experience at training courses in Poland, workshops and promotion courses about the modified state supervision of EMF exposure monitoring system for personnel supervising safety and health protection conditions at workplace and for users of the EMF sources (4 courses in Poland – about 100 employees to be trained at user level).

4. Training of 25 employees from the network of SSI stations within conducting the modernised “Database of EMF Sources” (3 professional courses in Poland).

### Objectively Verifiable Indicators

- preparing procedures for the supervision of EMF exposure system harmonised with EU
- minimum 200 employees in Sanitary Inspection, Labour Inspection and NIOM will have been trained by the end of 2007 for conducting supervision and measurement at workplace
- twinning covenant (1 RTA and a number short time experts)
- till the end of 2007 the Sanitary Inspection and NIOM will be equipped with modern equipment for EMF exposure monitoring at workplace
- till the end of 2007 the software will be modernised and tested in practice of EMF exposure risk assessment
- preparing high qualified NIOM staff members (4), the Chief Sanitary Inspectorate’s employees (2) and 25 employees of appropriate local sanitary-epidemiological units (25) for conducting supervision.

### Source of Verification

- preparing high qualified NIOM staff members (4), the Chief Sanitary Inspectorate’s employees (2) and 25 employees of appropriate local sanitary-epidemiological units (25) for conducting supervision.
- minimum 200 employees in Sanitary Inspection, Labour Inspection and NIOM will have been trained by the end of 2007 for conducting supervision and measurement at workplace
- twinning covenant (1 RTA and a number short time experts)
- till the end of 2007 the Sanitary Inspection and NIOM will be equipped with modern equipment for EMF exposure monitoring at workplace
- till the end of 2007 the software will be modernised and tested in practice of EMF exposure risk assessment
- preparing high qualified NIOM staff members (4), the Chief Sanitary Inspectorate’s employees (2) and 25 employees of appropriate local sanitary-epidemiological units (25) for conducting supervision.

- preparing procedures for the supervision of EMF exposure system harmonised with EU
- minimum 200 employees in Sanitary Inspection, Labour Inspection and NIOM will have been trained by the end of 2007 for conducting supervision and measurement at workplace
- till the end of 2007 the Sanitary Inspection and NIOM will be equipped with modern equipment for EMF exposure monitoring at workplace
- till the end of 2007 the software will be modernised and tested in practice of EMF exposure risk assessment
- preparing high qualified NIOM staff members (4), the Chief Sanitary Inspectorate’s employees (2) and 25 employees of appropriate local sanitary-epidemiological units (25) for conducting supervision.
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Improving the Administrative Supervision of the Exposition to Electromagnetic Fields Control System in the Country

Strengthening of State supervision and monitoring system of exposure to electromagnetic fields

| Implementation within safety and health protection of workers and users of EMF sources (at the user level, see p. 3 of the Activities) 25 SSI and NIOM equipped in high class measuring and monitoring devices used to test workers exposed to EMF in order to increase the monitoring possibilities and credibility of results according to EU criteria (see Contract 2) |

<table>
<thead>
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<th>Preliminary conditions</th>
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<td>• Ending of restructurisation of the SSI in the frame of municipal hygiene</td>
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Improving the Administrative Supervision of the Exposition to Electromagnetic Fields Control System in the Country
**Annex 2-3**

1. **Implementation, contracting and disbursement schedule**

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**Legend:**
- D = design of sub-projects
- C = tenders and contracting
- I = contract implementation and payment
- * give total amounts in MEUR by increasing number
The present equipment of the network of voivodship sanitary and epidemiological stations is old and, first, cannot measure average results in EMF intensity within 6-minute periods which is obligatory in methodology of 2002/40/EEC Directive. Equipping the referred above state institutions with such devices will facilitate the process of comparing the results of exposure to EMF research made on the national level and the results obtained in professional laboratories of the EU member states, consequently better harmonisation of methodology referring to assessment of EMF exposure. It is also a crucial factor when considering guaranteed credibility of EMF exposure data in the Central and Voivodship Database of EMF Sources.

Modern measuring and monitoring equipment facilitates EMF spectrum analysis in the tested place by the equipment working in different frequency ranges as well as intensity results averaging for any 6-minute period as it is stated in the Directive. Registration of measurement results done by measuring equipment will facilitate environmental monitoring when necessary. The measuring equipment will strengthen the status of the monitoring institution and will facilitate taking appropriate decisions in problem situations in case of EMF risk.

25 measuring sets are to be purchased for the SSI-net and 1 with extra equipment, i.e. isotropic broadband, selective probes and spectrum analyser, for NIOM which, authorised by the Chief Sanitary Inspector, controls the referred above supervision of EMF exposure monitoring system.
Improving the Administrative Supervision of the Exposition to Electromagnetic Fields Control System in the Country

Strengthening of State supervision and monitoring system of exposure to electromagnetic fields

Annex II
Modernisation of the existing “database of EMF Sources”

A new software for the Central Database in Microsoft Net Frame technology or equivalent will facilitate Internet access by personnel of the referred above SSI-net units, CSI and NIOM. Software modernisation will also contribute to its user-friendliness.

Another part of the above-mentioned services will consist of professional software prepared by professional computer companies experienced in building databases and their operation in network. The software will be fit for developing the Voivodship Databases and in particular data uniting, data sets archiving and their modifying when necessary. Well-equipped, the SSI-net units will be able to conduct a specific analysis as part of their assessment of EMF sources and workers’ exposition to EMF sources in a region.

The beneficiary plan to purchase 20 computers outside the scope of this project using national funds in order to replace the present computer equipment of the networks of SSI and NIOM which is nearly obsolete. Financing maintenance of the IT equipment will be covered with State donation.