1. Basic Information:
1.1. CRIS Number: 2003/005-710.01.01
1.2. Title: Modernisation of Communicable Disease Surveillance and Control System
1.3. Sector: Social Policy
1.4. Location: Poland

2. Objectives:
2.1. Overall Objective
Adapting to European Union’s standards in the field of the public health.

2.2. Project purpose
Modernization of Communicable Disease Surveillance and Control System.
Compatibility of the Communicable Disease Surveillance and Control System to the Community Network on communicable diseases based on Dec. 2119/98/EC and the Commission decisions based on that decision.

2.3. Accession Partnership and NPAA Priorities
According to recommendations of the European Commission’s final report of peer review meetings held in Warsaw on 4-6 June 2002, modernisation of Communicable Disease Surveillance and Control System will allow to adapt to European Union’s standards of the Community Network on communicable diseases.

2.4. Contribution to National Development Plan
N/A

2.5. Cross Border Impact
N/A

3. Description
3.1. Background and justification
State Sanitary Inspection is an official control body performing surveillance over communicable diseases. The following legal acts create the framework for State Sanitary Inspection competencies and activity:
- Act of March 15th 1985 on State Sanitary Inspection,
- Act of September 6th 2001 on Contagious Diseases and Infections.

According to Article 7 of Act of March 15th 1985 State Sanitary Inspection is supervised by the Ministry of Health. Chief Sanitary Inspector governs State Sanitary Inspection. Chief Sanitary Inspector (at national level) is accountable directly to the Minister of Health and the Prime Minister. Voivodship Sanitary Inspectors (16) are accountable to the Chief Sanitary Inspector and directly to the Minister of Health. Poviat Sanitary Inspectors (318) are accountable to the Voivodship Sanitary Inspectors.

The system of surveillance and control of communicable diseases at present in Poland is in transition to the new system set out in the act of September 6th 2001. This system will comply with the Community Network on communicable diseases based on Dec. 2119/98/EC and the Commission decisions based on that decision.

Surveillance of infectious diseases in Poland is based primarily on case reporting. The list of 78 infectious diseases and syndrome subjects to reporting is included in the act of September 6th 2001.

Obligatory hospitalization is required for the following diseases and syndromes: diphtheria, cholera, typhoid fever, paratyphoid fever (A, B, C), plague, poliomyelitis and other acute flaccid paralysis syndromes including Guillain-Barre syndrome, tularemia, encephalitis,
meningitis, yellow fever and VHF. Quarantine is required for contacts of: cholera, pulmonary plague and VHF.

A new law requires also wider implementation of laboratory based surveillance. Laboratory based surveillance will start after the formulation of executive regulations to the act of September 6th 2001.

The organisational structure of surveillance is based on 318 Poviat Sanitary Epidemiological Stations at local level and 16 Voivodship Sanitary-Epidemiological Stations at Voivodship level and 15 Border Sanitary-Epidemiological Stations. The Department of Epidemiology, at the State Institute of Hygiene (SIH) in Warsaw, performs analyses for the whole country.

Reporting is based on individual cases and done by the physician who makes the diagnosis. Reports are sent to local Poviat Sanitary Epidemiological Stations, except for TB, STi and AIDS reports, which are sent directly to Voivodship Stations by STi and TB clinics.

These data are forwarded every two weeks to the Voivodship Sanitary-Epidemiological Station, which produces a summary of data in terms of disease, gender of patient, whether resident in town or country. These summary data are then sent to the State Institute of Hygiene in Warsaw.

For certain diseases e.g. hepatitis, pertussis, further information is collected at Poviat level, which includes risk factor data. These data are summarized at Voivodship level and forwarded to the State Institute of Hygiene.

Vaccination coverage is assessed using reports linked to vaccination cards, which are kept at primary care level. These data are analysed at the SIH.

### Analysis

At Voivodship level TB, STI and AIDS reports as well as reports received from Poviat level, are summarised and forwarded to the SIH. The summary sent from Voivodship level to the SIH gives information on the number of cases of each importable disease broken down by gender and whether city or country dweller. Although age group is recorded at Poviat level it is not included in the analysis sent by mail to the Voivodship stations. There is no transfer of complete individual records electronically, so that only summary data are received at national level. This does not permit detailed national analyses.

### Mechanisms of information transfer

At local level individual case reports are sent by post or delivered by hand. Summary sheets are sent by post from Voivodship stations to the SIH. There is little use of computers for recording, analysing or transferring data. Where computers are used, the software simply replicates the paper system.

It shows that the system of recording, analysing or transferring data is outdated and slow. It takes time before the data receive the top of the proper institution.

Computerisation of data – the collection and transmission of individual records in electronic format would enable analysis of all data collected at Poviat, Voivodship and national level. Computerisation of data will ensure that all the data captured at local level are transmitted to national level. It will also allowed systematic vigilance of the occurrence of unexpected increases in the number of reports of any given disease as well as enable active response to the Poviat and Voivodship level.

### 3.2. Linked activities

At present, no Phare projects in the field of Communicable Disease Surveillance and Control System are being implemented in Poland. However, a pilot programme covering three of sixteen Voivodship Sanitary-Epidemiological Stations and subjected Poviat Sanitary-Epidemiological Stations concerning communicable disease surveillance is being
implemented. There are means from the Polish budget only for three of sixteen Voivodship Sanitary-Epidemiological Stations and subjected Poviat Sanitary Epidemiological Stations. For the needs of the pilot program special IT system called GISK-NET was created. GISK-NET is an IT system used for collecting, transmitting and analysing collected data for the communicable diseases surveillance and control system.

The funds from Phare 2003 would allow broadening Communicable Disease Surveillance and Control System for the rest of the Voivodship and Poviat Sanitary-Epidemiological Stations. Without Phare 2003 program there will not be a systematic resolve in the field of Communicable Disease Surveillance and Control System in Poland.

3.3. Results

1. Increased capacity of outbreak detection and management at Poviat, Voivodship and national level.
2. Creation of early warning system.
3. Better integration of the surveillance system with respect to different information sources and institutions participating in the system resulting in increased simplicity of reporting and greater flexibility of introducing changes into the system.
4. Improved data quality ensuing from standardization of data collection, adapting up-to-date case definitions and more effective data verification.
5. Timely collection and transmission of individual records in electronic format enabling ongoing analysis of all data captured at Poviat, Voivodship and national level.
6. Access to detailed information on individual data including potential risk factors and factors influencing trends allowing thorough analysis and more accurate targeting of the public health interventions thus redirecting resources to the most requiring areas.
7. Compatibility of Polish Communicable Disease Surveillance and Control System with the Community Network on communicable diseases based on Dec. 2119/98/EC and the Commission decisions based on that decision.
8. Creation a Headquarters of the whole system at the Chief Sanitary Inspectorate. The HDQ at the Chief Sanitary Inspectorate will be a surveillance body of Communicable Disease Surveillance and Control System responsible for the managing the whole system, taking up decisions in cooperation with other governmental bodies.
9. Upgrading of the qualifications of the employees of the State Sanitary Inspection in a field of epidemiological surveillance, data analysis, outbreak management and early warning/response system and also skills to fully utilize the capacity of GISK-NET.
10. Improved completeness of reporting due to simpler procedures, higher awareness of surveillance purposes, enhanced surveillance methods, integrating laboratory based surveillance, greater involvement of stakeholders.

These results will comply with recommendations of the European Commission’s final report of peer review Warsaw, 4-6 June 2002.

3.4 Activities

Within Contract 1 the following tasks have been identified:
- Designing of a special IT system – GISK-NET for collecting, transmitting and analysing collected data for the communicable diseases surveillance and control system
- Beside the technical development of the system itself it would require relevant GISK-NET training for 750-1000 employees of thentiepidemic units from the sanitary
Modernization of Communicable Disease Surveillance and Control System

Purchasing 350 personal computers for 296 antiepidemic units in the sanitary epidemiological stations and also for Chief Sanitary Inspectorate and State Institute of Hygiene,

Purchasing 13 servers for the Poviat Sanitary-Epidemiological Stations which will be placed at Voivodships presented in Annex 3. These servers will collect information from the Poviat level and transmit it to the higher level. Servers for 3 others Voivodships have been already bought for the means from the Polish budget granted for the pilot-program mentioned above,

Connecting stations to the PESEL-net which ensure secure transmission of sick persons’ personal data.

**Within Contract 2 the following tasks has been identified:**

1. Training on epidemiological surveillance, data analysis, outbreak management and early warning/response system at the local level.

Training will take place in 16 Voivodships for participants from Poviat and Border Sanitary-Epidemiological Stations from antiepidemic units.

Training at the local level will comprise lectures and workshops on legal basis for infectious diseases control in Poland, basic principles and practice of public health surveillance including description of data sources, management of the surveillance system, quality control of the data, special types of surveillance, laboratory based surveillance, ethical issues and protecting personal data, outbreak management. Special attention will be focused on descriptive summary of the data, identifying and assessing risk factors, selection of appropriate study design, fork-to-farm investigation and identification of the infection source in the outbreak management settings.

2. Training on epidemiological surveillance, data analysis, outbreak management and early warning/response system at the central level.

Training will take place in Warsaw for the participants from Chief Sanitary Inspectorate, Voivodship Sanitary-Epidemiological Stations, State Institute of Hygiene.

Training at the central level will cover similar areas, but it will focus on more in-depth epidemiological analysis, including more complex study designs, tools for multivariate analysis, extensive investigation of validity and generality of findings. The ethical issues involved in the management of the surveillance will be covered highlighting problems of confidentiality and personal data protection.

The contractor will be responsible for preparation and conduction of the trainings for the 750-1000 people (c.a. 40 per session).

**Experts’ profile for the epidemiological data analysis, outbreak management and early warning/response system surveillance training:**

- Good knowledge of and experience in the *acquis communautaire* and EU standards as well as procedures applied in the EU countries in the field of epidemiological surveillance (desirable experts with knowledge of the procedures in greater number of the EU countries),
- Specialist in a field of the epidemiology, hygiene and public health,
• Familiarity with systems concerning health risk, statistical methods used for practical applications of test findings, electronic data analysis, early warning/response system and outbreak management,
• Good knowledge of and experience of monitoring system verification, monitoring system and data base managing,
• Ability to provide know-how and transfer experience,
• Language – English or Polish.

3.5 Lessons learned:
N/A

4. Institutional framework:
4.1. Institutions responsible for and involved in the project:
- The Ministry of Health,
- Chief Sanitary Inspectorate (the Minister of Health - superior surveillance over Chief Sanitary Inspectorate),
- Voivodship Sanitary-Epidemiological Stations (Chief Sanitary Inspectorate - superior surveillance),
- Poviat and Border Sanitary-Epidemiological Stations (Chief Sanitary Inspectorate - superior surveillance),
- State Institute of Hygiene (science and research institute acting in the field of public health, the Minister of Health - superior surveillance).

The Chief Sanitary Inspectorate will act as a leading institution, responsible for co-ordination, supervision and monitoring of the project implementation. This institution will specify actions to be taken and will approve final results of the project.

5. Detailed budget (EUR):

<table>
<thead>
<tr>
<th>PHARE Support</th>
<th>National Co-financing</th>
<th>IFI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment Support I</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Building IB</td>
<td>1.698.750,00</td>
<td></td>
<td>666.250,00</td>
</tr>
<tr>
<td><strong>Institution</strong></td>
<td><strong>Building IB</strong></td>
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<tr>
<td>TA</td>
<td>300.000,00</td>
<td></td>
<td>300.000,00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1.998.750,00</strong></td>
<td></td>
<td><strong>666.250,00</strong></td>
</tr>
</tbody>
</table>

The co-financing funds from the Polish side for the project implementation will be available.

6. Implementation arrangements:
6.1. Implementing Agency
PAO: Mr Tadeusz Kozek, Under-secretary of State, Office for the Committee of European Integration; Al. Ujazdowskie 9, 00-918 Warsaw, tel. 48 22 455 52 41, fax 48 22 455 52 43
CFCU: Barbara Kasnikowska, Director, Central Contracting and Financial Unit, Co-operation Fund, 4A Górnoslaska Str., 00-444 Warsaw; tel. 48 22 622 00 31, fax 48 22 622 95 69
The CFCU is responsible for handling tendering, contracting and payments of contracts on behalf of the Chief Sanitary Inspectorate, which is responsible for project preparing and its implementation.

6.2. Twinning
N/A
6.3. Non-standard aspects
No non-standard contracts are envisaged under the project.

6.4. Contracts
1. Contract 1 – Investments
   - Computer Equipment and licences, GISK-NET training – 2.365.000,00 EUR (1.698.750,00 EUR Phare + 666.250,00 EUR of national co-financing) - joint-co-financing.
   **Total price of hardware and software equipment – 2.364.992 €**
2. Contract 2 – Technical Assistance – 300.000,00 EUR (300.000,00 EUR Phare)
   - Training on epidemiological surveillance, data analysis, outbreak management and early warning/response system

7. Implementation schedule:
1. Start of tendering process – I quarter 2004
2. Start of the project activities – III quarter 2004
3. Completion of the project – II quarter 2006

8. Equal Opportunity:
This project will be open to both women and men, on the equal basis. The only criteria for choosing the project participants are professionalism and experience.

9. Environment:
   N/A

10. Rates of return:
   N/A

11. Investment criteria:
   N/A

12. Conditionality and sequencing
In the beginning of the year 2003 will come into force secondary legislation to the act of 6th September 2001 on Infections Diseases, including ordinances determining patterns of application forms of cases and positive laboratory tests and the way of conveying. It will create legal framework for operation of system of reporting and registration cases of infections diseases with aim to conducting epidemiological surveillance.

The order of activities:
- working out the specification for the aim of choosing subjects which will realize the project must be done
- sanitary epidemiological stations at all levels must be equipped so as employees should be trained in the field of using the software and content – related working
- an IT system of collecting and transmitting on cases of infections diseases with proper, specialists personal computers and relevant software
- training on epidemiological surveillance, data analysis, outbreak management and early warning/response system will be required.
### Annex 1

#### LOGFRAME PLANNING MATRIX FOR

<table>
<thead>
<tr>
<th>Project</th>
<th>Overall objective</th>
<th>Objectively Verifiable Indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modernisation of Communicable Disease Surveillance and Control System</td>
<td>Adapting to European Union’s standards in the field of the public health.</td>
<td>Starting electronic system of reporting and registration cases of infectious diseases and verification of diagnosis in electronic way</td>
<td>Documentation and data from sanitary epidemiological testing stations at all levels. Analysis and assessments made by Chief Sanitary Inspectorate. Analysis made by National Institute of Hygiene</td>
<td>Implementation of pilot system in 3 Voivodship and Poviat Sanitary-Epidemiologic Stations</td>
</tr>
</tbody>
</table>

#### Project purpose (Immediate Objectives)

<table>
<thead>
<tr>
<th>Objectively Verifiable Indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The electronic network system between sanitary epidemiological stations at all levels operational. Communicable Disease Surveillance and Control System adopted to EU requirements and compatible with the others EU systems.</td>
<td>Documentation and data from sanitary epidemiological testing stations at different levels. Documentation made by Chief Sanitary Inspectorate. Reports and assessments made by UE experts. Results of inspection by the Inspection of Personal Data Protection</td>
<td>Execution of purchase of computers and relevant software for Modernization of Communicable Disease Surveillance and Control System. Choosing training staff for the office personnel and permanent surveillance of function of the system by an office subordinate to Ministry of Health. Payment for the project from PHARE budget and from ministry’s budget funds.</td>
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</table>

#### Programme name and number

<table>
<thead>
<tr>
<th>Contracting period expires</th>
<th>Disbursement period expires</th>
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</table>

<table>
<thead>
<tr>
<th>Total budget</th>
<th>Phare Budget</th>
</tr>
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<tbody>
<tr>
<td>2 665 000. - EUR</td>
<td>1 998 750. - EUR</td>
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</tbody>
</table>
### Results

- Increased capacity of outbreak detection and management at Poviat, Voivodship and national level.
- Creation of early warning system.
- Better integration of the surveillance system with respect to different information sources and institutions participating in the system resulting in increased simplicity of reporting and greater flexibility of introducing changes into the system.
- Improved data quality ensuing from standardization of data collection, adapting up-to-date case definitions and more effective data verification.
- Timely collection and transmission of individual records in electronic format enabling ongoing analysis of all data captured at Poviat, Voivodship and national level.
- Access to detailed information on individual data including potential risk factors and factors influencing trends allowing thorough analysis and more accurate targeting of the public health interventions thus redirecting resources to the most requiring areas.
- Compatibility of Polish Communicable Disease Surveillance and Control System with the Community Network on communicable diseases based on Dec. 2119/98/EC and the Commission decisions based on that decision.
- Creation a Headquarters of the whole system at the Chief Sanitary Inspectorate. The HDQ at the Chief Sanitary Inspectorate will be a surveillance body of Communicable Disease Surveillance and Control System responsible for the managing the whole system, taking up decisions in cooperation with other governmental bodies.
- Upgrading of the qualifications of the employees of the State Sanitary Inspection in a field of epidemiological surveillance, data analysis, outbreak management and early warning/response system and also IT skills to fully utilize the capacity of GISK-NET.
- Improved completeness of reporting due to simpler procedures, higher awareness of surveillance purposes, enhanced surveillance methods, integrating laboratory based surveillance, greater involvement of stakeholders.

### Objectively Verifiable Indicators

- Equipping Sanitary-Epidemiologic Stations with hardware and software in 13 counties.
- No of people to be trained (750-1000) on:
  1) epidemiological surveillance, data analysis, outbreak management, early warning/response system
  2) GISK-NET training
- Development of disease specific questionnaires based on EU case definitions.
- Creation of databases at the Poviat, Voivodship and central level containing relevant information on reportable diseases.
- Surveillance system outcome indicators: Incidence of reportable diseases with geographic and temporal distribution by gender, age group, environment. Number of detected outbreaks. Fraction of cases of a given disease occurring in outbreaks.
- Surveillance system performance indicators: Percentage of cases reported through clinical versus laboratory surveillance. Completeness of reporting. Timeliness of reporting. Data quality assessed by internal and external system evaluation. Predictive value positive. Sensitivity of outbreak detection with respect to significant increases in incidence as noted in the reported data and during external evaluation. Fraction of correctly investigated outbreaks. Fraction of outbreaks with identified source.

### Sources of Verification

- Documentation and reports from sanitary stations on reception, installment of appropriate equipment.
- Course records, including evaluation of trainees.
- Documentation made by Chief Sanitary Inspectorate.
- Reports and assessments made by UE experts.
- Course records, including evaluation of trainees.
- Midterm visitations by designated commissions to Voivodship and selected Poviat sanitary stations. Commissions will assess progress in the program implementation and review records of outbreak management.
- Internal evaluation of surveillance system. This ongoing process will provide data on timeliness of the system, data quality, positive predictive value of the system.
- External evaluation of the surveillance system. The external evaluation will be performed on and tailored to selected diseases especially with respect to vaccine preventable diseases. It will include active sentinel surveillance in select health care units/laboratories and cross-sectional questionnaire/serosurvey studies where appropriate.

### Assumptions

- Appointing subjects implementing the control system and trainers
- Fulfilment of commitments made by the appointed subjects
<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designing of a special IT system – GISK-NET for collecting, transmitting and analysing collected data for the communicable diseases surveillance and control system</td>
<td>Purchase of adequate equipment.</td>
<td>Documentation and data from sanitary epidemiological testing stations at different levels.</td>
<td>Professionalism of people that take part in realization of the project</td>
</tr>
<tr>
<td>Beside the technical development of the system itself it would require relevant GISK-NET training for 750-1000 employees of the antiepidemic units from the sanitary epidemiological stations. The training will cover the scope of the rules and exploitation of the surveillance system, its software, data entering, report creation, communication with the other users of the system.</td>
<td>Technical assistance contract</td>
<td>Documentation made by Chief Sanitary Inspectorate</td>
<td>Budgetary fund for the implementation of the pilot project.</td>
</tr>
<tr>
<td>Purchasing 350 personal computers for 296 antiepidemic units in the sanitary epidemiological stations and also for Chief Sanitary Inspectorate and State Institute of Hygiene. Purchasing 13 servers which will be placed at Voivodships presented in Annex 3. These servers will collect information from Poviat level and transmit it to the higher level. Servers for 3 other Voivodships have been already bought for the means from the Polish budget granted for the pilot-program mentioned above.</td>
<td></td>
<td>PESEL-net administration data</td>
<td>Valuable training programs</td>
</tr>
<tr>
<td>Connecting stations to the PESEL-net which ensure secure transmission of sick persons’ personal data</td>
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<td>Reports submitted by contractors</td>
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<tr>
<td>Training on epidemiological surveillance, data analysis, outbreak management and early warning/response system.</td>
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<td>Documentation made by Chief Sanitary Inspectorate</td>
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<tr>
<td></td>
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<td>PESEL-net administration data</td>
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<tr>
<td></td>
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<td>Reports submitted by contractors</td>
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</tbody>
</table>

**Preconditions**

- Contract implementation and payment
- A pilot programme covering three of sixteen Voivodship Sanitary-Epidemiological Stations concerning communicable disease surveillance must be implemented. Without Phare 2003 program there will not be a systematic resolve in the field of Communicable Disease Surveillance and Control System in Poland.
### Implementation, contracting and disbursement schedules

<table>
<thead>
<tr>
<th>Project title</th>
<th>Modernisation of Communicable Disease Surveillance and Control System</th>
<th>Date of Drafting</th>
<th>Planning Period</th>
</tr>
</thead>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
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<tr>
<td></td>
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<td>Q4/03</td>
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<td>Contracting schedule</td>
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<tr>
<td>Disbursement schedule</td>
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<td>1.2</td>
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</tbody>
</table>

**Legend:**
- D = design of sub-projects
- C = tendering and contracting
- I = contract implementation and payment