Standard Summary Project Fiche – IPA decentralised National programmes

(Final Draft)

1. Basic information

1.1 CRIS Number: TR080216
1.2 Title: Surveillance and Control of Communicable Diseases (SCCD)
1.3 Sector: 03.28 – Consumer and Health Protection
1.4 Location: Ankara, Turkey

Implementing arrangements:

1.5 Implementing Agency:
The Central Finance and Contracting Unit (CFCU) will be Implementing Agency and will be responsible for all procedural aspects of the tendering process, contracting matters and financial management, including payment of Project activities. The Director of the CFCU will act as Programme Authorizing Officer (PAO) of the Project.

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1.6 Beneficiary (including details of SPO):
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Other Beneficiaries:
Refik Saydam National Hygiene Centre (RSNHC)

1.7 Overall cost: € 4,500,000
1.8 EU contribution: € 4,050,000
1.9 Final date for contracting: 2 years after the signature of the Financing Agreement.
1.10 Final date for execution of contracts: 2 years following the end date for contracting
1.11 Final date for disbursements: 3 years following the end date for contracting.
2. **Overall Objective and Project Purpose**

2.1 **Overall Objective:** To support the Turkish government in its efforts to develop an early warning and response system (EWRS) to detect, assess, report and respond to health events and public health risks (hazards of infectious, chemical, radio-nuclear or unknown origin) in line with the International Health Regulations (IHR) and the EU communicable disease surveillance system *acquis*.

2.2 **Project purpose:**

To develop a more efficient early warning and response system (EWRS) for Turkey to comply with *acquis communautaire* and to operate under the IHR. By building upon earlier Projects (ESCCDS I and II) this Project will institutionalise training and ensure continuing education, in diseases control through the establishment of a National Field Epidemiology Training Program (FETP) and a sustainable laboratory training program.

The Accession Partnership 2006 for Turkey sets out the principles, priorities, intermediate objectives and conditions decided by the European Council. Public Health is referred to as a short term priority is listed under the chapter of “Consumer and Health Protection”.

Furthermore, ‘Proposal for a Council Decision on the principles, priorities and conditions contained in the Accession Partnership with Turkey COM (2005) 559 states these priorities as 1) Align with the *acquis*, 2) Further develop institutional structures for effective implementation, 3) Further develop systems for the notification of dangerous substances, All of these priorities are addressed by the Turkish EWRS described here.

National Program for Adoption of Acquis (NPAA)-2003 has envisaged preventive health care services as a medium term priority within the context of the harmonization process with EU norms.

In Regular Progress Report 2006 for Turkey, it is emphasized that good progress was made in setting up a network for epidemiological surveillance and control of communicable diseases and Turkey has partially aligned its existing surveillance system of communicable diseases with Union’s list. Additionally, it is mentioned that progress was made on early warning of outbreaks by introducing real time data collection by family physicians into a central electronic database at the MoH and it has been preparing a National Plan of Action that is to set a timetable and allocate responsibilities address shortcomings by MoH. In the Screening Report, under the Chapter III, “Assessment of the Degree of Alignment and Implementing Capacity” is mentioned as the progress has been made through setting up of a network for communicable diseases. However, the Report suggests that further developments are needed to strengthen the institutional structure and capacity. Additionally, EWRS still remains to be established.

2.4 **Link with MIPD**

N/A

2.5 **Link with National Development Plan (where applicable)**

Regulation on Principles of Communicable Disease Surveillance and Control, published in the Official Gazette May 2007, transposes EC *acquis* on EWRS into Turkish law.

2.6 **Link with national/ sectoral investment plans (where applicable)**

N/A

3. **Description of Project**
3.1 Background and justification:

Two previous EC technical assistance Projects where the overall objective - Strengthening of the Epidemiological Surveillance and Control of Communicable Diseases System in Turkey, ESCCDS I and ESCCDS II have already been accomplished. The purpose of the Projects was to strengthen national capacity and the legal framework of the current Turkish communicable diseases surveillance and control (CDSC) to be in conformity with EU Directives in terms of structure, function, capacity, effectiveness and resources.

ESCCDS I Project resulted in the Regulation on Principles of Communicable Diseases Surveillance and Control¹, a Turkish field epidemiology training programme fellowship for which was designed as a foundation for the Turkish FETP, cascade training of up to 6000 front line health workers in use of the surveillance guideline, cascade training of 500 microbiology laboratory staff in laboratory management, publication of national Standard Operating Procedures (SOP) for laboratory diagnosis, working pilot national laboratory surveillance network. The Foundation fellowship and cascade training of 6000 front line workers in CDSC consolidated the system around the national surveillance guidelines and the Fellows gained a basic understanding and experience of field epidemiology.

The ongoing ESCCDS II Project, including service element continued the training and technical assistance commenced under ESCCDS I, and also contained supply contracts, financed under the 2005 Financial Cooperation Program. The purpose of the supply was to provide the necessary equipment in support of the establishment of the CDSC infrastructure, including server computers for surveillance, laboratory equipment and provision of a laboratory training centre. This investment Project was to complement the capacity building component of the Project I.

The two previous Projects have achieved large scale training of staff responsible for notification and investigation, and laboratory diagnosis, of infectious diseases. They have also provided guidelines, SOPs and equipment for activating a national infectious disease surveillance system. The system is now ready for institutionalisation to ensure sustainability. This institutionalisation will comprise establishment of a Turkish FETP and a national laboratory training system, which together will provide functional support for the Turkish EWRS. Without institutionalisation, the results achieved by the first two Projects are most likely to have reduced impact, and the window of opportunity for establishment will be closed.

In this Project the logic is that EWRS will be achieved through four results – 1) activating dedicated channels of communication and information analysis, 2) institutionalising epidemiological training of an internationally accepted standard, 3) extending capacity and improving performance of microbiology laboratory support for a Turkish EWRS, and 4) institutionalising laboratory training to achieve uniform high performance. It will be able to detect potential Public Health Emergencies of International Concern (PHEICs) as defined in IHR(2005). The key success factors in this Project correspond to the three results: 1) multi-sectoral coordination; 2) central level expertise and peripheral proficiency in field epidemiology; and 3) a timely, accurate laboratory service.

The scope of EU EWRS is limited to communicable diseases, including those of unknown origin. It is therefore not as broad as the IHR(2005), which includes events of unknown cause or source, and the spread of toxic, infectious or otherwise hazardous materials, as potential PHEICs. But bearing in mind that most potential PHEICs are likely to result from communicable diseases, it is clear that there are many similarities between the information and communication needs MS face with respect to EU EWRS and the IHR.

¹ By-law on Principles of Communicable Diseases Surveillance and Control. (Official Journal 30/5/2007 - 26537)
An individual was nominated within the MoH to act as the NFP for IHR(2005) in June 2007. However, the Guide makes it clear that in order to discharge its function; the NFP should be an office containing several people. An invitation to join the EU EWRS was also received in June 2007 from DG SANCO and the legal adoption procedure is under way. The existence of a properly functioning NFP for both IHR and EU EWRS is a pre-condition for implementation of this Project.

The Proposed Turkish EWRS. The EU EWRS is a computer based mechanism for information exchange between the EC and Member States, which are competent to respond. It is therefore simply a means of information sharing between Member States. However, the proposed Turkish EWRS is comparable with national systems in the EU by being able to provide and receive warnings, and competent to respond appropriately. It is therefore primarily concerned with risk assessment and risk management. In terms of warning, it is a nationwide, multi-sectoral, multi-level system for receipt, analysis and prioritisation of information; in terms of response, it utilises the capacities existing within the system, and those created by the laboratory and field epidemiology training modules of this Project, to initiate and coordinate rapid response. EWRS is a key component of health protection, which in turn is defined as the reduction of the impact on human health of infections and poisons, plus chemical and radiation hazards.

Almost 90% of recorded potential PHEICs are of biological cause. The Project begins with, and concentrates on, biological health events – communicable diseases – but the training of the field epidemiologists extends to techniques for investigating all acute threats; and by providing feedback to a broad range of stakeholders, the aim is to gradually integrate other surveillance and response systems.

The main proposed components of Turkish EWRS include an EWR Unit at the centre, and regular multi-sectoral risk assessment meetings in each of the Provincial Governorates. Provincial meetings are expected to include input from sectors including communicable diseases control, consumer protection, environmental and animal health and their standard agenda and working procedures will be introduced and established by the Project. Under normal working conditions, the role of the EWR Unit is to integrate the information coming from the Provincial meetings with other sources, both national and international, to pass filtered intelligence to the NFP and to feedback to the Provinces. In the event of a potential PHEIC, or a worrying national event, its role is also to initiate and technically coordinate a rapid response in close contact with the NFP.

The Proposed Turkish Field Epidemiology Training Programmes (FETP). Field epidemiology is the application of epidemiological methods to rapidly investigate the cause of adverse health events, such as outbreaks of known diseases, changes in the seriousness or treatment effectiveness of endemic diseases or exposure to noxious substances, with a view to early intervention. FETP that will be undertaken over by the “National Public Health Institute” (CD Strategic Plan 2008-2013) to institutionalise in-service training programmes for this specialty and according to the needs of MoH. The training philosophy of the Turkish FETP is the same with the European Programme for Intervention Epidemiology Training (EPIET) – an introductory course of 3 to 4 weeks, followed by a 2 year practical attachment during which the fellow carries out outbreak investigation and scientific evaluation of surveillance system under close, expert supervision. The national FETP is designed to train minimum 3 persons per two year and refresh full national cadres of field epidemiologists in a cost-effective and contextually sensitive way.

Fellows trained during ESCCDS I & II take part as trainers during the cascade trainings. University Public Health Departments to support assessing the needs of cohort I, II and forthcoming fellows, developing curriculum, revising training materials, identifying tools for mentoring of fellows field activity provided
Key success factors include: having dedicated international director who is a senior epidemiologist or public health specialist, preferably with a strong background in FETP and in-service training. A co-director with extensive experience of Epidemiology Training System who is full-time resident for at least two years. A dedicated office with support staff and strong links with both academic and service local experts. Formal links between the FETP and other educational and national service institutes, including FETP training for a master’s degree. Sustainable finance for at least a five-year period after the end of the set-up period.

**National Laboratory Surveillance.** Laboratory surveillance is the ongoing systematic collection and analysis of data arising from clinical and public health laboratories. This information complements notification of clinical cases by providing information on the accuracy of clinical diagnosis and the prevalence and harmfulness of disease agents. Laboratory systems are a required core capacity of IHR(2005) mentioned in Annex 1a:

‘4(b) At the local community level, essential information includes the following: clinical descriptions, laboratory results, sources and type of risk, numbers of human cases and deaths, conditions affecting the spread of the disease and the health measures employed.

6(b) At the national level, to provide support through specialized staff, laboratory analysis of samples (domestically or through collaborating centres) and logistical assistance (e.g. equipment, supplies and transport).’

Systems for laboratory surveillance and confirmation of diagnoses by a national reference laboratory require expansion and consolidation. Many of the necessary activities are in the field of Management and Organisation Development and the institutionalisation of laboratory training.

3.2 Assessment of Project impact, catalytic effect, sustainability and cross-border impact (where applicable)

**Project impact:** By strengthening various key system elements – Provincial and central health intelligence risk assessment, sustainable training of field epidemiologists capable of leading surveillance and rapidly responding to health threats, sustainable training of diagnostic and reference microbiology specialists – the Project will institutionalise effective health protection.

All components of this Project are anticipated to have a considerable impact with regard to advancing the implementation of the IHR(2005). The IHR(2005) aim to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade (IHR Article 2). As in line with the IHR(2005) that emphasize capacity building and maintaining a set of core capacities with regard to surveillance and response at local/community, intermediate and national public health levels (IHR Annex 1A) including at designated points of entry (airports, ports and ground crossings) (IHR Annex 1B), one of the main outcomes of the Project is the development of a national action plan to meet these minimum core capacity requirements that is based on the assessment of national structures and resources. The national action plan shall be implemented to ensure that the core capacities are present and functioning throughout the country. Benefits of IHR(2005) implementation include strengthened national and international public health security, emergency preparedness and cross-border collaboration, while striving to reduce the risk of and unilateral traffic and trade restrictions.

**Catalytic effect:** EWRS will be catalytic for other improvements in health and consumer affairs. Overall the impact on population health is expected to be high during the emergency
conditions in which EWRS operates and therefore its potential to prevent mass illness and panic is high.

**Sustainability:** The laboratory and field epidemiology training systems will be designed as part of in-service commitment will both be directed through national trainings centres run by newly appointed national directors. They will have five year plans of continued activity after the Project is over. The mechanism of multi-sectoral health intelligence gathering from Provinces and ongoing rapid analysis in the EWR Unit will have appropriate legal definition.

**Cross border impact:** One of the stated objectives of IHR is to contain serious health threats within their country of detection. The Project is therefore expected to have a major impact on preventing cross border transmission. By institutionalising training and multi-sectoral working in Turkey, its sustainability is designed to be high.

3.3 Results and measurable indicators:

**Result 1** - The EWRS is strengthened by finely tuning technical functions and communications. This result will be verified by:
- National IHR action plan published by the end of 2010
- EWR Unit (as a National Focal Point -NFP) at the central level with minimum five provincial EWR units are operational by the end of first year.
- Communication channels at all levels of the EWR system functional by the end of Project

**Result 2** - Turkish Field Epidemiology Training Programme (FETP) is institutionalized. This result will be verified by:
- Government commitment to the sustainability of the National FETP by the end of Project.
- An organisational structure for management of the training system is developed.
- Existence of Continuing Education Program
- Existence of National FETP and minimum 3 persons trained by FETP.
- Existence of an official membership to TEPHINET by the end of Project
- Existence of a “5 Year Action Plan” for National FETP by the end of Project.

**Result 3** – Improvement of present capacity in microbiology laboratories, support for Turkish EWRS, is extended. This result will be verified by:
- Mechanism for the definition of performance criteria for microbiology laboratories in the different sectors (including health, agriculture, environment) established by the 2nd quarter of 2011

**Result 4** – A National Microbiological Laboratory Training Programme (MLTP) including laboratory management and specific laboratory training programme is institutionalized. This result will be verified by:
- Existence of a “5 Year Action Plan” for national microbiology laboratory training” by the end of Project.
- Minimum 3000 trained people including specialists and technical staff by the end of the Project.
- An organisational structure for management of the training programme is functional by the end of the Project.
- Establishment of documented career paths in microbiology laboratory sciences by the end of the Project.
3.4 Activities:

Means:

For the implementation of Activities, the National Co-financing is supported by the sources of GDPHC and RSNHC corresponding to the content.

Technical assistance does not mean the service contract in this Project. Technical assistance means the assistance of WHO experts in this Project which is provided by direct grant agreement with WHO.

By the Activities, under the Result 1; technical assistance and other actions are required for the needs assessment using historical data and reports, to examine the operational guidelines and perform dynamic testing of the EWRS in its present state, to integrate findings into the National Action Plan and to recommend needed modifications to the system.

The communications system activity will be conducted in order to define the users of the system, the structure, the timeframes and the actual development and testing of the computer system specific to the Turkish EWRS.

The training of the personnel inputting data into the communications system to enable the information system developed will allow them to understand the mechanics, flow and quality of the system as well as the critical importance of their diligence.

Activity 1.5 occurs over two years which timeframe counterparts from all sectors involved in the detection, assessment, notification and response of unusual health events and public health risks, including rapid response teams, establish communication systems amongst themselves and appreciate the contribution and roles of each counterpart.

Testing according to Turkish procedures of the EWRS for detection, assessment, reporting and response to a potential health emergency of international concern, using a simulation activity, will occur by the 2nd year of Project. The timing of this activity will allow modifications to the EWRS, as needed, in the final two quarters.

Conducting needs assessment of FETP will be the first step for the institutionalization. The establishment of the FETP will be a continuing process during the Project.

Developing the curriculum and the operational procedures for the FETP is initiated by the appointment of Co-Directors, who serve over the three years period, followed by the development of the curriculum and the operational procedures, necessitating technical assistance, as well as the maintenance of these procedures. The preparation of the educational materials and tools requires technical assistance too. A protocol with academicians will be formed. However, the field activity component of the FETP is the key that distinguishes this type of program from classic, university-based, epidemiology programs. This field component occurs over two years and involves definition of the activity, twinning with another FETP, technical assistance from outside of the program, and actual field studies. Additional technical assistance is guaranteed in this time by assuring mentoring for the FETP fellows, travel to national and international scientific meetings for presentations, and aid in advocacy and dissemination and communication of field activity results. Monitoring of the program occurs during the second year, with interim and final evaluations occurring also during this time period.

The continuing education component assures that those persons having received training continue to be updated in methods and findings, and continue to broaden their knowledge and contacts to enable them to strengthen their core public health knowledge. The ascertainment of the country to support such a program, includes training of trainers (ToT). Developing a “5 Year Action Plan” for both types of epidemiology trainings, FETP and ToTs requires outside technical assistance. Technical assistance, gathering existing documents and creating specific reports, as deemed necessary by the MoH to aid in the
legislation making the FETP and continuing education components functional, will fulfil Activity 2.3

Activity 3.1 is about on-site assessments of selected major laboratories using standardized laboratory assessment tools. Technical assistance and other resources will be required.

Activity 3.2 is a continuing practice during the Project as a developmental process. The activity will be initiated by appointment of technical experts to monitor progress on an ongoing basis, provided problem solving, ensure full integration with other components of the Project, provide analysis and written reports as required and make appropriate technical adjustments to ensure success of the Project. Two experts will be required, one a senior international expert with appropriate qualifications and experience in microbiology laboratory management, and one a national counterpart of similar status. Resources for the on-going development and monitoring of a laboratory proficiency testing scheme will be required during the course of the Project.

The product from Activity 3.3 will be based on an existing microbiology laboratory information exchange system and will be used throughout the Project. The Activity 3.4 will result in the establishment of formal performance criteria for laboratories engaged in EWRS activities, and agreed roles and responsibilities of institutions involved in monitoring laboratory performance. The product of this activity will be used through the remaining duration of the Project. Activity 3.4 is concurrent with Activity 3.1, and synergies between the two activities will be exploited. These activities will be performed with the means mentioned below;

Technical assistance which is not a service contract, will be required from the WHO by Direct Grant, in this Project. The WHO is an international expert organisation for surveillance and control of the communicable diseases and carries on the main responsibility for implementing the IHR(2005) all over the world smoothly.

For the Activity 3.5 technical assistance and expenses will be required to ensure compliance with IHR requirements. Formal agreements will be finalized and approved during the second quarter. Agreements and technical specifications will be reviewed and amended if necessary on an annual basis.

Activity 4.1 is a developmental process which needs the technical assistance and other activities to assess the current curriculum of laboratory training, with particular reference to the adequacy for an EWRS in accordance with the IHR, to explore material from other programs to fill any noted gaps, and to define entities involved in training, their roles and their responsibilities.

Activity 4.2 occurs, initiated by the development of the evaluation questions to be answered, followed by the monitoring, and concluding with the final evaluation. In order to evaluate the laboratory training program, evaluation questions will be developed, objective criteria by which the program will be evaluated will be developed, a monitoring system which collects needed data items will be developed and implemented, and interim and final evaluations will be conducted.

Technical assistance for gathering existing documents and creating specific reports, as deemed necessary by the MoH, to aid in the legislation making the Laboratory Management Training System functional and institutionalized, will fulfil Activity 4.3.

The continuing education component assures that those persons having received training continue to be updated in methods and findings, and continue to broaden their knowledge and contacts to enable them to strengthen their laboratory capabilities, particularly in accordance with EWRS and the IHR. The ascertainment of the country to support such a program, the identification of collaborating institutions and partners as well as defining their roles, defining participants, and developing a “5 Year Action Plan” for a National
Microbiological Laboratory Training Program (MLTP), requiring outside technical assistance during the Project period by intervals or continuously.

Activities

Activity 1.1 Needs assessment of the current public health surveillance and response system, encompassing all-sectors and hazards.

1.1.1. Reporting on and integrating the outcome of the needs assessment in the national IHR action plan

Activity 1.2 Establishment of the EWRS to detect health events and public health risks at all levels

1.2.1. Establishment of an EWR Unit at national level and in 5 provinces by the end of the first year and at all levels in 81 provinces by the end of the Project

1.2.2. Development of operating guidelines and reports at different levels.

1.2.3. Identification of necessary tools to work among all levels of the EWRS, national government and international organisations

Activity 1.3 Establishment of a communications system to enable information management, integration, and access for users and decision makers.

1.3.1. Publication of a weekly communicable diseases bulletin, including IHR related issues, and dissemination of printed copies at provincial level as well as via web.

Activity 1.4 Training of the personnel involved in the EWRS.

Activity 1.5 Engagement and strengthening multi-sectoral surveillance and response capacity

1.5.1. Establishment of operational and logistic capacity to respond to small-medium scale communicable diseases outbreak.

1.5.1.1 Communication equipment for rapid communication between the provincial, central, and international levels,

1.5.1.2 Development of distribution and replenishment mechanisms,

1.5.1.3 Compiling inventory of supplies for outbreak response, inventory of suppliers, to map storage facilities at all levels,

1.5.1.4 Supplies to be pre-positioned at national and provincial levels to respond to specific diseases threats.

1.5.2 Development of Integrated Public Health Emergency preparedness plan.

Activity 1.6 Simulation for detection, assessment, reporting and response to public health events of potential international public health concern.

Activity 2.1 Establishment of the Field Epidemiology Training Program (FETP): minimum 3 persons trained by FETP

2.1.1 Development of the curriculum and the operational procedures for FETP

2.1.1.1 Exploring the country’s capacity for supporting the FETP

2.1.1.2 Identification of the collaborating institutions (Institute of PH, universities, provincial and district governances, etc.)

2.1.1.3 Defining the responsible parties and responsibilities of other partners

2.1.1.4 Revision of the courses/modules
2.1.1.5 Identification and appointment of Co-Directors, (one senior epidemiologist, the other from and provided by MoH)

2.1.1.6 Identification of admissions committee and admissions requirements for potential trainees

2.1.1.7 Identification of the procedures for mentoring the FETP

2.1.2 Preparation of the FETP educational materials and tools (including relating these materials to the continuing education process)

2.1.3 Implement training activity

2.1.3.1 Twin with another country on FETP for collaboration and field activities

2.1.4 Meetings for technical assistance and advocacy and dissemination and communication of field investigation results

2.1.5 Monitoring and evaluation of the training programme

2.1.6. Development of a continuing education accreditation system

Activity 2.2 Continuing Education in Epidemiology as training of trainers (ToT)

2.2.1. Implementation of training for at least 300 persons as ToT.

Activity 2.3 Development of the “5 year action plan” for both types of epidemiology trainings FETP and ToT.

Activity 2.4 Preparation of documents necessary to aid in the legislation to make the FETP and ToT functional

Activity 3.1 Conducting a review and needs assessment of existing laboratory capacities for the detection, characterization and reporting of notifiable diseases, including contribution to the EWRS

3.1.1. Identification and appointment of national technical expert for coordination, implementation, analysis and reporting of laboratory on-site assessments

3.1.2. Preparation of appropriate laboratory assessment tools

3.1.3. On-site assessment of selected laboratories

3.1.4. Analysis of results, preparation of needs assessment and development of prioritized list of laboratory activities

3.1.5. Reporting on the needs assessment and prioritized list of activities for integrating and coordinating microbiology laboratories into EWRS

Activity 3.2 Establish ongoing improvement in microbiology laboratory performance quality and support the development of Quality Assurance guidelines and operations

3.2.1. Identify and appoint laboratory technical coordinators for laboratory component of the Project, one international, one from MoH/RSNHC

Activity 3.3 Establishment of a web-based information exchange system for microbiology laboratory results reporting among the laboratories including observing other countries’ systems during study visits.

Activity 3.4 Establishing a performance monitoring system for microbiology laboratories

Activity 3.5 Expand participation of microbiology laboratories in international collaborative networks for the testing of samples that is not appropriate for testing within Turkey

Activity 4.1 Further development of the curriculum for Basic Laboratory Management and pathogen Specific Laboratory Training for laboratories at the different levels
Activity 4.2 Monitoring and evaluation of the laboratory management training programme

Activity 4.3 Institutionalization of the Laboratory Management Training and Pathogen Specific Laboratory Training Programme

Activity 4.4 Continuing training in microbiology laboratory management and pathogen specific laboratory for at least 3000 people including specialists and technical staff by the end of the Project.

4.1.1. Identification of the collaborating institutions (Institute of PH, universities, provincial and district governances, etc.)

4.1.2. Development of the 5 year action plan by a certified continuing education consultation

4.1.3. Develop a continuing education accreditation system

3.5 Conditionality and sequencing:
National focal point exists.

Full time staff assigned by both Refik Saydam National Hygiene Centre and Primary Health Care General Directorate.

A laboratory training system has been established at RSNHC under ESCCDS Project II

3.6 Linked activities

Strengthening of the epidemiological Surveillance and Control of Communicable Diseases System (ESCCDS I) in Turkey (TR0403.06).

ESCCDS I produced a National Strategic Plan of Action for Communicable Diseases Surveillance and Control, 2008-2013 (NPoA) which includes targets and budgets for many of the activities in this Project (SCCD). The correspondence between these targets and Project activities is presented in the table below:

<table>
<thead>
<tr>
<th>Project Activities</th>
<th>NPoA Target</th>
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<tbody>
<tr>
<td>1.1. Needs assessment of the current public health surveillance and response system, encompassing all-sectors and hazards</td>
<td>T*1.1 (A1, A2) ; T1.2 (A2-7); T4.1 (A1, A2, ); T5.1 (A1)</td>
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<tr>
<td>1.2. Establishment of the EWRS to detect health events and public health risks at all levels</td>
<td>T1.3 (A3); T4.1 (A3)</td>
</tr>
<tr>
<td>1.3. Establishment of a communications system to enable information management, integration, and access for users and decision makers.</td>
<td>T4.1 (A4, A5, A6)</td>
</tr>
<tr>
<td>2.1. Establishment of the Field Epidemiology Training Program (FETP): minimum 3 persons trained by FETP</td>
<td>T1.3 (A1); T1.8 (A1-4) T1.10 (A2-4); T3.3 (A1-8)</td>
</tr>
<tr>
<td>2.2. Continuing Education in Epidemiology as training of trainers (ToT)</td>
<td>T3.1 (A1, A2, A3); T3.2 (A1); T3.4 (A1-6, A8, A9, A24)</td>
</tr>
<tr>
<td>3.1. Conducting a review and needs assessment of existing lab capacities for the detection, characterization and reporting of notifiable diseases, including contribution to the EWRS</td>
<td>T1.2 (A2); T5.3 (A1-3)</td>
</tr>
<tr>
<td>3.2. Establishment of ongoing improvement in microbiology laboratory performance quality and supporting the development of Quality Assurance guidelines and operations</td>
<td>T5.3 (A4-7);</td>
</tr>
<tr>
<td>3.3. Establishment of a web-based information exchange system for microbiology laboratory results reporting among the laboratories</td>
<td>T1.9 (A2-4); T5.2 (A4-7)</td>
</tr>
</tbody>
</table>
3.4. Establishment of a performance monitoring system for microbiology laboratories  T3.4 (A17, A18)

3.5. Expanding the participation of microbiology laboratories in international collaborative networks for the testing of samples that are not appropriate for testing within Turkey  T5.8 (A2-6)

4.1. Further development of the curriculum for Basic Laboratory Management and Pathogen Specific Laboratory Training for laboratories at the different levels  T1.3 (A4); T3.4 (A10-16, A21-23)

4.2. Monitoring and evaluation of the laboratory management training programme  T1.6 (A2); T3.4 (A17, A18)

4.3. Institutionalization of the Laboratory Management Training and Pathogen Specific Laboratory Training Programme  T1.3 (A4); T3.4 (A10-23); T5.2 (A2)

4.4. Continuing training in microbiology laboratory management and pathogen specific laboratory by training min 3000 people including specialists and technical staff by the end of the Project  T3.4 (A11, A12, A14, A16)

* T : target; § A : Activity

**Avian Influenza Preparedness and Response Project (2006)**

The overall objective of the Project is to minimize the threat in Turkey posed to humans by Highly Pathogenic Avian Influenza (HPAI) infection in domestic poultry and other animals to diminish the burden of disease and loss of productivity; to improve influenza pandemic preparedness and the response to this and other infectious disease threats to humans. The Project purpose is to strengthen the infrastructure of Veterinary Services for the effective and efficient AI disease control and eradication activities to be carried out, as well as, improving the national public health surveillance and response systems through upgrading diagnostic testing and early response capacities. The Project duration is two years (January 2006 - February 2008). Project budget financed under the 2006 Financial Cooperation Program is €10.400.000.

**The Reproductive Health Program (DGIA-D/MEDTQ/03-98)**

The overall objective of the Project is to improve the reproductive health system, to modernize the services including information, training and health care services and to develop a strategy for circumstances supporting people in their rights and choices concerning reproductive health in Turkey. The Project duration is between 2001 and 2007 and Project budget financed under the MEDA Program is €60.000.000.

One component of the reproductive health programme was an operational research Project aimed at introducing second generation surveillance of HIV. The Project included training of clinicians to deliver behavioural risk assessment questionnaires in high risk groups and to conduct voluntary linked counselling and testing for sexually transmitted diseases including HIV in ante-natal populations in four Turkish cities. This Project proved that 2nd generation surveillance could work under pilot conditions, but the final report recommended that 1st generation surveillance should first be fully established throughout Turkey and that the organisational structure for coordinating surveillance should first be strengthened.

There are also links to multi-lateral donor funded assistance:

**WB Health Transition Project**

The overall Program objective is to improve the governance, efficiency, user and provider satisfaction, and long-term fiscal sustainability of the healthcare system in Turkey. The Project has the following six components: Component A) supports MoH's institutional transition from a provider of services to a policy maker and regulator of service provision, while retaining key public health functions. This component has four sub-components: (i) restructuring of the MoH; (ii) establishment of a National Pharmaceutical and Medical
Devices Agency (NPMDA); (iii) quality assurance and accreditation of health facilities; and (iv) establishment of the Monitoring and Evaluation Capacity for the Program for Transformation in Health (PTH). Component B) supports the establishment of a single health insurance fund by means of consolidating the four existing health insurance schemes, and expanding its reach to an additional estimated 22 million citizens who are not fully covered. Component C) has four sub-components: (i) introduction of family medicine as an organizational model for the provision of outpatient or primary health care services; (ii) harmonization of MoH and SSK hospitals towards greater autonomy; (iii) developing an effective patient referral system to reinforce system hierarchy; and (iv) strengthening population health programs, including disease surveillance, maternal and child health, prevention and control of communicable and non-communicable diseases (NCDs). The reorganization will be implemented in a phased manner, with pilots in large cities during Phase I, to be rolled out nationwide during the second phase. Component D) has two sub-components: (i) health and social security human resources policy and planning; and (ii) strengthening the School of Public Health (SPH), to become a centre of excellence in advocacy, training and research for the MoH. Component E) supports the development of national standards in line with the realignment of institutional roles and responsibilities in both MoH and Ministry of Labor and Social Security (MOLSS). Component F) involves activities related to Project management. It will support Project coordination between the two ministries as well as Project implementation in each ministry, and an oversight mechanism for overall Project guidance and policy support for both the PTH and the Project itself.

Avian Influenza and Human Pandemic Preparedness and Response APL 2 Project

The Avian Influenza and Human Pandemic Preparedness and Response (APL) Project for Turkey aims to minimize the threat in Turkey posed to humans by highly pathogenic avian influenza infection and other zoonoses in domestic poultry and prepare for the control and response to an influenza pandemic and other infectious disease emergencies in humans. To achieve this, there are three Project components. Component 1 targets the prevention, control and total eradication of Highly Pathogenic Avian Influenza through: (1) strategy development and epidemiological studies and surveillance programs to inform the improvement of disease control measures; (2) strengthening the detection capacity of reference and regional diagnostic laboratories to follow-up reported Avian influenza cases; (3) support to activities related to implementing the containment plan for avian influenza outbreaks; and (4) and restructuring the poultry sector. Component 2 targets reducing the impact of a pandemic influenza virus through: (1) year-round surveillance; (2) effective and accurate methods of diagnosis; (3) social distance interventions; and (4) strengthened medical services. The Project helps the MoH to build its institutional capacity to implement the recently prepared national pandemic influenza action plan in coordination with the Ministry of Agriculture and Rural Affairs (MARA). Component 3 supports information and communication activities to increase the attention and commitment of government, the private sector, and civil society organizations and to raise awareness, knowledge and understanding among the general population about the risk and potential impact of the pandemic. It will also support the National Zoonotic Disease in its roles of triggering emergency responses by the MARA and MoH, monitoring the actions taken by them, coordinating public statements to the media, and executing Project evaluation activities.

WHO Biennial Country Agreement (BCA)

Each two years, WHO agrees a series of Project activities with its Member State governments to be funded and organised by the related WHO Country Office (CO). The BCA for Turkey 2008/9 includes capacity assessments and consensus building workshops to be organised by the office in Ankara that will help to establish the NFP and multi-sectoral early warning and response at all levels before the Project commences.
3.7 Lessons learned

Study tours were organised to the Spanish and German FETPs during ESCCDS I. The main lesson learned was that an effective epidemiology training system relies on a medium-term new budgetary and political commitment to maintain staff in dedicated epidemiology posts.

The Foundation Fellows have demonstrated they are suitable candidates for FETP.

There is a high level of demand from heads of microbiology laboratories for establishment of systematic performance monitoring and proficiency testing.

Senior laboratory staff from RSNHC and collaborating hospital and university laboratories have demonstrated their ability to develop high quality laboratory training materials and deliver them in an effective way (as demonstrated by post-training assessments).

4. Indicative Budget (amounts in €)

<table>
<thead>
<tr>
<th>Activities</th>
<th>IB</th>
<th>INV</th>
<th>TOTAL EXP,RE</th>
<th>TOTAL PUBLIC EXP,RE</th>
<th>IPA COMMUNITY CONTRIBUTION</th>
<th>NATIONAL PUBLIC CONTRIBUTION</th>
<th>PRIVATE CONTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(1)</td>
<td>EUR</td>
<td>EUR</td>
<td>EUR</td>
<td>EUR</td>
<td>EUR %</td>
</tr>
<tr>
<td></td>
<td>(a)=(b)+(e)</td>
<td>(b)=(c)+(d)</td>
<td>(c)</td>
<td>(2)</td>
<td>(d)=(x)+(y)+(z)</td>
<td>% Central EUR</td>
<td>Regional/Local EUR</td>
</tr>
<tr>
<td>Activity 1 (Grant to WHO)</td>
<td>X</td>
<td>4,500,000</td>
<td>4,500,000</td>
<td>4,050,000</td>
<td>90</td>
<td>450,000</td>
<td>10</td>
</tr>
<tr>
<td>TOTAL IB</td>
<td>4,500,000</td>
<td>4,500,000</td>
<td>4,050,000</td>
<td>90</td>
<td>450,000</td>
<td>10</td>
<td>450,000</td>
</tr>
<tr>
<td>TOTAL INV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,500,000</td>
<td>4,050,000</td>
<td>90</td>
<td>450,000</td>
<td>10</td>
<td>450,000</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: DO NOT MIX IB AND INV IN THE SAME ACTIVITY ROW, USE SEPARATE ROW

Amounts net of VAT
(1) In the Activity row use “X” to identify whether IB or INV
(2) Expressed in % of the Public Expenditure (column b)
(3) Expressed in % of the Total Expenditure (column a)

5. Indicative Implementation Schedule (periods broken down per quarter)

A single direct grant contract with WHO is anticipated. The indicative quarterly cost/activity schedule is attached as Annex 2.

1 A brief explanation for the basis of demand direct grant with WHO: The WHO Regional Office for Europe is indicated as the anticipated technical partner in the implementation of the present Project, as this arrangement was deemed to constitute the most appropriate constellation after discussion among MoH, EU and WHO. WHO has a recognized mandate for improving public health and is perceived as a reliable partner on the global, regional and Turkish public health arena. WHO involvement would guarantee access to resources at global and regional level through dedicated networks and international guidelines/standards. Moreover, the international mandate to lead assistance with regard to the implementation of the IHR, a primary objective of the present Project, lies with WHO. Accordingly, a central position of WHO in SCCD would lend weight and legitimacy to the activities and thereby increase their impact.

During the implementation of SCCD, WHO could build on the activities and lessons learnt in ESCCDS I, for which WHO was the primary technical partner. Phase I ended in March 2008 and the ongoing review of its outcome and implementation is anticipated to provide key lessons for successful implementation of phase III. Similarly valuable experiences are previous collaborative initiatives between Turkish authorities and WHO regarding the development of a roadmap for IHR implementation, as well as the control of communicable diseases including water borne diseases, avian influenza, Crimean-Congo haemorrhagic fever etc.

WHO would also provide links to experience and technical expertise and facilitate formation of bilateral partnerships with regard to related capacity building efforts in other EU and non-EU Member States in the WHO European
### Contracts

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Start of Tendering</th>
<th>Signature of contract</th>
<th>Contract Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract 1.1</td>
<td>1st Quarter of 2009</td>
<td></td>
<td>1st Quarter of 2012</td>
</tr>
</tbody>
</table>

Duration of the Project: 36 months

All Projects should in principle be ready for tendering in the 1st Quarter following the signature of the FA

### 6. Cross cutting issues (where applicable)

#### 6.1 Equal Opportunity

The Project will apply the policy of equal opportunities for all groups.

The position of National Director of the Turkish FETP will be appointed through national open advertisement of Terms of Reference appropriate to this senior and specialised role.

The position of International Co-Director of the Turkish FETP will be appointed through international open advertisement of Terms of Reference appropriate to this senior and specialised role.

#### 6.2 Environment

The scope of IHR includes natural and environmental disasters. The EWRS has a role in preventing and minimising environmental damage through accidental releases.

#### 6.3 Minority and vulnerable groups

According to the Turkish Constitutional System, the word minorities encompass only groups of persons defined and recognized as such on the basis of multilateral or bilateral instruments to which Turkey is a party. This Project has no negative impact on minority and vulnerable groups.

IHR has a human rights focus aimed at control of the spread of disease with minimum human discomfort and minimum disruption of trade. It is applicable to travellers and to forced migrants and internally displaced persons, placing a requirement on States Parties to ensure adequate standards of nutrition, shelter and health care.

### ANNEXES

ANNEX 1 Log frame in Standard Format (attached)

ANNEX 2 Amounts contracted and Disbursed per Quarter over the full duration of Programme (attached)

ANNEX 3 Institutional Framework

ANNEX 4 Reference to laws, regulations and strategic documents

ANNEX 5 Details per EU funded contract (*) where applicable

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Region. A WHO involvement in the implementation would enable Turkey to serve as a model for other eastern and southern countries in the Region, an issue which is pertinent considering the central geopolitical position of Turkey.

WHO has through its Country Office a lasting and direct presence in Turkey. Presence of the Country Office could promote sustainability of the results of the Project, through follow-ups and support technical assistance as requested even after the Project.
**ANNEX 1: Logical framework matrix in standard format**

<table>
<thead>
<tr>
<th>LOGFRAME PLANNING MATRIX FOR Project Fiche</th>
<th>Programme name and number</th>
<th>Surveillance and Control of Communicable Diseases System (SCCD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contracting period expires</td>
<td>Disbursement period expires</td>
</tr>
<tr>
<td></td>
<td>2 years after the signature of the Financing Agreement</td>
<td>3 years following the end date for contracting</td>
</tr>
<tr>
<td></td>
<td>Total budget : € 4,500,000</td>
<td>IPA budget: € 4,050,000</td>
</tr>
</tbody>
</table>

**Overall objective**  
To support the Turkish government in its efforts to develop a public health early warning and response system (EWRS) to detect, assess, report and respond to health events and public health risks (hazards of infectious, chemical, radio-nuclear or unknown origin) in line with the IHR and the EU acquis.

**Objectively verifiable indicators**  
System ability to detect, assess, report and respond to public health hazards pursuant national and international requirements

**Sources of verification**  
MoH’s centralized and provincial data records

**Project purpose**  
To develop a more efficient early warning and response system (EWRS) for Turkey to comply with acquis communautaire and to operate under the IHR. By building upon earlier Projects (ESCCDS I and II) this Project will institutionalise training and ensure continuing education, in diseases control through the establishment of a National Field Epidemiology Training Program (FETP) and a sustainable laboratory training program.

**Objectively verifiable indicators**  
An operational EWRS to detect, assess, report, respond to and document health events and public health risks at all levels, in line with EU acquis and IHR by the end of Project.  
Existence of a “5 Years Action Plan” for National FETP by the end of the Project.  
Existence of an official membership to TEPHINET by the end of Project.  
Existence of institutional infrastructure managing the continuing education programmes for field epidemiologists and laboratory personnel

**Sources of verification**  
Records documenting the decision making process related to public health events’ management available.  
Fellowship programme and other training reports  
TEPHINET membership  
Legal document, training reports, professional outcome of graduates

**Assumptions**  
Existence of enabling environment (technical, technological, political, legislative) at all levels
### Result 1

The EWRS is strengthened by finely tuning technical functions and communications.

<table>
<thead>
<tr>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>National IHR action plan published by the end of 2010.</td>
<td>No. of staff are empowered related to the implementation of IHR action plan</td>
<td>Political commitment.</td>
</tr>
<tr>
<td>EWR Unit (as a National Focal Point -NFP) at the central level with minimum five provincial EWR units are operational by the end of first year.</td>
<td>EWR Unit activities reports monthly</td>
<td>Sufficient communication capacity</td>
</tr>
<tr>
<td>Communication channels at all levels of the EWR system functional by the end of Project</td>
<td>Training reports</td>
<td>IHR-related assessments (e.g., points of entry, emergency preparedness, etc.) have been initiated or completed</td>
</tr>
</tbody>
</table>

### Activities

<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Costs</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. Needs assessment of the current public health surveillance and response system, encompassing all-sectors and hazards.</td>
<td>Direct Grant / WHO</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>1.1.1. Reporting on and integrating the outcome of the needs assessment in the national IHR action plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2. Establishment of the EWRS to detect health events and public health risks at all levels</td>
<td>Direct Grant / WHO</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>1.2.1. Establishment of an EWR Unit at national level and in 5 provinces by the end of the first year and at all levels in 81 provinces by the end of the Project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.2. Development of operating guidelines and reports at different levels.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.3. Identification of necessary tools to work among all levels of the EWRS, national government and international organisations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3. Establishment of a communications system to enable information management, integration, and access for users and decision makers.</td>
<td>Direct Grant / WHO</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>
| 1.3.1. Publication of a weekly communicable
diseases bulletin, including IHR related issues, and dissemination of printed copies at provincial level as well as via web. |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4. Training of the personnel involved in the EWRS</td>
</tr>
<tr>
<td>1.5. Engagement and strengthening multi-sectoral surveillance and response capacity</td>
</tr>
<tr>
<td>1.5.1. Establishment of operational and logistic capacity to respond to small-medium scale communicable diseases outbreak.</td>
</tr>
<tr>
<td>1.5.1.1 Communication equipment for rapid communication between the provincial, central, and international levels</td>
</tr>
<tr>
<td>1.5.1.2 Development of distribution and replenishment mechanisms,</td>
</tr>
<tr>
<td>1.5.1.3 Compiling inventory of supplies for outbreak response, inventory of suppliers, to map storage facilities at all levels,</td>
</tr>
<tr>
<td>1.5.1.4 Supplies to be pre-positioned at national and provincial levels to respond to specific diseases threats.</td>
</tr>
<tr>
<td>1.5.2 Development of Integrated Public Health Emergency preparedness plan.</td>
</tr>
<tr>
<td>1.6. Simulation for detection, assessment, reporting and response to public health events of potential international public health concern</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result-2</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkish Field Epidemiology Training Programme (FETP) is institutionalized.</td>
<td>Government commitment to the sustainability of the National FETP by the end of Project.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>An organisational structure for management of the training system is developed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existence of Continuing Education Program</td>
<td>Funds allocated from the MoH budget to the training system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of staff allocated full time for the training system.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of participants having</td>
<td>MoH Co-Director available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislations are available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities</td>
<td>Means</td>
<td>Costs</td>
<td>Assumptions</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------------------</td>
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<td>-------------</td>
</tr>
<tr>
<td>2.1 Establishment of the Field Epidemiology Training Program (FETP): minimum 3 persons trained by FETP</td>
<td>Direct Grant / WHO</td>
<td>1340</td>
<td></td>
</tr>
<tr>
<td>2.1.1 Development of the curriculum and the operational procedures for FETP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.1 Exploring the country’s capacity for supporting the FETP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.2 Identification of the collaborating institutions (Institute of PH, universities, provincial and district governances, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.3 Defining the responsible parties and responsibilities of other partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.4 Revision of the courses/modules</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.5 Identification and appointment of Co-Directors, (one senior epidemiologist, the other from and provided by MoH)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.6 Identification of admissions committee and admissions requirements for potential trainees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.7 Identification of the procedures for mentoring the FETP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.2 Preparation of the FETP educational materials and tools (including relating these materials to the continuing education process)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.3 Implement training activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.3.1 Twin with another country on FETP for collaboration and field activities</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Existence of National FETP and minimum 3 persons trained by FETP.
Existence of an official membership to TEPHINET by the end of Project.
Existence of a “5 Year Action Plan” for National FETP by the end of Project.
received continuing education
No. of graduates of FETP
Membership certificate
Official publication of action plan
| 2.1.4 Meetings for technical assistance and advocacy and dissemination and communication of field investigation results |  
| 2.1.5 Monitoring and evaluation of the training programme |  
| 2.1.6. Development of a continuing education accreditation system |  
| 2.2 Continuing Education in Epidemiology as training of trainers (ToT) | Direct Grant / WHO 350 |
| 2.2.1. Implementation of training for at least 300 persons as ToT. |  
| 2.3. Development of the 5 year action plan for both types of epidemiology trainings, FETP and ToT. | 10 |
| 2.4 Preparation of documents necessary to aid in the legislation to make the FETP and ToT functional | Direct Grant / WHO 500 |

<table>
<thead>
<tr>
<th>Result-3</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement of present capacity in microbiology laboratories, support for Turkish EWRS, is extended</td>
<td>Mechanism for the definition of performance criteria for microbiology laboratories in the different sectors (including health, agriculture, environment) established by the 2nd quarter of 2011</td>
<td>systematic laboratory review process</td>
<td>Political commitment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Microbiology experts at national level available to conduct on-site reviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Appropriate international technical expert can be identified for available budget</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Appropriate national technical expert is available from MoH/RSNHC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Budgetary support for additional laboratory testing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Costs</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Conducting a review and needs assessment of existing laboratory capacities for the detection, characterization and reporting of notifiable diseases, including contribution to the EWRS</td>
<td>Direct Grant / WHO</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>3.1.1 Identification and appointment of national</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


technical expert for coordination, implementation, analysis and reporting of laboratory on-site assessments

3.1.2. Preparation of appropriate laboratory assessment tools

3.1.3. On-site assessment of selected laboratories

3.1.4. Analysis of results, preparation of needs assessment and development of prioritized list of laboratory activities

3.1.5. Reporting on the needs assessment and prioritized list of activities for integrating and coordinating microbiology laboratories into EWRS

<table>
<thead>
<tr>
<th>3.2. Establishment of ongoing improvement in microbiology laboratory performance quality and supporting the development of Quality Assurance guidelines and operations</th>
<th>Direct Grant / WHO</th>
<th>550</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.1. Identify and appoint laboratory technical coordinators for laboratory component of the project, one international, one from MoH/RSNHC</td>
<td>Proficiency Testing Pilot (established under ESCCDS)</td>
<td></td>
</tr>
<tr>
<td>3.3. Establishment of a web-based information exchange system for microbiology laboratory results reporting among the laboratories including observing other countries’ systems during study visits.</td>
<td>Direct Grant / WHO</td>
<td>50</td>
</tr>
<tr>
<td>3.4. Establishment of a performance monitoring system for microbiology laboratories</td>
<td>Direct Grant / WHO</td>
<td>50</td>
</tr>
<tr>
<td>3.5. Expanding the participation of microbiology laboratories in international collaborative networks for the testing of samples that are not appropriate for testing within Turkey</td>
<td>Direct Grant / WHO</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result-4</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A National Microbiological Laboratory Training Programme (MLTP) including laboratory management and specific laboratory training programme is institutionalized.</td>
<td>Existence of a “5 Year Action Plan” for national microbiology laboratory training” by the end of Project. Minimum 3000 trained people including specialists and technical staff by the end of the Project.</td>
<td>Officially publication of action plan Training reports including participant list Annual report Existence of terms of reference</td>
<td>Existence of training laboratory Political commitment</td>
</tr>
</tbody>
</table>
An organisational structure for management of the training programme is functional by the end of the Project. Establishment of documented career paths in microbiology laboratory sciences by the end of the Project.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Costs</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1. Further development of the curriculum for Basic Laboratory Management and Pathogen Specific Laboratory Training for laboratories at the different levels</td>
<td>Direct Grant / WHO</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>4.2. Monitoring and evaluation of the laboratory management training programme</td>
<td>Direct Grant / WHO</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4.3. Institutionalization of the Laboratory Management Training and Pathogen Specific Laboratory Training Programme</td>
<td>Direct Grant / WHO</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4.4. Continuing training in microbiology laboratory management and pathogen specific laboratory by training minimum 3000 people including specialists and technical staff by the end of the Project.</td>
<td>Direct Grant / WHO</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>4.1.1. Identification of the collaborating institutions (Institute of PH, universities, provincial and district governances, etc.)</td>
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<td>4.1.2. Development of the 5 year action plan by a certified continuing education consultation</td>
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<tr>
<td>4.1.3. Develop a continuing education accreditation system</td>
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</tbody>
</table>

Pre conditions:

National focal point exists.
Full time staff assigned by both Refik Saydam National Hygiene Centre and Primary Health Care General Directorate.
A laboratory training system has been established at RSNHC under ESCCDS Project II