ANNEX I
(Technical annex)

1. Management summary of the project

The project EUVAC.NET 2004 is based on the EU public health program and important innovation taking into account the previous experience, new technology and methodological approaches of surveillance of vaccine preventable diseases (VPD). The project is designed to facilitate integration of previous achievements within the new European Centre for Disease Prevention and Control (ECDC) in Stockholm. The EUVAC.NET Hub will be housed at Statens Serum Institut (SSI) and will have the Italian Istituto Superiore di Sanità (ISS) and WHO/Europe as major partners together with the 25 Member States (MS), EFTA and candidate countries.

Following the establishment of case definitions and disease classifications for measles and pertussis (Decision 2002/253/EC), databases have been set up for the ongoing collection of surveillance data.

Measles surveillance reports for 2001 and 2002 have already been transmitted to the Commission and are available on the web at www.euvac.net, which also provides schematically and updated vaccination schedules of the EU Member states, as well as Switzerland, Norway, Iceland and some of the candidate countries. In EUVAC.NET 2004 innovative approaches, such as sentinel physician networks, will be applied to strengthen surveillance, considering the next launching by WHO of the campaign for measles elimination.

Pertussis surveillance collecting data over a five years period allows drawing a comprehensive picture of a large area of Europe. The general overview of results reveals a very inhomogeneous situation. Of the 19 countries included in the project, three were not able to provide any data (Finland, Belgium, Luxembourg), 12 provided data in a case-based format, Austria had only aggregated data available, while three countries switched from aggregated to case-based data during the period under study (Ireland, Iceland, Spain). Incompleteness of information from statutory notifications for surveillance purposes, especially for many VPD, suggest that new and innovative approaches should be considered for acquiring more timely and focused data even if not comprehensive for the entire MS and to strengthening surveillance of other VPD. The experience made so far is underlying the need for promoting a more shared surveillance and to implement innovative approaches for surveillance of measles and other VPD as the implementation of sentinel physician networks already operating in some contexts.

Moreover, EUVAC.NET 2004 will extend its activities to include surveillance of additional VPD and infections, such as rubella, mumps and varicella. Congenital rubella syndrome (CRS) will be also included as a new condition under surveillance.

General objective of the project will be, 1: To operate a surveillance Community network for vaccine preventable infectious diseases (pertussis, measles, rubella and congenital rubella syndrome, mumps and varicella) using epidemiological and laboratory surveillance methods; 2: To disseminate and exchange information on vaccine preventable disease occurrence; 3: To create an inventory of sentinel physician/paediatrician networks in Member States; 4: To

identify strengths and weaknesses in surveillance systems for VPD and 5: To create a network of competent sources of reliable data on VPD in each Member State.

Specific objectives will be, 1: To facilitate standardized surveillance methodologies and comparability of data; 2: To monitor and compare disease epidemiology, effects of vaccination programs and burden of disease; 3: To contribute to, advocate for and facilitate toward elimination of measles and the control of congenital rubella infection; 4: To estimate/measure denominators for sentinel surveillance systems where systems on general population are not in place; 5: To collect and compare tools used and data provided by the physician/paediatrician networks; 6: To collaborate with other stakeholders; 7: To integrate EFTA/EEA, accession and applicant countries; 8: To create mechanisms and systems for distribution, sharing and transfer of data, information and experience; 9: To implement and to update the project website; 10: To disseminate information on VPD occurrence; 11: To facilitate connection and experience sharing across the various sentinel networks; 12: To improve efficiency by sharing available surveillance tools and methods.
Comprehensive co-ordination and evaluation procedures will be established to ensure the scheme fulfils its aims and objectives and legal obligations under Decision no. 2119/98/EC and the Community Action in the Field of Public Health (2003-2008). The committee should also advise on planning and development of the network activities.

The Hub will collate measles, mumps, rubella, congenital rubella syndrome (CRS), pertussis and varicella data from routine notification systems from the EUVAC.NET participating countries. ISS will coordinate the collection of data across sentinel physician/paediatrician networks in Member States and will participate in the overall activities with a major focus on epidemiological analyses of data on pertussis and varicella. Data will be exchanged with WHO/Europe as agreed in the network and when appropriate. Integration of EFTA and candidate countries will be coordinated during an interim period and until fully integrated..

In case information on or indications about a potential public health threat due to VPD, information or indications about such events immediately will be brought to the attention of the national designated authorities responsible for early warning in line with Commission Decision 2000/57/EC[1] on the Early Warning and Response System for the prevention and control of communicable diseases.

Collaboration with the Enhanced Laboratory Surveillance of Measles project (ELSM) and WHO-designated reference laboratories in the WHO/Europe measles-rubella laboratory network will facilitate laboratory surveillance of measles and rubella. EUVAC.NET will contribute to, advocate for and facilitate national plans of actions toward measles elimination and control of congenital rubella infection. National plans will be collected and published in English on the website upon agreement. A database has been created on measles and pertussis and the Hub will continue the data collection. Additional databases will be created for the collection and analysis of data on rubella, congenital rubella syndrome (CRS), mumps and varicella. Other indicators of congenital rubella infection should be investigated.
A report on project progress and results will be produced annually. A mid-term desk review of activities and results will be produced with conclusions and recommendations. An evaluation of the project process and results will be commenced within the last 2 months of the project period.

[1] OJ L 21, 26.1.2000, p.32-5.

2. The precise deliverables of the project

Introduction

1. The Commission published Decision 2003/542/EC[2] amending Decision 2000/96/EC[3] as regards the operation of dedicated surveillance networks (DSNs).

2. To assist the Member States to fulfil the requirements of Decision 2119/98/EC[4], in particular Article 4, the designated structures/authorities in the Community Network, will be technically supported by DSNs, each covering one or more diseases or special health issues. The DSN will perform epidemiological surveillance according to what is defined by Decision 2119/98/EC.

3. In addition, the operation of other projects in the field of the Community Network is recognized and in particular the work of on-going surveillance projects and capacity building projects. For diseases not covered by DSNs, article 6 of Decision 2000/96/EC applies stating that, Member States shall disseminate relevant information in their possession detected in their national surveillance system on communicable diseases in the Community Network.

List of the deliverables of the project

Deliverable	**Dissemination**
Midterm report	Written report including inter-rim desk review (D8.3) and results to the partners
Final report	Written report including evaluation of the project to the partners and published on the WEB
Annual reports	Written report on data results to the partners and published on the WEB
Quarterly newsletter	Activities, results, news published on:www.EUVAC.NET
Publication of results in scientific papers	Reports of major results targeted for the scientific community
National strategy papers on measles elimination and control of rubella	Available strategy papers will be published on the WEB. Strategy papers from Accession countries may be translated to English before publication
Measles data	Data will be analysed and published on the WEB quarterly
Rubella questionnaire survey and data base	Written report on results to the partners
Rubella data	Data will be analysed and reported in the annual reports (D1.2) and on the WEB

[2] OJ L 185, 27.7.2003, p55 and OJ L 213, 23.8.2003, p 14.
[3] OJ L 28, 3.2.2000, p. 50.
[4] OJ L 268, 3.10.1998, p. 1.

Varicella questionnaire survey and data base	Written report on results to the partners
Varicella data	Data will be analysed and reported in the annual reports (D1.2) and on the WEB
Pertussis data	Data will be analysed and reported in the annual reports (D1.2) and on the WEB
Mumps questionnaire survey and data base	Written report on results to the partners
Mumps data	Data will be analyzed and reported in the annual reports (D1.2) and on the WEB
An interim desk review commenced by the Steering Committee	Written report included in the mid-term report (D1.2) to the partners.
Reports from three meetings in the Steering Committee	Written reports to the partners
Workshop convened	Written report to partners and on published on the WEB
Inventory of sentinel physician/pediatrician networks in MS	Published and ongoing updated on the WEB
Annual reports	Written reports on progress and estimates of occurrence of some VPD and published on the WEB
Final report	Written report to the partners and published on the WEB
Protocols and tools used	Published and ongoing updated on the WEB
Advocacy and technical support	Written reports from country visits included in the annual reports (D1.2)
Plenary meetings	Written reports from three plenary meetings to the participants and published on the WEB
Website development and update	All data on the website will be updated regularly, i.e. on a daily basis if needed.
Questionnaire survey and evaluation report	Results from a questionnaire survey and the evaluation will be reported in written in the final report (D1.1) and published on the WEB.

USE BY THE COMMISSION OF THE DELIVERABLES

The signing of this agreement implies authorisation of the Commission services and the European Centre for Disease Prevention and Control, to use as needed, including publication, all data and results produced in the context of the work which is the object of this agreement, as well as the use of all publications related to the project. In such as case, the Commission services will indicate the sources of data and publications.
The beneficiary accepts also to ask the Commission's permission to publish results from the project and provide to the Commission services on their request, of a reasonable number of additional copies of the results and main publications for subsequent dissemination to key institutional and Member States authorities.

A. Standard operating procedure. At the latest 9 months after signature of the grant agreement the beneficiary will provide the Commission with recommendations for standard operating procedures that the Commission may take into account in drawing-up proposals to be submitted for an opinion to the Community Network, as referred to in article 4.2 of Decision 2003/542/EC. These operating procedures will describe the following:

1) Co-ordinating structure and decision making process ;
2) Project management administration and supervision;
3) Case definitions, nature, and type of data to be collected;
4) Data management and protection, including data access and confidentiality;
5) Ways in which data are made comparable and compatible ('quality requirements and data validation');
6) Appropriate technical means and the procedures by which the data are to be disseminated and analysed at Community level ('data dissemination and reporting');
7) Proposed public health action, infection control procedures, and laboratory procedures.

B. One contact point (institution, service, department, etc.) for each Member State participating will have to be designated from the beginning of the project. This contact point would have to have the endorsement of the competent authorities of the Member States concerned. This does not exclude the possibility of networks having more than one participant per country but these should be organised through the national contact point. In each network one of the contact points (or other appropriate body) is nominated to act as a co-ordinating structure. It will collect the data required by the project and will regularly and in a timely way communicate data and results to the Community Network.

C. **For the correct functioning of the beneficiary's network:**

1. Each contact point will:

(a) Collect from its national information sources data relevant to that specific disease / group of diseases / special health issue. Such collection will be carried out after 9 months in accordance with the recommended standard operating procedures;
(b) Circulate epidemiological surveillance information to the co-ordinating structure and within its network through appropriate communication systems at intervals appropriate to the objectives of surveillance and at any other time that it may prove necessary;
(c) In case information on or indications about an event point to a potential public health threat (e.g. propagation of an outbreak) bring information or indications about such events immediately to the attention of the national designated authorities responsible for early warning, so that a decision can be taken quickly at to whether an official Early Warning shall be issued (in line with Commission Decision 2000/57/EC[5] on the Early Warning and Response System for the prevention and control of communicable diseases and in particular with Annex I thereof).

2. The co-ordinating structure will:

(a) Be the reference point for the network and co-ordinate data collection, validation, analysis, and dissemination in close collaboration with the national contact points, the

[5] OJ L 21, 26.1.2000, p.32-5.

epidemiological surveillance component of the Community Network and any other surveillance system, such as that of the WHO;

(b) Develop a manual or documents setting out standard operating procedures that will have to be recommended after nine months and used by the network thereafter, in agreement with the national contact points; such procedures will have to address at least the issues listed in Annex III of Decision 2000/96/EC;

(c) On request it shall provide data and summaries and analyses thereof and organise relevant expert advice and support to assist the Community Network and the Commission, in particular, but not exclusively, during emergencies;

(d) Regularly and in timely way, based on the standard operating procedures that it agreed and recommended, communicate data and results of their analyses to the Community Network and the Commission through the official communication system set up by the Commission for the operation of the Community Network and, to all other outlets that might be specified in the grant agreement such as "Eurosurveillance", web-sites, publications, etc..

(e) In case information on or indications about an event point to a potential public health threat (e.g. propagation of an outbreak) in one or more Member State(s) bring information or indications about such events immediately to the attention of the national designated authorities of the implicated Member State(s) so that a decision can be taken quickly as to whether an official Early Warning shall be issued (in line with Commission Decision 2000/57/EC on the Early Warning and Response System for the prevention and control of communicable diseases and in particular with Annex I thereof);

(f) Maintain the network database(s) and up-to-date documentation showing its structure, access and use procedures and search tools. The Commission and the Community Network will have access to the database(s). In case the network ceases to exist the co-ordinating structure shall be responsible for transferring the database(s) to the Commission.

3. Work breakdown structure: structure and description of work packages or "jobs"

Work package number :	WP 1	Starting date	01/01/2005	Ending date	31/12/2007
Work package title:	**Coordination of the project**				
Lead Partner for the work package:	SSI				
Partners involved:	P1				
Number of person-days:	887				

Expected results
To which objective is this work package linked?

The general aims:
1.1 To operate the coordination of this project 1.2 To disseminate and exchange information on vaccine preventable disease occurrence.
1.3 To create an inventory of sentinel physician/paediatrician networks in Member States
1.4 To identify strengths and weaknesses in surveillance systems for VPD.
1.5 To create a network of competent sources of reliable data on VPD in each Member State.
1.6 To integrate EFTA/EEA, accession and applicant countries as members of the EU-VAC.NET.

Description of work

The EUVAC.NET Hub is based at the SSI.
The Project leader is responsible for the general management of the project, including its procedural and financial actions. In collaboration with the Steering Committee he/she will supervise the work carried out to ensure optimal output and will participate in the activities on a daily basis as well as participate in international activities related to the project.
The Project coordinator will coordinate the project's activities and will be the focal point for communication with the Gatekeepers and other stakeholders on a daily basis. He/she will be directly involved in the planning of meetings and workshops and is expected to participate in quality assurance and the coordination of incoming data and dissemination of the results (WP2).
A Steering Committee will be established to ensure the scheme fulfils its aims and objectives and legal obligations under Decision no. 2119/98/EC and the Community Action in the Field of Public Health (2003-2008). The committee should also advise on planning and development of the network activities.

Deliverables

D1.1: Communication related to the project
D1.2: Midterm and final reports
D1.3: Annual reports
D1.4: Office equipment purchased
D1.5: EFTA/EEA, accession and applicant countries integrated as members of the EUVAC.NET.

Work package number :	WP 2	Starting date	01/01/2005	Ending date	31/12/2007
Work package title:	**Dissemination of results and other information**				
Lead Partner for the work package:	SSI				
Partners involved:	P1				
Number of person-days:	548				

Expected results
To which objective is this work package linked?

2.1 To create mechanisms and systems for distribution, sharing and transfer of data, information and experience.
2.2 To implement and regularly update the project's website with availability of European data on VPD programs.
2.3 To disseminate information on vaccine preventable disease occurrence.

Description of work

Target groups are the participating surveillance institutions and partners, the scientific community, health professionals, health authorities and decision makers at national and EU level and the general public.
The website: www.euvac.net serves as the basis to disseminate results and information and will be developed within the scope of Health information in the EU as an internet source that can be used by all target groups.
EUVAC.NET participants will be in regular contact mainly through electronic mail.
Participants and relevant stakeholders will also receive a newsletter distributed regularly by email and information will be disseminated through annual plenary meetings.
Dissemination of results to the scientific community will mainly be through participation in internanional conferences and publication of results in scientific papers.
Some National plans for measles elimination and control of rubella will be translated and all available plans published on the website.

Deliverables

D2.1: Quarterly newsletters to participants and relevant stakeholders.
D2.2: Publication of results.
D2.3:Update information on the website: Latest news, publications, national vaccination schedules
D2.4: Translation of national strategy papers on measles elimination into English
D2.5: Publish national strategy papers on measles elimination on the website

Work package number	WP3	**Starting date[7]:**	01/01/2005	**Ending date[8]:**	31/12/2007
Work package title:	**Measles surveillance**				
Lead Partner for the work package:	SSI				
Partners involved:	P1 + P3 -> 31				
Number of person-days:	1476				

Expected results
To which objective is this work package linked?

3.1 To facilitate the development of standardized surveillance methodologies and comparability of data between participating countries.
3.2 To monitor and compare disease epidemiology, effects of vaccination programme and burden of disease regarding measles.
3.3 To contribute to, advocate for and facilitate toward elimination of measles.
3.4 To encourage the collection of case based information following the minimum dataset identified by previous projects in this area;

Description of work

Special attention will be paid to measles towards its elimination in Europe.
The Hub will collate measles data on a monthly basis from the designated national surveillance institutions of the participating countries through the contact person known as the gatekeeper.
The gatekeepers will use one day per month for data processing.
Data will be analyzed by the Hub.
The hub will validate data which will be shared in accordance with the Memo of Understanding agreed upon with the WHO Office for Europe.
Results will be disseminated as decribed in WP2 and also integrated for the purpose of WP10.

Deliverables

D3.1: Measles agreed dataset received from all participating countries on a monthly basis.
D3.2: Data validated, stored and analysed with SQL database. Any further analysis performed with suitable epidemiological programmes such as STATA and epi-data/epi-info.
D3.3: Validated measles data forwarded to the Community Network on Communicable Diseases and WHO Office for Europe on a monthly basis.

Work package number	WP4	**Starting date[7]:**	01/01/2005	**Ending date[8]:**	31/12/2007
Work package title:	**Rubella surveillance**				
Lead Partner for the work package:	SSI				
Partners involved:	P1 + P3 -> P31				
Number of person-days:	649				

Expected results
To which objective is this work package linked?

4.1 To facilitate the development of standardized surveillance methodologies and comparability of data between participating countries.
4.2 To monitor and compare disease epidemiology, effects of vaccination programs and burden of disease regarding rubella and congenital rubella syndrome (CRS).
4.3 To contribute to, advocate for and facilitate toward the control of congenital rubella infection by 2010.
4.4 To encourage the collection of case based information following the minimum dataset identified by previous projects in this area
4.5 To support the use of the standard case definitions.

Description of work

Special attention will be paid to rubella towards its control in Europe.
A questionnaire survey will be carried out among the gatekeepers to identify surveillance systems in use to cover rubella and congenital rubella syndrom (CRS).
A database will be created using the variables identified and agreed upon.
Historical data on rubella and CRS will be collected to validate the database.
The Hub will collate data on rubella and CRS from the designated national surveillance institutions of the participating countries through the gatekeeper.
The gatekeepers will use half a day per month for data processing.
The Hub will analyze data.
The Hub will validate data which will be shared in accordance with the Memo of Understanding agreed upon with the WHO Office for Europe.
Results will be disseminated as described in WP2 and also integrated for the purpose of WP10

Deliverables

D4.1: Questionnaire survey carried out (3 months).
D4.2: Variables for database identified and agreed upon.
D4.3: Database created
D4.4: Historical data will be collated and used for reporting purposes and identifying trends.
D4.5:Data validated, stored and analysed with SQL database. Any further analysis performed with suitable epidemiological programmes such as STATA and epi-data/epi-info.
D4.6: Database on rubella cases and CRS received on an annual basis.
D4.7:Data validated, stored and analysed with SQL database. Any further analysis performed with suitable epidemiological programmes such as STATA and epi-data/epi-info.
D4.8: Validated rubella data forwarded to the Community Network on Communicable Diseases and WHO Office for Europe on a annual basis upon agreement.

Work package number :	WP5
Work package title:	**Varicella surveillance**
Lead Partner for the work package:	SSI
Partners involved:	P1 + P3 -> P31
Number of person-days:	173

Expected results
To which objective is this work package linked?

5.1 To facilitate the development of standardized surveillance methodologies and comparability of data between participating countries.
5.2 To monitor and compare disease epidemiology, effects of vaccination programs and burden of disease regarding varicella.
5.3 To encourage the collection of case based information following the minimum dataset identified by previous projects in this area
5.4 To support the use of the standard case definitions.

Description of work

A questionnaire survey will be carried out among the gatekeepers to identify varicella surveillance systems.
A database will be created using the variables identified and agreed upon.
Historical data on varicella will be collected to validate the database.
The Hub will collate data on varicella from the designated national surveillance institutions of the participating countries through the contact person known as the gatekeeper.
The gatekeepers will use one day per year for data processing.
Data will be analyzed in collaboration with the ISS.
The hub will validate data which will be shared in accordance with the Memo of Understanding agreed upon with the WHO Office for Europe.
Results will be disseminated as described in WP2.

Deliverables

D5.1: Questionnaire survey carried out (3 months).
D5.2: Variables for database identified and agreed upon.
D5.3: Database created
D5.4: Historical data will be collated and used for reporting purposes and identifying trends.
D5.5: Data validated, stored and analysed with SQL database. Any further analysis performed with suitable epidemiological programmes such as STATA and epi-data/epi-info.
D5.6: Available data on varicella cases received from all participating countries on an annual basis.
D5.7: Analysis of data in collaboration with the ISS.
D5.8: Validated varicella data forwarded to the Community Network on Communicable Diseases and WHO Office for Europe on a annual basis upon agreement.

Work package number :	WP6
Work package title:	**Pertussis surveillance**
Lead Partner for the work package:	SSI
Partners involved:	P1 -> P31
Number of person-days:	104

T6.1 Expected results
To which objective is this work package linked?

6.1 To facilitate the development of standardized surveillance methodologies and comparability of data between participating countries.
6.2 To monitor and compare disease epidemiology, effects of vaccination programs and burden of disease regarding pertussis.
6.3 To encourage the collection of case based information following the minimum dataset identified by previous projects in this area .
6.4 To support the use of the standard case definitions.

Description of work

The Hub will collate data on pertussis from the designated national surveillance institutions of the participating countries through the contact person known as the gatekeeper.
The gatekeepers will use one day per year for data processing.
Data will be analyzed in collaboration with the ISS
The hub will validate data which will be shared in accordance with the Memo of Understanding agreed upon with the WHO Office for Europe.
Results will be disseminated as described inWP2.

Deliverables

D6.1: Available data on pertussis cases received from all participating countries on a annual basis.
D6.2: Analysis of data in collaboration with the ISS.
D6.3: Validated pertussis data forwarded to the Community Network on Communicable Diseases and WHO Office for Europe on a annual basis upon agreement.

Work package number :	WP7
Work package title:	**Mumps surveillance**
Lead Partner for the work package:	SSI
Partners involved:	P1 + P3 -> P31
Number of person-days:	173

Expected results
To which objective is this work package linked?

7.1 To facilitate the development of standardized surveillance methodologies and comparability of data between participating countries.
7.2 To monitor and compare disease epidemiology, effects of vaccination programs and burden of disease regarding mumps.
7.3 To encourage the collection of case based information following the minimum dataset identified by previous projects in this area
7.4 To support the use of the standard case definitions.

Description of work

A questionnaire survey will be carried out among the gatekeepers to identify mumps surveillance systems.
A database will be created using the variables identified and agreed upon.
Historical data on mumps will collated to validate the database.
The Hub will collate data on mumps from the designated national surveillance institutions of the participating countries through the contact person known as the gatekeeper.
The gatekeepers will use one day per year for data processing.
Data will be analyzed by the Hub
The Hub will validate data which will be shared in accordance with the Memo of Understanding agreed upon with the WHO Office for Europe.
Results will be disseminated as described in WP2.

Deliverables

D7.1: Questionnaire survey carried out (3 months).
D7.2: Variables for database identified and agreed upon
D7.3: Database created
D7.4: Historical data will be collated and used for reporting purposes and identifying trends.
D7.5: Data validated, stored and analysed with SQL database. Any further analysis performed with suitable epidemiological programmes such as STATA and epi-data/epi-info.
D7.6: Data on mumps cases received from all participating countries on a regular basis.
D7.7: Data validated, stored and analysed with SQL database. Any further analysis performed with suitable epidemiological programmes such as STATA and epi-data/epi-info.
D7.8: Validated data forwarded to the WHO Office for Europe upon agreement.

Work package number :	WP8
Work package title:	**European network of sentinel physicians for vaccine preventable disease surveillance**
Lead for the work package:	Istituto Superiore di Sanità
Partners involved:	P1 -> P29
Number of person-days:	1807

T6.1 Expected results
To which objective is this work package linked?

General Aims:
8.1 To create an inventory of sentinel physician/paediatrician networks in Member States
8.2 To identify strengths and weaknesses in surveillance systems for VPD
8.3 To create a network of competent sources of reliable data on various VPD in each MS;

Specific objectives:
8.4 To estimate/measure accurate denominators for sentinel surveillance systems where systems on general population are not in place
8.5 To collect and compare tools used and data provided by the physician/paediatrician networks
8.6 To encourage the implementation of surveillance systems on the general population where they do not exist yet
8.7 To facilitate connection and experience sharing across the various sentinel physician/paediatrician networks in Member States
8.8 To improve efficiency by sharing available surveillance tools as case reporting forms and methods of data collection

T6.2 Description of work

Networks of sentinel physicians do already operate in Networks of sentinel physicians do already operate in many European countries, such as France, Italy, Belgium and Switzerland. Validity of their results assure the quality of surveillance in Member States as a tool for surveillance as well as emerging and re-emerging infectious diseases and will encourage implementations closely related to the organization of the various health systems and to the availability of denominator figures.
Data will be collected where sentinel surveillance systems are in place on diagnosed cases and vaccination status, including number of doses and type of vaccine received.
The definition of a minimal data set of pertinent variables common to most countries where sentinel surveillance are in use will be defined as a way to initiate harmonization of sentinel systems.
An European database will be designed and available data from sentinel surveillances will be collected trough national gate keepers.

T6.3 Deliverables
D8.1: Create an inventory of sentinel physician/pediatrician networks in MS
D8.2: Create estimates of occurrence of some VPD across the EU Member States
D8.3: Yearly publication on the project's website of protocols and tools (e.g., questionnaires, instructions for participants) used in sentinel surveillance systems in Europe

Work package number :	WP9
Work package title:	**Advocacy and technical support**
Lead for the work package:	SSI
Partners involved:	P1 + P3 -> P31
Number of person-days:	60

T6.1 Expected results
To which objective is this work package linked?

9.1 To facilitate the development of standardized surveillance methodologies and comparability of data between participating countries.
9.2 To contribute to, advocate for and facilitate toward elimination of measles and the control of congenital rubella infection by 2010.
9.3 To encourage the implementation of surveillance systems on the general population where they do not exist yet;
9.4 To improve efficiency by sharing available surveillance tools as case reporting forms and methods of data collection.

T6.2 Description of work

Special attention will be paid to measles towards its elimination in Europe. The project will contribute to, advocate for and facilitate national plans of actions toward measles elimination and control of congenital rubella infection.
Country visits by the project leader and the coordinator or data manager in collaboration with the WHO Office for Europe will provide an opportunity to define and implement activities for monitoring the progress towards the eliminaition of measles and control of congenital rubella infection.
The national plans will be collected and published in English on the EUVAC.NET website upon agreement and as described in WP2.

T6.3 Deliverables

D9.1: All countries visited at least once in a three year period
D9.2: Reports on activities needed for monitoring the progress of measles elimination and control of congenital rubella.
D9.3: National plans developed and published on the project's website

Work package number :	WP10
Work package title:	**Plenary meetings**
Lead Partner for the work package:	SSI
Partners involved:	P1 -> P31
Number of person-days:	293

T6.1 Expected results
To which objective is this work package linked?

The general aim:
10.1 To operate a surveillance Community network for vaccine preventable infectious diseases using epidemiological and laboratory surveillance methods.
10.2 To disseminate and exchange information on vaccine preventable disease occurrence.

Specific objectives are:
10.3 To facilitate the development of standardized surveillance methodologies and comparability of data between participating countries.
10.4 To monitor and compare disease epidemiology, effects of vaccination programs and burden of disease regarding measles, mumps, rubella, congenital rubella syndrome (CRS), pertussis and varicella.
10.5 To contribute to, advocate for and facilitate toward elimination of measles and the control of congenital rubella infection by 2010.
10.6 To encourage the collection of case based information following the minimum dataset identified by EUVAC-NET.
10.7 To integrate EFTA/EEA, accession and applicant countries as members of the EU-VAC.NET.

T6.2 Description of work

EUVAC.NET operates primarily on epidemiological and managerial methods.
Any decisions taken follow discussions between coordinators and gatekeepers and other national representatives as well as members of related organisations such as WHO and projects working in the same field.
Annual plenary meetings will be organised for all EUVAC.NET participants. Additional stakeholders will be invited.
The scope of the meetings is to disseminate information on VPD and through discussions to facilitate the development and progress of the network.

T6.3 Deliverables
D10.1: Three annual meetings convened
D10.2: Reports from each annual meeting to reflect discussions and decisions taken.

Work package number :	WP11
Work package title:	**Website development and update**
Lead Partner for the work package:	SSI
Partners involved:	P1 + P2
Number of person-days:	210

T6.1 Expected results
To which objective is this work package linked?

11.1 To facilitate the development of standardized surveillance methodologies and comparability of data between participating countries.
11.2 To monitor and compare disease epidemiology, effects of vaccination programs and burden of disease regarding rubella and congenital rubella syndrom (CRS).
11.3 To contribute to, advocate for and facilitate toward the control of congenital rubella infection by 2010.
11.4 To encourage the collection of case based information following the minimum dataset identified by EUVAC-NET
11.5 To support the use of the standard case definitions.

T6.2 Description of work

The website serves as the basis to disseminate results and information and will be developed within the scope of Health information in the EU as an Internet source that can be used by all target groups.
Target groups are the participating surveillance institutions and partners, the scientific community, health professionals, health authorities and decision makers at national and EU level and the general public.
The website will be developed continuously and with updated information including dissemination of information on vaccine preventable disease occurrence.
Annual reports on disease incidence especially regarding measles and rubella, will be published on the website. Project results and outcome and scientific papers should also be disseminated to stakeholders via the website.

T6.3 Deliverables

D11.1: All data on the website will be updated regularly, i.e. on a daily basis if needed.
D11.2: Further development of the website according to the needs that will arise in the project.

Work package number :	WP12
Work package title:	**Evaluation**
Lead Partner for the work package:	SSI
Partners involved:	P1 - > P31
Number of person-days:	58

T6.1 Expected results
To which objective is this work package linked?

General aim:
1.To identify strengths and weakeness of the project

T6.2 Description of work

A midterm desk review of activities and results will be carried out as described in WP8.

A final evaluation of the project process and results will be commenced within the last 3 months of the project period.

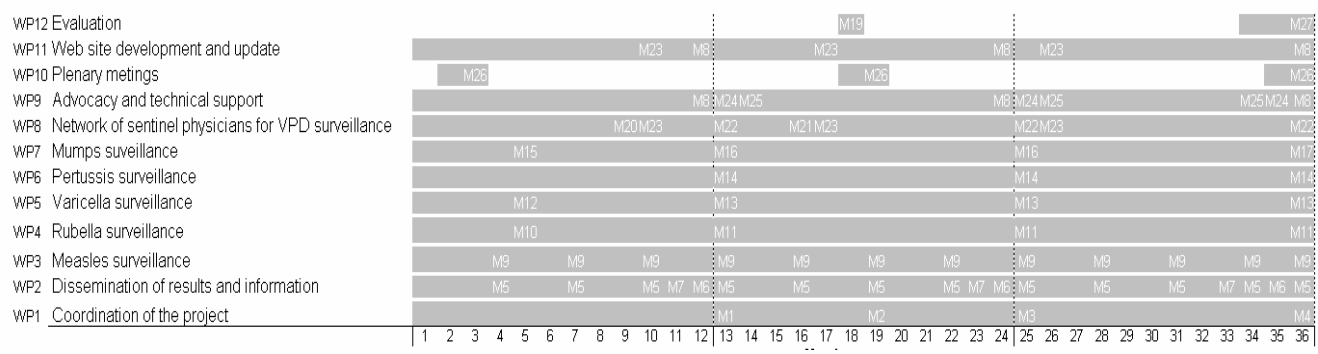
T6.3 Deliverables

D12.1:A questionnaire survey carried out
D12.2:Evaluation report published

5. Timetable presentation of the jobs and the corresponding time schedules

WP12	Evaluation
WP11	Website development and update
WP10	Plenary meetings
WP9	Advocacy and technical support
WP8	Network of sentinel physicians for VPD surveillance
WP7	Mumps surveillance
WP6	Pertussis surveillance
WP5	Varicella surveillance
WP4	Rubella surveillance
WP3	Measles surveillance
WP2	Dissemination of results and information
WP1	Co-ordination of project

*Ghant chart of showing milestones (**M1-M27**) and the minimum time needed for completion:*



LIST OF ACTIVITY INDICATORS

* **M1:** ***Annual report first year***
* **M2:** ***Midterm report***
* **M3:** ***Annual report second year***
* **M4:** ***Annual report third year and final report***
* **M5:** ***Quarterly newsletters***
* **M6:** ***Articles in scientific papers***
* **M7:** ***Participation in international conferences***
* **M8:** ***Available National strategy papers on measles elimination published on the web***
* **M9:** ***Measles data analysis published quarterly on the web***
* **M10:** ***Questionnaire on rubella carried out***
* **M11:** ***Rubella data analysis published annually on the web***
* **M12:** ***Questionnaire on varicella carried out***
* **M13:** ***Varicella data analysis published annually on the web***
* **M14:** ***Pertussis data analysis published annually on the web***
* **M15:** ***Questionnaire on mumps carried out***
* **M16:** ***Mumps data analysis published annually on the web***
* **M17:** ***Steering Committee meeting convened***
* **M18:** ***Reports from Steering Committee meetings published on the web***
* **M19:** ***Interim desk review carried out***
* **M20:** ***Workshop on sentinel physicians/paediatricians networks has been convened***

*** M21:** ***An inventory of sentinel physicians/paediatricians networks has been convened created***
*** M22:** ***Annual reports on sentinel physicians/paediatricians networks***
M23:** ***Protocols and tools used in sentinel physicians/paediatricians networks published on the EUVAC.NET website
*** M24:** ***All countries visited at least once in the three year period***
*** M25:** ***Reports on progress of measles elimination and control of congenital rubella syndrome***
*** M26:** ***Plenary meetings convened***
*** M27:** ***Final evaluation carried out***

6. Completion criteria for the project

1. Three annual reports on activities and progress.
2. One midterm report on activities progress and budget.
3. Three reports from plenary meetings.
4. Three reports from Steering Committee meetings.
5. One report from interim desk review.
6. Three reports on activities and results related to sentinel physicians/ paediatricians networks.
7. Three reports on progress of measles elimination and control of congenital rubella.
8. Report from final evaluation.
9. Final report on activities project progress and budget.

LIST OF OUTPUT INDICATORS

*** Some national plans for measles elimination and control of rubella will be translated and all available plans published on the website.**
*** Measles data will be collated and analysed on a monthly basis.**
*** Validated data on measles will be shared with the WHO European Region Office**
*** An overview on the occurrence of rubella in Europe will be produced and a database will be created. Available data will be collated continuously and analysed and shared with the WHO European Region Office.**
*** An overview on the occurrence of varicella in Europe will be produced and a database will be created. Available data will be collated continuously and analysed and shared with the WHO European Region Office.**
*** An overview on the occurrence of mumps in Europe will be produced and a database will be created. Available data will be collated and analysed and shared with the WHO European Region Office.**
*** An estimation/measurement of denominators for sentinel surveillance systems where systems on the general population are not in place.**
*** An inventory of sentinel physician/paediatrician networks in member states.**
*** Reports on activities needed for measles elimination and control of congenital rubella in member states.**
*** Information and data on VPD and vaccination programmes distributed to a wide audience though newsletters, scientific papers, international meetings and the website.**

7. **Acceptance criteria for the project**

Databases
Quality control of databases carried out according to the SOP.

EUVAC.NET website
Serves as a medium for publishing surveillance reports and information on relevant issues, provides links to publications and information to the public as well as updated inventory on sentinel GPs/paediatrician networks.

Annual reports
Surveillance data from participating countries shown as aggregate and individual data.

National strategy plans for measles elimination
Available plans made available and translated into English (if necessary)

Newsletters
Description of ongoing and planned activities. Email distribution to all relevant institutions and stakeholders.

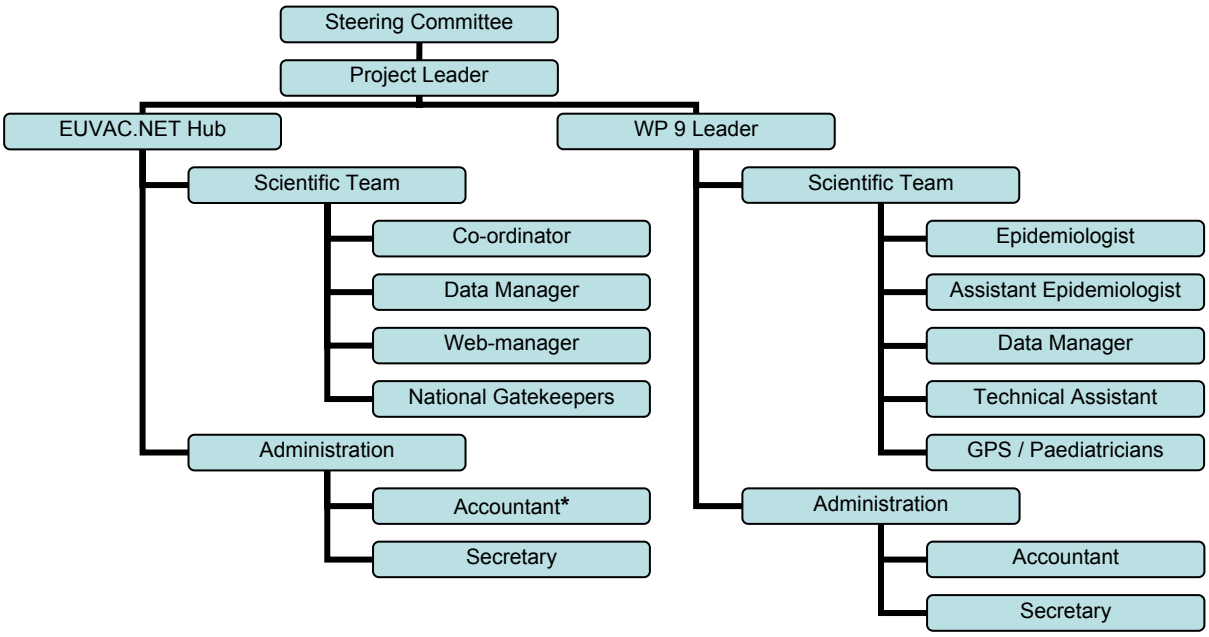
8. Outline of the human, budgetary and other resources required

Information for this section is included in the enclosed table "Time loading".

9. **Timetable**

Information for this section is included in the enclosed table "Time loading".

10. Organisation chart



* *Not included in the budget as per internal regulations of the Statens Serum Institut*

11. **Risk analysis**

Non-submission, delayed or incomplete submissions
The agreed work plan for updating databases and reporting takes into account delays in receiving data from national gatekeepers. In case of gross delays in providing data to the hub, there might be delayed reporting or reporting with missing data for the delayed countries after consultation with the Commission. Pressure on the national gatekeepers for timely data collection and sending to hub might be exerted.

Collaboration with WHO
There is risk of concomitant publication with data reporting variations. Enhanced coordination with WHO for improved communication and agreement on data reporting issues and Consultation with the Commission will be necessary.

Collaboration with other projects
Linking databases with those of other related EU funded projects through an anonymous case identifier might require clearance by data protection agencies. Consultation with the Commission will be necessary.

Unexpected changes in project team personnel
This can result in delays in producing deliverables. Modification of the work plan and notifiation to the Commission will be necessary.

12. **Monitoring of the execution of the project**

A Steering Committee will be established to ensure the scheme fulfils its aims and objectives and legal obligations under Decision no. 2119/98/EC and the Community action in the Field of Public Health (2003-2008). The Committee shall monitor planned progress of planned activities and should also advise on planning and development on future activities. The Steering Committee will consist of two to four representatives for partners, one representative for the ECDC and one representative for the WHO European office. Two additional members may represent special knowledge and/or potential EU-funded projects within the field of vaccinology.

The project leader is responsible for the general management of the project, including its procedural and financial actions. In collaboration with the Steering Committee he/she will monitor and supervise the work carried out to ensure optimal output and will participate in the activities on a daily basis as well as participate in international activities related to the project.

An accountant at the Statens Serum Institut will be dedicated to monitor the budget and to produce financial reports as specified by the Commission. The accountant is not included in the budget as per regulations of the Statens Serum Institut.

The project coordinator will coordinate the network's activities and will be the focal point for communication with the partners and other stakeholders on a daily basis. He/she will be directly involved in the planning of meetings and workshops and is expected to participate in quality assurance and the coordination of incoming data and dissemination of results and writing of reports presented in section 5 above.

13**. Ex-ante and ex-post evaluation**

The Steering Committee will commence an internal evaluation by a midterm desk review on progress of planned activities. A report should provide additional information and conclusions on results so far with recommendations to ensure how to meet the goals and expected outcome of the remaining project period, refer to work package 8.

An external evaluation of the project process and results will be commenced within the last 3 months of the project period (refer to work package 13).