



MEETING REPORT

TESSy WORKING GROUP

**First Meeting of the TESSy
Working Group
Stockholm, 14–15 February 2007**



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EXECUTIVE SUMMARY

ECDC is developing a system for infectious disease surveillance at the European level, The European Surveillance System (TESSy). To bring together the TESSy users in the Member States (MS) ECDC has established a working group of experts in infectious disease surveillance at a national level or in disease-specific surveillance. The first meeting of this group was convened by ECDC to review technical issues and discuss the user requirements of TESSy. This report reflects the discussions that were held during the first meeting of the working group. Since then the work has continued and conclusions presented here may not necessarily reflect current knowledge. However, the report is still very useful as it presents the basic principles for TESSy and the intended collaboration regarding the surveillance of infectious diseases.

TESSy aims to collect, store and disseminate surveillance data of the EU MS and EEA/EFTA countries. TESSy starts with the collection of a reduced set of variables for cases of infectious diseases. This will gradually be extended by a more enhanced set of variables as well as non-case-based surveillance data currently collected by Dedicated Surveillance Networks (DSNs). Close collaboration with the MS will ensure that their needs and expectations are taken into account.

In the plenary session, the present situation with respect to surveillance of infectious diseases at the European level was outlined. It shows a complex picture with each MS having one or more systems for the surveillance of infectious diseases and, in addition, with 16 DSNs collecting data on a variety of diseases using diverse methods. The MS have to comply with various reporting standards. It is ECDC's responsibility to coordinate all the relevant elements of surveillance. Some of them are already foreseen and planned for the near future, for instance alerting, data collection, analysis and reporting. The development of TESSy was presented and the members were invited to share their views regarding technical issues and user requirements. Group discussions led to a series of consensus statements and recommendations:

- 1 It was recommended that, during the transitional phase, in which MS report to TESSy and some DSNs are still operational (until 2009), *all* data regarding infectious diseases should be sent to TESSy, regardless of whether they are also collected by a DSN. It would be best to continue the routine data collection, set up by the Basic Surveillance Network, during the transitional phase.
- 2 With respect to the future data transport protocol, it was agreed that the XML file format was the most favoured. As XML formats are at present not widely used for the exchange of surveillance data in Europe, a CSV file format was suggested as a simple alternative for the transition period, being aware that this format does not meet all the requirements. ECDC shall identify the needs and methods for support in MS. The source of the data in TESSy must be clearly specified by 'tagging' the data. Data shall be validated by the MS themselves and corrected updates need to be sent to TESSy.



- 3 The development of the outbreak reporting component was not considered as a priority. The development of an integrated surveillance system for case reporting and early warning was identified as the first priority.
- 4 Data on all national notifiable diseases should be available from the ECDC website. It was emphasised that standard reports and outputs need to be produced on a regular basis. For general standard output an 'a priori' approval should be agreed upon with the MS so that the routine reports can go automatically. Country-specific commentary requires prior approval from that country. The standard reporting is part of the future 'Agreement on collaboration regarding communicable disease surveillance'.
- 5 It is planned that TESSy will provide static data tables as well as an interactive interface for data extraction. With respect to reports, an inventory of current standard outputs produced by DSNs, that best describe the current status, was recommended.
- 6 Many detailed suggestions were made regarding access rights and data usage. It was agreed that a data usage policy, signed by all parties involved, is needed, and should include a description of roles and various authorisation levels.
- 7 ECDC shall develop a strategy for collaboration with the MS with respect to the surveillance of infectious diseases. The strategy needs to be approved by the competent bodies for surveillance. ECDC was encouraged by the participants to minimise bureaucracy and to ensure a prompt communication. A list of experts for communication with ECDC shall be made per MS. This list would include the contact points per disease or disease group and the various levels of communication.
- 8 There was a general agreement on the planned forums for communication and between the different levels of urgency. As an intermediate solution for the information exchange platforms, the use of simple mailing lists including experts from the MS and ECDC staff was suggested.

Overall it was agreed to have two task forces to further work on the technical issues and user requirements, respectively. Additionally, task forces will be established to further deal with disease-specific issues. Many participants volunteered to take part in the planned task forces. ECDC expressed general appreciation for the input from the participants and acknowledged that the future surveillance system for Europe will benefit from current discussions.

INTRODUCTION

Background

According to the founding regulation (Regulation (EC) No 851/2004), ECDC is responsible for the surveillance in the European Union and shall maintain the databases for epidemiological surveillance. In the near future, data will be collected by ECDC for case-based reporting from MS for the routine surveillance of the 46 diseases listed in Decisions 2002/253/EC and 2003/534/EC (plus SARS, West Nile fever and avian influenza).

All MS have established one or more systems for the surveillance of infectious diseases. There is heterogeneity between the countries concerning the implementation and the resources for the system.

Additionally, 16 DSNs collect data on a variety of diseases using diverse methods according to their own data transport specifications, reporting, etc. The MS have to comply – in their role as data providers – with various reporting standards, e.g. different frameworks and different interfaces. On the other hand, DSNs have to validate, analyse and report the data in general and to all their collaborators.

ECDC aims to reduce the complexity and workload for all the participants by establishing a central database for all the surveillance activities on the European level. ECDC is currently developing The European Surveillance System (TESSy). This surveillance system aims to collect, store and disseminate surveillance data of the EU MS and EEA/EFTA countries. The first priority was to develop the database for routine surveillance with a core set of variables for all diseases set out for surveillance at European level. At the same time, the concept for the database should already envision the future addition of an enhanced set of variables based on what is currently collected by the DSN.

TESSy aims to:

- 1 standardise data collection on infectious disease surveillance;
- 2 provide one single point for MS reporting and retrieving data;
- 3 standardise reports based on surveillance data;
- 4 provide a consistent overview of the current situation in the EU.

Until the end of 2006, the core dataset had been collected for all reportable diseases by the Basic Surveillance Network (BSN). As of January 2007, the data collection has been taken over by ECDC. The annual meeting of BSN has been a forum not only for the epidemiologists of the BSN members but also for the IT experts and data managers involved in national surveillance. ECDC plans to continue and enhance this invaluable discussion forum.

Close collaboration with MS is needed regarding the development and implementation of the European surveillance system to ensure that the needs and expectations of MS are taken into account. The exchange of information is crucial during the implementation phase to ensure that any specific requirements from individual MS are included.



In February 2007, ECDC established a working group (WG) with the main user groups of TESSy. Members of the WG are involved in infectious disease surveillance at a national level or in disease-specific surveillance as part of a DSN. Therefore, the WGs include epidemiologists or information technology experts and data managers at a national level, nominated by the Chief Medical Officers of their country, and epidemiologists and IT experts and data managers from the DSNs.

The main tasks and responsibilities of the working group include:

- 1 exchange of knowledge and expertise;
- 2 build a network of specialists;
- 3 discuss and agree upon functional requirements of the database;
- 4 discuss and agree upon data exchange standards for the database.

Objectives of the meeting

The objectives of the meeting were to:

- 1 Present an update regarding the development of TESSy.
- 2 Discuss the further development and implementation of TESSy.
- 3 Ask for views and input regarding issues dealing with data transfer protocols, data output, outbreak reporting, etc.
- 4 Ask for views and input regarding the terms of reference of the WG and future task forces, access rights, future communication strategy between ECDC and MS, and alerts and information exchange.
- 5 To assign task forces for further work in specific areas.

The objectives 3 & 4 were addressed in eight smaller groups as follows:

- WG A - Data Transport
- WG B - Access Rights and Data Usage Policy
- WG C - Contact Point Strategy
- WG D - Data Output
- WG E - Transitional Phase
- WG F - Terms of Reference for Working Group and Task Forces
- WG G - Outbreak Reporting
- WG H - Alerts and Information Exchange in the DSNs.

The working groups provided feedback in the plenary meeting followed by a general discussion. This document presents the outcome of this meeting.

Welcome at ECDC

Zsuzsanna Jakab, the director of ECDC, and Andrea Ammon, chair of the Working group and head of the Surveillance Unit warmly welcomed the participants.

Nearly 80 members attended the meeting; the attendance list can be found in Annex 1.

The agenda was presented and the participants were encouraged to contribute to the discussions with respect to the development of TESSy.

The European Surveillance System (TESSy)

The project leaders of TESSy, Edward van Straten and Daniel Faensen, presented an update regarding the development of TESSy, the framework and timeline, and the planning of the transitional phase in which both ECDC and the DSNs collect surveillance data. Finally, an overview was given on the envisioned exchange of surveillance data between MS and ECDC/TESSy.

The presentations were followed by a discussion: the ESSTI/UK asked how to relate cases to outbreaks and how data protection is covered. These issues will be discussed in WG G Outbreak Reporting and B Access Rights. ENTER-NET/UK asked why is it considered a problem to have different contact points in DSNs and BSNs? They noted that regarding the formal Early Warning and Response System message there is a tension between the expertise and the political level. These issues will be discussed in WG C Contact Point Strategy and H Alerts and Information Exchange. EuroTB/France asked about the collection of aggregated data: how to collect data on warnings, comments etc. These issues will be discussed in WG D Data Output. Ireland asked about the timeliness of TESSy. Are frequent uploads envisioned? Timeliness will differ by disease and future objectives. As soon as there is a case it could be reported. In the beginning monthly uploads are envisioned. EISS/Netherlands expressed their concern that the transfer of the database to TESSy would introduce a drawback, as for now, weekly outputs with interpretation are produced. Another question concerned what ECDC is going to do with the data, and are there any short- and long-term visions for it. Also some concern was expressed on the inclusion of the enhanced dataset. The EISS virological data is much broader than the outlined datasets at present. How will this specific data be incorporated in TESSy? These issues will be discussed in WG D Data Output. Diseases will have separate enhanced datasets. Disease-group-specific task forces will be formed to discuss how the future surveillance should be organised. WG F Terms of Reference for Working Group and Task Forces will deal with this. We need to develop criteria to group the diseases into major disease groups. Norway mentioned that it will save work at the national level if all data could be sent by one person. However, it would also be valuable to have a salmonella expert in the country who can discuss the issue with other experts on the topic in other countries. This interchange should be kept. These issues will be discussed in WG F Terms of Reference for Working Group and Task Forces and WG H Alerts and Information Exchange. The ultimate goal of ECDC is to preserve the expert networks.



REPORTS OF THE WORKING GROUPS

Group A: Data transport

Objectives of the working group

- 1 Discuss data transport formats and protocols required for sending data to TESSy.
- 2 Discuss the TESSy value sets, the use of standard coding systems and the needed data export formats from TESSy to data users.
- 3 Establish task force for future work.

Questions

- 1 Can the presented data transfer formats be supported by the data providers? Which format is the preferred alternative?
- 2 Is the proposed way to exchange data acceptable for the data providers and users?

Background

TESSy aims to collect, store, analyse and disseminate information on infectious diseases in Europe. The data are mainly provided by the national surveillance institutes in the EU Member States and EEA countries.

The proposed TESSy data transfer protocol was provided in a technical document for the working group.

The current version of TESSy supports the upload of data files containing surveillance data. This upload can be done either manually using a web-based user interface or completely automatically (machine-to-machine communication) by using a web service.

Data upload to TESSy is normally done in two steps. First, information is uploaded and evaluated by the system. The result of the validation can be checked by an authorised user and then approved (confirmed) or rejected. After approval the data are made visible to other TESSy users. The authorisation scheme has two different roles for these two steps, Provider and Approver. Users in the role Provider are allowed to upload data, Approvers may approve or reject uploads. Both roles can be assigned to the same user, meaning that upload and approval can be done by the same person.

ECDC will provide a standard interface for uploading, validating and reporting of all data, regardless the source of data.

All data uploaded to TESSy will automatically be validated to ensure quality. Specific validation rules will be developed. Depending on the severity of a rule violation, data may be rejected by the system or just annotated as invalid. This information will immediately be fed back to the data provider prior to data approval. If approved, invalid data are stored in TESSy but marked as invalid. Depending on the invalid variables the data might be included in general analyses but drop off from others.

As the data transfer format ECDC suggests four alternatives for discussion:

- 1 XML: XML is a data exchange standard that is very flexible, supports structured data and repeating elements. It is widely used in all business domains. However, it is difficult to generate without specific IT knowledge.
- 2 CSV 'Rectangular': Comma-separated value (CSV) files are easy to generate, even from a simple Excel table. Here each line in the file contains one record, for instance a case report. Columns correspond to variables. Unfortunately, repetitive information (for instance, a list of countries visited) is not well supported.
- 3 CSV 'Triplet': This file structure should overcome the disadvantages of the 'rectangular' CSV file by having one line for each variable. Each line contains the record identifier (or case identifier), the variable name and the actual value of the variable. This approach resembles the XML file approach.
- 4 A 'mixed' approach similar to the one used in BSN would allow to submit a core set of variables in a CSV 'Rectangular' file and additional variables in a 'Triplet' file.

Outcome

The proposed data transfer protocol to TESSy excludes the submission as an e-mail attachment which most of the current networks support. In the discussion it was stated that the upload frequency may differ per disease. TESSy shall support either submission of all data in a batch upload or the submission of data for different diseases in different batches. It was agreed that e-mail submission is excluded in favour of web-based file upload or use of web services.

The Netherlands suggested downloading data from the provider's site rather than uploading to TESSy. This pull-type of data transfer was rejected because it would not be feasible to provide ECDC with access to the national surveillance databases, due to severe security issues, and the interface could not be standardised.

It was agreed that the XML file format was the most favoured, but XML formats are at present not feasible for many MS.

The structure of the CSV file format as the alternative for XML files was discussed. The 'rectangular' format was considered the easiest one but 'repeating fields' would not be possible. The 'triplet' structure was most popular because it provides flexibility. However, expertise is needed to create this and it was felt that the creation of XML files would require similar expertise. The 'mixed' format was rejected. TESSy will support this only for backward compatibility with BSN.

Conclusion: no final decision was made and the task force needs to discuss whether a triplet-like CSV format is needed for a transition period until all data providers can create the XML file format.

Supporting the HL7 standard is currently not needed but it should be reconsidered after some time.



Specific remarks from MS and DSN:

- 1 UK: It will be difficult to provide data since there is no homogeneous system in the country. Availability varies among the different regions and comparability is lacking. This needs further discussion between the UK and ECDC.
- 2 Greece: No resources to change their surveillance systems again.
- 3 Malta: What happens if a country cannot comply with the new standard for submitting data? According to the EU decision the MS are obliged to submit the data that they have. However, ECDC expects that the MS will comply with TESSy and acknowledge the benefits of participation. If MS lack resources or expertise, ECDC shall support MS. A discussion is needed on how ECDC can provide support.
- 4 UK and DIVINE expressed concerns about confidentiality. ECDC provided reassurance that all communication with TESSy will be encrypted and data will be only made accessible to authorised users.
- 5 ENTERNET/UK suggested automatically sending out reminders to the data providers.
- 6 Denmark asked ECDC to be more ambitious in building a shared database that provides real-time surveillance data.

Action points

- 1 Identify needs and methods for support in MS.
- 2 Find a solution for heterogeneity in the UK. Identify countries that have similar problems.
- 3 Establish a task force with the following first items on the agenda:
 - finalise the XML format;
 - discuss and agree on the web service protocol;
 - code lists;
 - coding of regional data;
 - zero reporting.

Group B: Access rights and data usage policy

Objectives of the working group

- 1 Discuss the proposal for access rights and identify roles for data access.
- 2 Discuss the 'Agreement on data transmission and access'.
- 3 Propose procedures for providing access rights and data usage.
- 4 Establish task force for future work.

Questions

- 1 Who will get access to these data?
- 2 What should the data use policy look like?
- 3 What kind of data should be publicly available?

Background

As with all systems handling data one of the questions that has to be answered is: Who will get access to the data? Apart from the 'who' there is also the 'what'. Not everyone who is

allowed to use TESSy will have unlimited access to the data. A proposal is made regarding the roles we can distinguish and what access rights should be granted to users with this role.

A data usage policy needs to be put in place and an agreement on data transmission and access needs to be signed by MS and ECDC.

All roles and access rights should be generally applicable. For example, there should be no exception for one country or one network member.

Outcome

A distinction needs to be made between the data and information. It is suggested that we only handle 'data'. But reports and information are produced also, e.g. conclusions, determined risk-factors, an outbreak identified, etc. There should be a distinction between how data and information are handled.

A distinction between general information and information dealing with only one specific country is also needed. For general standard output an 'a priori' approval should be agreed upon with the Member States so that the routine monthly/weekly reports can be submitted automatically. If there are country-specific comments, then a specific consultation and authorisation is warranted.

It was considered appropriate to give limited access to case-based data if compared with aggregated data. Aggregated data could be made publicly available if proper interpretation is provided. Rules should be set out to define a minimal level of aggregation for public data.

Identification of roles to define access. Suggested roles:

- 1 State epidemiologist.
- 2 Designated expert (selected diseases).
- 3 National scientific expert.
- 4 ECDC-assigned expert.
- 5 General public.
- 6 Interested stakeholders.

It was discussed whether the numbers of users per country per disease should be limited. One argument was that four users per disease should be sufficient whilst others argued that this should be decided at national level.

It was agreed that the suggested title for the agreement on data transmission and access does not cover the content. It was suggested to change this into 'Agreement on communicable disease surveillance co-operation'.

The following aspects need to be included in the Agreement:

- 1 To promote the use of internally agreed upon standards with respect to coding (e.g. grouping of age), data transfer formats.
- 2 Access to data and reports: to promote open access of data to the general public and to develop a standard operating procedure (SOP) to provide specific access to data for specific users or to deal with specific requests for data.



- 3 Describe the routine standard reports: they need a general prior approval so that they can be submitted automatically. Country-specific commentary needs prior consultation with the relevant Member State.
- 4 Distribution of authorisation: different levels of authorisation should be identified and described in general.
- 5 To promote the timely reporting of data, a framework for reporting intervals needs to be developed and timeliness of data shall be monitored and evaluated regularly.

It was noted that the data protection rules vary from country to country and the national data used by ECDC must not break any of the national laws. For example, UK data may not be broken down to regions with less than three cases.

Action points

A task force is needed for further work on detail the agreement.

Group C: Contact point strategy

Objectives of the working group

- 1 Discuss the outlined strategy for communication and contact points regarding surveillance and provide recommendations as discussion paper for the ECDC Advisory Forum in May 2007.

Questions

- 1 What are the advantages and disadvantages of the new approach of having one contact point (e.g. the TESSy nominator) per country?
- 2 Can a list of functions and characteristics be provided? For example, could communications functions be suggested? Could characteristics be added for a TESSy nominator? Could methods be suggested to minimise the number of delegates without losing expert input?
- 3 Can suggestions for SOPs, e.g. timeframe, nomination and functions be formulated?
- 4 Could a task force for further work be created?

Background

At present, the communication regarding the surveillance of infectious diseases takes place within the DSN, among the networks and within ECDC. The hub communicates with the members of the network. Current communication with DSN and Member States takes place through the contact points in the networks representing each country, meaning that with 16 networks and 27 countries the number of national contact points can be as high as 413 (if each country selects one different contact point per DSN).

Current categories of communication in the DSN include:

- 1 Data management (e.g. request for data, validation, usage, ad hoc data, alerting). Data requests are sent from the hub and data are entered into the DSN database. Data validation, interpretation, analysis and reporting are done by a restricted number of DSN collaborators or the hub itself.

- 2 Alerts of unusual events or outbreaks (e.g. exchange on information, strains).
- 3 Technical performance (e.g. error reports, uploads).
- 4 Communication within the network and its members (e.g. meetings, consultation).
- 5 Dissemination of data (e.g. newsletter, website, periodic reports).
- 6 SOPs (e.g. protocol).
- 7 Laboratory methods (e.g. quality assurance, lab protocols, molecular data).

Communication with ECDC regarding surveillance could reproduce the above outlined strategy or could be channelled through a number of contact points per country.

The competent body approves the communication strategy between the country and ECDC regarding surveillance for all diseases and designates one so-called 'TESSy nominator'. The TESSy nominator can nominate contact points for disease-specific communication with ECDC. SOPs will describe the functions for the TESSy nominator and the contact points, specify the communication flow between these and ECDC, the actions required dealing with the points listed above and the timeframe in which the actions are needed.

Outcome

Protocols dealing with communications regarding disease-specific surveillance occurring within networks and between ECDC and those networks also need to be established. At least two contact points per network per Member State – when separate leads for epidemiology and laboratories are required – should be selected. Regarding communication, two categories were added: 'Coordination of outbreak investigation and response' and 'Exchange of expertise on the development of electronic surveillance systems'. Also two categories were rephrased: 'Analysis and interpretation issues and questions' (separately from data management) and 'Scientific and operational coordination within the network' (instead of communication).

Contact points must be selected regarding specific disease surveillance. For communication with ECDC, the Member States need to select (or re-confirm already selected) contact points. This offers the opportunity to ensure that all contact points represent competent bodies and provides an assurance that contact points are acting with the knowledge and support of the MS. Also, a greater synergy can be achieved by selecting contact points that could deal with several diseases from currently potentially overlapping networks. It will both reduce the burden on smaller countries and also provide a safety net for ensuring that diseases not covered by a DSN have a contact point.

Proposals for a future strategy must be made. The TESSy nominator can nominate contact points for disease-specific communication with ECDC. SOPs describe the functions and specify the communication flow between the TESSy nominator, contact points and ECDC. Although ECDC is searching for a balance between expert input and the number of contact points, a considerable reduction in the latter cannot be anticipated within the future strategy.

There needs to be clarity on the communication between ECDC and competent bodies on one hand and the need for rapid sharing of data and expertise between the contact points (in national institutes) on the other hand. The communication with, and between, the laboratory partners within the surveillance networks needs further discussion.



Contact points need to be nominated. It was suggested that per M. S. a (re-confirmed) list for communication should be made, including disease-specific contact points and the various communication levels. The MS needs to find a mechanism for maintaining an up-to-date list of contact points.

Prompt communication must be ensured. The working group encourages ECDC to minimise bureaucracy and to improve and ensure a prompt communication with the contact points.

Action points

- 1 A task force should further work on the SOPs regarding the contact point strategy and future communication, to further discuss the role of the laboratory partners within the surveillance networks and how to ensure future communication within the networks.
- 2 There should be one task force which works on the Contact Point Strategy, on Alerts and Information Exchange and on the Access Rights and Data Usage Policy.

Group D: Data output

Objectives of the working group

- 1 Discuss the types and content of standard reports that should be publicly available.
- 2 Discuss the types and content of the specific standard reports for authorised users.
- 3 Establish task force for further work.

Questions

- 1 Which diseases should be included in the standard reports?
- 2 Which template and content should be used for the standard reports?
- 3 Which template should be used for the standard and disease-specific reports for authorised users?
- 4 Which topics need to be discussed in the task force?

Background

After validation and analysis, the surveillance data for all infectious diseases will be compiled in timely reports. Standard reports will be posted on the ECDC website and be available to the MS. The standard reports should already be available in the first version of TESSy in 2007 (first quarter 2008). Therefore the template and content of the standard reports as well as the frequency (weekly, monthly, quarterly) need to be defined.

Furthermore, in the future, authorised users will be able to query, through a web interface, specific data on selected diseases.

Outcome

Data on all national notifiable diseases should be available from the ECDC website. It must be noted that national surveillance systems differ substantially, from sentinel to statutory system, and as a result do not provide comparable information. Comments on national systems should be included in country profiles.

The grouping of diseases is complex. Diseases could be grouped according to the national surveillance systems or according the type of surveillance system. Comments on disease-

specific data should be included as well. Information about country-specific data is provided with a link to that specific country.

Eurosurveillance was envisioned as an output channel. In *Eurosurveillance Weekly*, static tables should not be published but instead, analysed data with interpretation and comments from the respective countries would provide added value for the countries.

In general, the classical data tables were considered old-fashioned. Instead, a dynamic and interactive interface is needed to enable users to create their own tables with a query tool. TESSy will provide this function. However, it was agreed that both types of data access would probably serve different kinds of users.

The variables needed to prepare the dynamic reports were discussed and should include the following:

- 1 Person: gender, age (categories tailored to disease), nationality, risk.
- 2 Place: country, region, time (year, quarter, month, week, season).
- 3 Agent: specific for each disease; type, subtype, etc.
- 4 Comment/disclaimer attached to the reports along with the diseases.

In creating data output reports with the planned interactive portal, the time window (week, month, quarter, year) can be selected by the user. For some diseases, like influenza, a weekly output is necessary. The starting point would be monthly reporting but the actual timeliness depends on the future surveillance objectives, and it will be longer for some diseases and shorter for others.

It was agreed that a disease-specific output needs to be defined separately disease by disease. It was suggested that current products of DSNs could be listed to get an overview of regular outputs produced per disease. Graphical disease-specific outputs are preferred if feasible.

In the general discussion, it was brought up that a machine-to-machine interface should be planned as the future solution for sharing databases and that the standard output should be generated automatically. It was emphasised that standard reports and outputs need to be produced on a regular basis. Country-specific commentaries require prior approval from the country (see also the outcome of WG B Access Rights and Data Usage Policy).

Action points

- 1 A task force is needed to further work on both general and disease-specific standard reports.
- 2 An inventory of standard outputs produced by DSNs should be carried out and the outputs per disease identified that best describe the current status, e.g. three graphs or tables.

Group E: Transitional phase

Objectives of the working group

- 1 Agree on the diseases to report to TESSy during the transitional phase in 2007 and find a procedure for how to validate the data during the transition period.



Questions

- 1 Are the criteria for the selection of disease data to be collected by TESSy acceptable?
- 2 How shall ECDC and the data providers proceed to validate the data?

Background

Data collection for a number of infectious diseases is (partly) organised by the DSNs. The funding of these networks ends between 2007 and 2009.

As of January 2007, ECDC has taken over the data collection for routine surveillance regarding the core set of variables for infectious diseases from the Basic Surveillance Network (BSN).

To minimise the workload of the MS and to reduce data redundancy, ECDC proposed that TESSy will only collect data for those diseases that are not covered by a DSN provided that ECDC has access to the DSN database. However, some DSNs had not yet established an on-going data collection. Therefore, it must be decided on a case-by-case basis which diseases should be included in TESSy.

Outcome

It was suggested that all data regarding infectious diseases should be sent to TESSy, regardless of whether they are also collected by the DSN. It would be best to continue the routine data collection, set up by the BSN, during the transitional phase. This is now considered as the core set of variables. The core dataset will, while ECDC gradually takes over the databases in the transitional phase, be complemented with the enhanced data from the DSNs.

The 'parallel' reporting to TESSy and the DSNs is not regarded as a problem for two reasons. Firstly, the data sources may differ for TESSy and the DSNs. Secondly, the parallel reporting is expected to have less impact than the changing of the current BSN reporting routines.

The development of a 'wrapper' to avoid frequent changes for the data collection when surveillance databases are taken over by TESSy was suggested. A wrapper would enable the MS to temporarily keep the old data format (as defined by the DSN) for sending data to TESSy, whilst the formatting can be changed from the DSN format to the uniform TESSy format. For the BSN data such a wrapper has been developed. When TESSy is operational, MS can submit the data in the old BSN format. However, ECDC does not intend to implement wrappers for all DSNs nor to maintain them indefinitely. The development of a wrapper will be decided on a case-by-case basis.

The frequency of reporting depends on the future surveillance objectives and on the need per disease. Currently, the core set is updated once per month. With the takeover of the DSNs' data collection an appropriate update frequency will be defined, which takes into account the disease-specific surveillance objectives.

TESSy will be able to handle data from different sources. Previously, in the BSN, it was unclear from which source the data were expected, and similarly it was unclear to data-users where the data originated. For TESSy it must be clear which data come from which source. Furthermore, it will be possible to 'tag' the data and specify the source. It was suggested that the results from the ECDC survey on the current national surveillance

systems should be linked to TESSy. This could be done using the 'tagged' data. In this way multiple datasets for a disease can be sent by one country, e.g. national notification and laboratory surveillance.

Activities of the surveillance network beyond the collection of data include issuing alerts, recommending actions to be taken, organising scientific meetings, etc. ECDC will eventually co-ordinate all the relevant elements of surveillance, and some of them are already foreseen and planned for, e.g. alerting, hosting discussion forum EPIS (EPidemic Intelligence System) (as discussed in Group H), analysis and reporting. Depending on the capacity and future tasks, part of the work will be outsourced.

Some of the current activities of the DSNs do not fit within TESSy and it may not meet the specific needs of all surveillance activities. However, TESSy will be adjusted to the specific needs if necessary. Some activities will possibly never fit into TESSy and other solutions will have to be developed.

It was agreed that data will be validated by the MS themselves and not by ECDC staff. Data need to be corrected by updating the TESSy database and not in the reports. Correcting the reports only should be avoided. It was agreed that the old BSN data should be used carefully as they may be outdated and incomplete. Validation of this data is needed. Within TESSy the MS can send in retrospective data updates whenever needed to ensure the accuracy of data.

In reports of data from TESSy, the date of data extraction and the source ('tag') should always be mentioned. It must be clear which data were used, and also when they were last updated. Prior to publication, a deadline for data-update should be given to allow for corrections by the MS. A draft of a report will have to be circulated before publication (see also Group D Data output). For general standard output an 'a priori' approval should be agreed upon with the countries so that the routine monthly/weekly publication can be submitted automatically.

Action points

- 1 The tagging of sources of data needs to be developed.
- 2 The validation protocol needs to be developed.

Group F: Terms of reference for working group and task forces

Objectives of the working group

- 1 Discuss the proposal of the terms of reference for the ECDC surveillance database working group.
- 2 Develop terms of reference for the task forces of the working group.
- 3 Develop criteria for grouping of diseases for the disease group-specific task forces.

Questions

- 1 Is the proposal for the terms of reference for the working group acceptable?
- 2 If not, what changes or additional comments are needed?
- 3 Which issues need to be addressed in the terms of reference for the task forces?



- 4 Can the terms of reference for the task forces be general or do they need to be topic-specific?
- 5 Which criteria can be used to group the diseases?

Background

The working group of the European Surveillance Database requires terms of reference as a solid basis to its work. The chair of the working group is appointed by the Director of ECDC.

For the draft terms of reference for the working group see Annex 2 in which the suggested modifications are already taken into account.

In order to have a more effective and efficient discussion, the working group shall build topic-specific task forces. The members of the task force shall be ECDC experts and about 10–12 experts from the working group and the DSN.

Criteria should be developed for a discussion on how to group the diseases under surveillance in the EU into the disease-specific task forces.

Outcome

Several suggestions were made to modify the draft terms of reference for the working group (see Annex 2). Some of the suggestions have to be worked upon and added to the document. The document should be agreed upon by the Competent Bodies.

As for the task forces of the working group that should be established to take the work forward, the group was clear that there should be one on the 'Principles of collaboration' (e.g. issues like roles and responsibilities (SOPs), data access rights, outputs, governance (usage policy)) and one on 'Technical issues' (e.g. issues like IT, data security and data protection, analytical tools).

On the disease group-specific task forces, the group suggested one on outbreak surveillance, but for the further grouping a need was seen for more discussion. It could be done in the 'traditional' way by exposure/organ group affected (e.g. respiratory diseases, food- and water-borne diseases, sexually transmitted diseases, etc.) or, in a more innovative approach, according to surveillance objective (e.g. cluster detection and response, time series analysis, risk factor analysis). As the discussion was controversial, the foreseen time was too short to conclude definitely on a grouping.

Action points

- 1 The draft terms of reference for the working group have to be reworded.
- 2 Terms of reference for the agreed two task forces (on 'Principles of collaboration' and 'Technical Issues') needs to be drafted and agreed upon.
- 3 ECDC has to come up with a disease grouping that allows the development and implementation of the future surveillance of communicable diseases in the EU to be carried forward.

Group G: Outbreak reporting

Objectives of the working group

- 1 To discuss the implementation of an outbreak reporting platform at EU level and the advantages and disadvantages of such a system.
- 2 Task force for future work.

Questions

- 1 What kind of systems are in place in the MS to collect outbreak data?
- 2 What added value would an outbreak reporting system provide at the EU level? How could this be best approached?
- 3 What major problems do the Member States foresee in the development of an outbreak reporting system at the EU level?
- 4 For which diseases should it be developed? If for all, are there priorities?

Background

The founding regulation of ECDC (Regulation (EC) No 851/2004) states that the mission of the Centre is 'to identify, assess and communicate current and emerging threats to human health from communicable diseases' (Article 3, paragraph 1). The Centre shall 'establish, in cooperation with the Member States, procedures for systematically searching for, collecting, collating and analysing information and data with a view to the identification of emerging health threats' (Article 10, paragraph 1).

Many DSNs have developed activities targeted at early detection (alert), cluster identification and/or outbreak reporting. DIVINE has developed an outbreak reporting system for norovirus outbreaks. EWGLINET collects and compiles data to detect clusters of travel-related legionellosis cases. Enter-net collates salmonella and VTEC data from national reference laboratories to detect potential international outbreaks and a simple alert system through email has been developed. ESSTI is developing an alert system for STI-related events. EARSS has an early warning component for antimicrobial resistance. Many research networks have advanced laboratory components aimed at detection of internationally linked cases.

Each MS must provide the Commission with an annual summary report of the results of the food-borne outbreak investigations, which is sent to the European Food Safety Authority (EFSA). The data collection covers numerous variables, among them the number of human deaths and illnesses in the outbreaks. As MS report human cases to ECDC in the future, the reporting of human cases in food-borne outbreaks to the Commission needs to be assessed. The aim of ECDC is that MS should avoid duplicate reporting. At present, ECDC is working together with EFSA to develop a standardised system for food-borne outbreak reporting.

The advantages of a European outbreak reporting system could be the following:

- 1 To assess the relative importance of vehicles, sources of infection and modes of transmission in different countries.
- 2 The detection of new vehicles, new sources of infections, and new modes of transmission.



- 3 To identify the relative importance of different pathogens, species and strain types in causing outbreaks.
- 4 The development of methods to assess a 'true' burden of infectious diseases.
- 5 Human, environmental, food, and animal health data can be linked.
- 6 Outbreak reports can be linked to case-based data.

Outcome

Many different issues were raised, like the definition of an outbreak, the heterogeneity in reporting of an outbreak, the list of diseases with reportable outbreaks, reporting of international outbreaks, data collection, and restriction to the disease under surveillance. Early warning was considered as an essential component in outbreak monitoring as well as outbreak investigation and description.

It was suggested that outbreak monitoring would provide added value at the EU level with respect to tackle cross-border issues, comparison across MS, providing long-term trends assessment of the international impact.

Meta-analysis to gain more information from outbreaks was not seen as useful at the moment because of publication bias and the variations in levels of evidence. For example, salmonella in eggs would not be published any more but salmonella in caviar would be published. The surveillance of outbreaks should also lead to actions and should enhance prevention and control measures at the national level.

Specific remarks from DSNs:

- 1 EUVAC.NET has developed a simple discussion forum for network members where outbreak information can be discussed in an early phase. In the later phase, with more complete information the outbreak is published on the website. Especially in the elimination phase for measles, it is important to know where the outbreaks occur.
- 2 EISS does not have an outbreak reporting system but the first signs of disease can be discussed between the network members and as soon as more information is collected the information goes further to an upper level.
- 3 EWGLINET has proven the added value to the EU as the clusters of travel-related legionellosis cases can only be detected through this DSN.
- 4 WHO's experience shows that case-based outbreak reporting is impossible. Separate systems for case-based data and outbreak data are needed but it should be possible to link them. In the WHO database, a case can be linked to an outbreak.

For valid outbreak data, good outbreak investigations are needed. Training is important to strengthen the capacity in the MS to be able to do this. Currently, outbreak investigations mainly rely on microbiological results and descriptive epidemiology in some countries.

MS are not eager to start developing an outbreak reporting system right now although it was considered important. The work on the implementation of TESSy should be prioritised as follows: 1) case reporting, 2) early warning, and 3) outbreak reporting.

It was agreed that outbreak reporting is not the first priority at the moment. However, in order to prepare for it, the following should be carried out:

- 1 Objectives for outbreak monitoring need to be defined.
- 2 Variables need to be defined by disease groups.
- 3 A review of current expertise, e.g. consultations with experts from EU countries.

Action points

- 1 Establish task force for further work.
- 2 A separate workshop should be organised to prioritise preparatory work for outbreak reporting.
- 3 Review the current systems, and define the added value and objectives of an outbreak reporting system.

Group H: Alerts and information exchange in the DSNs

Objectives of the working group

- 1 To present the framework of EPIS.
- 2 To discuss the current information exchange platforms in the DSNs.
- 3 To identify requirements for information exchange at the short term.

Questions

- 1 What is needed in the short term (before EPIS is operational) to ascertain the exchange of information currently done within the DSNs?
- 2 What types of proposals should be discussed for future strategies and requirements?

Background

The EWRS is a formal risk management tool for the Commission. In agreement between ECDC and DG SANCO, and in line with the founding regulation (Regulation (EC) No 851/2004), the takeover of the EWRS by ECDC has been organised and will take place by April 2007.

Even though the transfer implies that ECDC will be operating the EWRS, the roles and functions of MS authorities and the European Commission remain defined as in Decisions 2119/98/EC and 2000/57/EC concerning the responsibilities related to coordination of public health measures in the EU and definition of SOPs and criteria.

In addition to the risk management tool, a risk assessment communication tool is needed for communication between Member States. A new information system (EPIS) will be developed by ECDC in close collaboration with the European Commission to cover EWRS and additional capabilities for risk assessment communication (at ECDC) and for risk management crisis communication (at the Commission).

EPIS aims to facilitate the exchange of signals (unverified alerts) between the Member States and the experts. EPIS aims to harmonise the information exchange between Member States and to facilitate quick and informal communications as well. EPIS will be structured with different levels of access. EPIS will be operational 2–3 years from now.

Most DSNs have developed some kind of information exchange between the collaborators (open access or password protected), e.g. using web-based facilities, mailing lists for sending out alerts or requests, etc.



Proposals for future communications on alerts and information exchange consist of three different components:

- 1 Technical performance level – communication on the coding, data transfer, etc; use of a mailing list with IT-responsible technical staff in Member States, including TESSy staff at ECDC.
- 2 EPI level – communication on verification and alert; use of a mailing list with EPI experts in MS (state epidemiologist and disease-specific experts), including ECDC staff (experts from Surveillance Unit and Preparedness and Response Unit).
- 3 Events level – communication on investigation and action; use of an ad hoc mailing list (e.g. those who need to know); to prepare an EWRS message.

Outcome

It is envisioned that EPIS will contain four levels for communication which would involve different functions and public health officials in the Member States:

- 1 Epidemic Intelligence gateway (information collection, TESSy, Threat Tracking Tool (TTT), interpretation, collation, exchange).
- 2 Signal Forum (unverified signal, information request).
- 3 Alert Forum (sending out public health alert, urgent enquiry).
- 4 Event Forum (investigation and action, preparation for EWRS message regarding risk management).

There was a general agreement on the suggested forums and the communication loops in and between the different levels. Requirements need to be assessed and should include a number of DSNs. However, EPIS will not be in place for a few years and the options for the interim period were discussed.

Information exchange platforms in the DSNs were discussed and it was suggested that the use of simple mailing lists for different purposes was the best intermediate solution. Another suggestion was to keep the current systems in place for those DSNs where the system works efficiently, and to include the appropriate contact person from ECDC in this loop of communication. However, in the event that a particular DSN has different or no methods in place, the harmonisation of terminology for platforms is needed to increase efficiency.

Mechanisms have to be developed for picking up signals and responding in a timely manner. The rules of the game have to be set as different kinds of access rights need to be developed (e.g., read-only access).

Changes were suggested for the future communication of alerts and information exchange including the levels of urgency in four components.

- 1 Technical performance, Request for Information – communication regarding the routine management of the surveillance network, the technical issues, etc. The mailing list for this group would include all IT experts, disease-specific technical staff (contact points) in the Member States, TESSy staff and the contact person in ECDC.
- 2 EPI level, Urgent enquiry – communication on the validation of a non-verified alert. The mailing list of this group would include disease-specific technical staff (contact points) in

- the Member States, State Epidemiologists and the appropriate ECDC staff (from all technical units). Communication results in a risk assessment (outbreak alert or no result).
- 3 Events level – communication on the outbreak investigation and action. The mailing list of this group is an ad hoc mailing list (outbreak control team) and depends on the disease and countries involved. Communication results in a message for EWRS.
 - 4 Feedback – communication on the outcome of the alert and the results of the outbreak investigation. The mailing list would include disease-specific technical staff in Member States, State Epidemiologists, and ECDC.

Action points

- 1 List of contact points. It was suggested that for each MS a list for communication should be made. This list would include the (re-confirmed) disease-specific contact points and the various communication levels (See also WG C on the Contact Point Strategy). It was suggested that the mailing lists should be tested at fixed points in time (like the fire alarm every first Monday of the month at 10 am). The logistics for this 'testing' need some additional thinking.
- 2 The task force should be combined with the Task Force on Contact Point Strategy as the contact points are probably the same individuals. SOPs should be developed to further specify the functions and the role of the different players (e.g. what kind of information at which level, requirements and the potential use of forms).
- 3 The final proposal for the contact point strategy and information exchange should be presented in a discussion paper to the Advisory Forum and the committee dealing with the EWRS platform.



CONCLUSIONS AND NEXT STEPS FOR ECDC

General

According to the founding regulation (Regulation (EC) No 851/2004), ECDC is responsible for the surveillance in the EU and shall gradually take over data collection for epidemiological surveillance. ECDC is developing a system for infectious disease surveillance (TESSy) to collect, store and disseminate surveillance data at European level. TESSy starts with the collection of a reduced set of variables for cases of infectious diseases. This will gradually be extended by a more enhanced set of variables as well as non-case-based surveillance data currently collected by DSNs.

A working group of experts in infectious disease surveillance at a national level or in disease-specific surveillance was established in February 2007. The working group shall continue discussing with the main user groups of TESSy technical issues and user requirements. Certain aspects of the work will be covered in more detail by task forces.

Task forces of the working group shall be established to take the work forward. One task force will deal with the 'Principles of collaboration' (e.g. issues like roles and responsibilities (SOPs), data access rights, outputs, data usage) and another one on 'Technical Issues' (e.g. issues like exchange of data, data security and data protection, analytical tools). Task forces on disease-specific issues shall be established to assist ECDC in the further development of disease-specific issues.

The development of an outbreak reporting system is *not* a priority for ECDC according to the discussion in the working group. The development of an integrated surveillance system for case reporting and early warning was identified as its first priority.

Task forces

To avoid the overhead of involving the whole TESSy working group in the discussion process it is planned that topic-specific task forces with approximately 10–15 members plus ECDC staff will be formed. The following task forces should be founded:

- 1 Task force on technical and IT issues: this task force shall deal with the technical issues concerning data exchange between MS and TESSy. The members should be nominated IT experts from the MS and the DSN. The main items to be discussed/developed are:
 - data transport formats;
 - data transport protocols;
 - coding systems;
 - integration of laboratory data;
 - specific issues (like zero reporting).
- 2 Task force on principles of collaboration dealing with user requirements and communication aspects: the members should be nominated experts for epidemiology from the MS and the DSN. The main items to be discussed are:
 - developing terms of reference for the working group and the task forces;

- developing the contact point strategy;
 - specifying the data output (contents and structure of standard reports);
 - developing the data usage policy and identify access rights;
 - developing the SOPs for granting access to TESSy users.
- 3 Task forces on disease-specific issues: these task forces shall assist ECDC in the further development of disease-specific work. The sub-groups have to be discussed and agreed upon. The members should be nominated experts for epidemiology from the MS or the DSN.

Data exchange, upload and access

A general 'Agreement on the collaboration regarding European Surveillance of communicable diseases' will provide a framework for the following:

- 1 definition of main user groups, ownership of data;
- 2 data reporting, access rights and roles, data usage;
- 3 communication strategy;
- 4 standard output that has general prior approval so that no additional approval from Member States is needed;
- 5 procedure on how to deal with data requests from others than the main user groups, e.g. MS, partners in Europe (WHO, European Monitoring Centre for Drugs and Drug Addiction), third parties, academia;
- 6 usage of the national data by ECDC shall not break any of the national laws with respect to data protection.

Data on all national notifiable diseases shall be available from the ECDC website. Standard reports and outputs are produced on a regular basis and should have a general prior approval with the Member States.

During the transitional phase, in which Member States report to TESSy and the DSNs are still operational, the core set of ALL infectious diseases shall be collected in TESSy, regardless of whether they are also collected by a DSN.

The future data transport protocol is the TESSy XML file format. For a transitional period, a CSV file format can be used as a simple alternative, being aware that this format does not meet all the requirements. The BSN format will be accepted only for a limited time period. Supporting the HL7 standard is currently not needed but it should be reconsidered after some time.

TESSy shall provide a standard interface for uploading, validating and reporting all data, regardless of its source. The source of the data in TESSy shall be clearly specified by 'tagging' the data. Data shall be validated by the MS themselves and corrected updates need to be sent to TESSy.

TESSy plans to provide predefined automated reports as well as an interactive interface for data extraction.

ECDC shall carry out an inventory of the three most useful outputs produced by DSNs to better describe the current status. This activity shall be included in the transition plan for each DSN.

The frequency of reporting depends on the future surveillance objectives and on the need per disease.



Country support

ECDC shall identify the needs and methods for support in Member States.

ECDC expects that MS will comply with TESSy and acknowledge the benefits of participation. If MS are lacking resources or expertise, ECDC shall support MS.

Bilateral discussions are needed on how ECDC can provide support.

Collaboration

ECDC shall propose that the MS prepare a list of contact points and functions for future collaboration regarding surveillance. This list would include the (re-confirmed) disease-specific contact points at the various communication levels. The MS need to find a mechanism for maintaining up-to-date lists of contact points.

The communication with, and between, the laboratory partners within the surveillance networks needs further discussion.

For the information exchange platforms, the use of simple mailing lists including experts from the Member States and ECDC shall be used as a temporary solution until the ECDC platform for communication and information (EPIS) has been implemented.

ECDC shall eventually co-ordinate all the relevant elements of surveillance and some of them are already foreseen and planned for, e.g. alerting, discussion forum, analysis and reporting. Depending on the capacity and future tasks, part of the work will be outsourced.

Mechanisms shall be developed for picking up signals and responding in a timely manner. The rules of the game have to be set as different kinds of access rights need to be developed (e.g. read-only access).

Next steps for ECDC

- 1 Based upon the experience of collating the 2005 data for the annual epidemiological report, it was decided that the historical data in BSN will only be included in TESSy after the validity of these data has been assessed. Incorporation of the data will be done on a case-by-case basis.
- 2 Identify the users for TESSy.
- 3 Set up the task forces to continue the work on the principle of collaboration, the communication strategy and the on-going technical issues.
- 4 Identify future needs for support to Member States.

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ANNEX 2: DISCUSSION PAPER ON DRAFT TERMS OF REFERENCE

Surveillance Cooperation Working Group: draft terms of reference

Background

In the European Union, all of the Member States have established national systems for the surveillance of infectious diseases. There is heterogeneity between the countries concerning the implementation and the financial and the personnel resources for the further development and maintenance of the systems. ECDC is currently establishing an EU-wide surveillance database that will – starting in January 2007 – collect, store and make available surveillance data from the EU Member States. The European Surveillance System (acronym TESSy) starts with a core set of variables for basic surveillance for all diseases reportable at the EU level. The database will be extended over the next years to cover additional sets of variables that are needed for enhanced future surveillance of the diseases at the EU level.

The core dataset has been collected by the Basic Surveillance Network (BSN). It will be migrated to ECDC by the end of 2006. The data that is currently collected by the Dedicated Surveillance Networks (DSN) will be migrated to the ECDC database system according to the needs for future surveillance objectives, after the evaluation and assessment of each network has been performed.

In order to build up a platform for the necessary discussions on the future development of TESSy, ECDC plans to establish a working group of the epidemiologists and the IT experts who have experience with their national surveillance systems. They will represent their countries and work with ECDC to develop an EU-wide surveillance system which also serves the needs and expectations of the MS. Scientific coordinators and data managers from the DSNs will be invited to the working group.

Purpose and mandate

The purposes of the working group will be mainly:

- to work on the principles of collaboration between ECDC and MS and on definition of roles; and
- to elaborate the required public health functionality and the terms of data usage of TESSy.

While ECDC will host TESSy, data providers and users are mainly the national experts and designated persons in the EU Member States. To specify and agree upon the functionality of the application, and, for instance, the access rights to the data, a close cooperation between ECDC and the Member States is necessary. The working group has the mandate to contribute to the development of the functional requirements and develop an agreement on data delivery and data usage that can be discussed in the Advisory Forum and the Management Board of ECDC.

- Work on the functionality of future networks within TESSy (including topic-specific and laboratory networks).

- Work on the epidemiological analysis of data and the outputs of the results.
- Work on standards for laboratory quality assurance.
- Contribution to standards: ECDC develops a format and protocol for data exchange with the Member States. This standard will be developed over the years and needs intensive discussions between ECDC and the Member States. An option might be to participate in an official standardisation body.
- Exchange of knowledge, exploration of the possibilities for support to MS, identification of training needs, exchange of software and other tools.

The experience of the suggested working group members is very heterogeneous. It will be very beneficial to learn from the experiences of other experts when establishing or changing their national surveillance systems, especially when introducing an electronic surveillance system. The views from both epidemiological and technical sides are important for the development of the EU-wide surveillance system.

Members

Full members of the working group will be from:

- ECDC (SCU, Knowledge Manager, ICT);
- Member States and EEA/EFTA countries.

The national experts shall be nominated by the countries' Chief Medical Officers. External guests can be invited at need, for example:

- scientific coordinators and data managers from currently running DSNs to ensure a smooth transition of the databases;
- institute/body/research networks with expertise on molecular database management (e.g., PulseNet Europe);
- WHO EURO (e.g., CISID team member);
- other EU Agencies (e.g., EFSA);
- other EFTA (Switzerland), EU acceding and candidate countries.

Organisation

The working group will be organised by the ECDC SCU. The working group shall meet once a year. Additional meetings can be organised if necessary. For specific tasks or problems (such as specification of data transfer standards) dedicated sub-groups can be established that meet in a satellite meeting to the annual meeting or whenever necessary (tele-conferences are an option). The working group can delegate these tasks to the sub-group.

Meetings can be hosted by ECDC or by any other institute with a working group member. Costs of the meetings are covered by ECDC for full members (maximum two per country) and the representatives from the DSNs.

Term of validity

The terms of reference will be revised at the end of 2007 to take into account the development on the surveillance strategy and the results of the evaluation and assessments of the DSNs.

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