



**WHO European Regional Office  
Expert Consultation on the Proposed  
Framework for Verifying Measles and  
Rubella Elimination  
in the WHO European Region**

26–27 January 2010  
Copenhagen, Denmark

## **Abstract**

In 2002, the WHO Regional Office for Europe developed and implemented a strategic plan targeting the elimination of measles, rubella and the prevention of congenital rubella syndrome infection in the WHO European Region by the year 2010.

The WHO Regional Offices for the Americas (AMRO), Eastern Mediterranean (EMRO) and Western Pacific (WPRO) also have measles elimination goals, and all have established or are establishing processes and criteria for verification of measles elimination, including establishment of regional and national verification commissions.

In order to begin to document progress towards measles and rubella elimination in the WHO European Region, the Regional Office developed a framework for the verification process. The objectives of the technical consultation were to critically review the proposed framework for the verification process in the WHO European Region and provide guidance and practical recommendations on the basic principles and components of the verification process, the structure and function of the regional and national verification commissions, and the operationalization of the verification process.

It is proposed to convene a consultation in September 2010 with Member States to further develop the processes and criteria for verification of measles and rubella elimination in the Region prior to the establishment of a Regional Commission for the Verification of Measles and Rubella Elimination (MRRVC) in November 2010. It is further proposed to begin establishing National Commissions for the Verification of Measles and Rubella Elimination (MRNVCs) in 2011.

### **Keywords**

Immunization  
World Health Organization  
Europe  
Measles  
Rubella  
Disease elimination  
Disease surveillance

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## Abbreviations

CDC	[United States] Centers for Disease Control and Prevention
CRS	Congenital Rubella Syndrome
cMYP	Comprehensive Multi-year Plan
ECDC	European Centre for Disease Control and Prevention
EIW	European Immunization Week
EMRO	[WHO] Eastern Mediterranean Regional Office
ETAGE	European Technical Advisory Group of Experts on Immunization
EU	European Union
EUR	[WHO] European Region
GAVI	Global Alliance for Vaccines and Immunization
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome
JRF	[WHO/UNICEF] Joint Reporting Form
MCV	Measles- containing vaccine
MRRVC	Regional Commission for the Verification of Measles and Rubella Elimination
MRNVC	National Commission for the Verification of Measles and Rubella Elimination
NITAG	National Immunization Technical Advisory Group
PAHO	Pan American Health Office [WHO Regional Office for the Americas]
RCV	Rubella-containing vaccine
SAGE	[WHO] Strategic Advisory Group of Experts on Immunization
SIA	Supplementary Immunization Activity
TORs	Terms of reference
UNICEF	United Nations Children's Fund
VPD	Vaccine-preventable disease
WER	Weekly Epidemiological Record
WHO	World Health Organization
WPRO	[WHO] Western Pacific Regional Office

## Executive Summary

The WHO Regional Office for Europe developed and implemented a strategic plan for measles, rubella, and the prevention of congenital rubella infection in the WHO European Region in 2002. This plan targeted the elimination of measles and rubella, and the prevention of congenital rubella infection by the year 2010. Interruption of indigenous measles transmission has already been achieved in some Member States through routine immunization programmes, which maintain high measles-vaccine coverage ( $\geq 95\%$ ) using a two-dose schedule.

The WHO Regional Offices for the Americas (AMRO), Eastern Mediterranean (EMRO) and Western Pacific (WPRO) also have measles elimination goals, and all have established or are establishing processes and criteria for verification of measles elimination, including establishment of regional and national verification commissions. However, the processes and criteria, while very similar, do address regional differences.

Establishing an agreed-upon external and objective process and criteria for verification of measles elimination will provide official recognition of countries that have interrupted indigenous measles or rubella transmission, and for those that have not, clear standards and resources that will help policy-makers and programme managers to do what is needed to eliminate measles and rubella and submit evidence demonstrating elimination.

In order to begin to document progress towards measles and rubella elimination in the WHO European Region, the Regional Office developed a framework for the verification process. The purpose of this document is to describe in detail the steps that will be taken to document and verify that the elimination of measles and rubella has been achieved in the WHO European Region.

The objectives of the technical consultation were:

- To critically review the proposed framework for the verification process in the WHO European Region and provide guidance and practical recommendations on:
  - the basic principles and components of the verification process,
  - the structure and function of the Regional and National Verification Commissions, and
  - the operationalization of the verification process.
- To review experiences of the verification process in WHO Regions of the Americas and plans for the Western Pacific.
- To present self-assessment tools for monitoring national progress towards measles and rubella elimination developed by WHO Europe and the European Centre for Disease Prevention and Control (ECDC).

It is proposed to convene a consultation with experts from Member States in September 2010 on further developing the processes and criteria for verification of measles elimination in the Region prior to the establishment of a Regional Commission for the Verification of Measles and Rubella Elimination (MRRVC) in November 2010. It is further proposed to begin establishing National Commissions for the Verification of Measles and Rubella Elimination (MRNVCs) from 2011.

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## Introduction

Dr. Nedret Emiroglu, Director, Division of Health Programmes, a.i., opened the meeting and highlighted the challenges that the WHO European Region faces in terms of achieving the regional measles and rubella elimination goal. She noted that measles outbreaks, particularly in western European countries, continue to remind us that transmission is far from having been interrupted in the Region. She noted that she will seek confirmation of the WHO European Region's political commitment and the personal engagement of Ms Zsuzsanna Jakab, the newly appointed Regional Director, and will examine the prospects for raising the issue at the next European Regional Commission (RC) meeting.

Progress towards measles and rubella elimination in the Region was summarized. She noted that all countries had endorsed the regional elimination goal. Pockets of low vaccination coverage continue to exist, complicating the achievement of measles and rubella elimination. The European Region (EUR) differs from other WHO regions in that most eastern countries have conducted a catch-up supplementary immunization activities (SIAs) typically targeting persons up to 49 years of age, but few have implemented subsequent follow-up SIAs (targeting children aged <5 years) as the European Region's strategy focuses on ensuring immunizations through routine delivery services. Furthermore, SIAs in EUR are not always nationwide, but may be targeted and often phased. Ukraine and Georgia have conducted deficient SIAs that will eventually have to be repeated.

Case-based surveillance for measles is well established in the Region, but rubella surveillance requires strengthening. The timeliness of surveillance data reporting from countries to the Regional Office is weak and requires strengthening. A substantial number of countries report only laboratory-confirmed measles cases and not discarded cases. Measles virus genotyping isolates demonstrates that 56% of all measles outbreaks are related to strains prevalent within the Region, whereas a smaller proportion are related to viruses imported from other regions. Age-specific analysis of measles cases shows that the great majority of cases occur in children aged 9-14 years who are unvaccinated..

Public acceptance of immunization in certain communities in some Member States, particularly in western Europe, is weak due to inadequate perceptions of risk of disease, benefit of vaccination, anti-vaccine advocacy and philosophical and religious refusals. There are also specific groups that remain hard-to-reach, such as the Roma ethnic communities in many countries. In certain countries, health reform has resulted in a reduction of resources available for outreach activities, which constitute one of the successful ways to reach Roma children. Greater emphasis on raising routine measles and rubella vaccination coverage to very high levels will be needed urgently to counter negative advocacy. There may also be opportunities to target specific groups such as the Roma in the course of SIAs or European Vaccination Week activities.

The Region is committed to measles elimination by the end of 2010. However, following an extensive review of current progress, the European Technical Advisory Group of Experts on Immunization (ETAGE) concluded that the regional target of measles and rubella elimination by 2010 will likely not be achieved on time by 30 of the 53 (57%) Member States: over two-thirds of the Region's population. The goals are technically feasible and can be achieved, but not by the target of 2010. An exercise has also been conducted to cost the elimination goal in EUR.

The current status of measles and rubella elimination in AMR was presented. AMR has eliminated transmission of indigenous measles virus strains, and is rapidly moving towards elimination of rubella transmission and prevention of CRS. In addition to the catch-up, follow-up and keep-up strategies, PAHO has now added the strategy of “speed-up”, specifically for rubella elimination: immunization among wider age cohorts. PAHO has initiated a process for verifying measles and rubella elimination in AMR, including the establishment of a Regional Commission and National Commissions. The regional plan of action aims to lay out the principles for verification and to standardize national reporting of evidence to support a declaration on elimination. Each country has been tasked to develop a national action plan of action to compile, analyze and report the information required by the Regional Commission, and to achieve sustainability of vaccination service delivery and epidemiological surveillance.

The analysis of measles and rubella epidemiology in each country is subject to a series of standardized indicators related to vaccination coverage, disease incidence, and viral genotyping,. The sensitivity indicator for clinically suspected measles cases has been set at 2 discarded cases per 100,000 population (based on WHO recommendations). The sensitivity indicator for clinically suspected congenital rubella syndrome (CRS) cases has been set at 1 discarded case per 10,000 live births (based on a study conducted in Peru). In 2011-12, the Regional Commission will report its conclusions to the PAHO Directing Council, which will then decide if the evidence supports a declaration of regional elimination of rubella.

The current status of measles elimination in WPR was presented. In 2005, a regional goal of measles elimination by 2012 was established, and an expert panel will be appointed in 2010. All 37 countries in WPR are conducting case-based measles surveillance. 31 of 37 countries have conducted catch-up SIAs – the six remaining countries have very small populations. To date, China has covered 75% of its provinces with catch-up SIAs. Elimination may be verified after one single year without measles transmission, on the basis that measles infection has a short incubation period and cases are visually evident. The Western Pacific Region believes that up to 25 countries have achieved measles elimination, most of these being island nations with small, epidemiologically isolated populations. WPR is considering a population-size criterion in national verification of measles elimination.

In a recent journal publication, it was claimed that Australia in fact achieved measles elimination despite having not met a number of the indicators established by the Western Pacific Region. A number of recent journal articles has appeared that question the feasibility of WHO-recommended elimination criteria, especially for industrialized countries.

The WHO European Regional Office self-assessment tool for monitoring national progress towards elimination was presented. The Regional Office developed this tool to assist Member States and to assess the usefulness of the globally recommended elimination indicators, and it was piloted in nine Member States. Performance indicators include the timeliness and completeness of reporting, vaccination coverage, outbreak size, overall incidence, and source of outbreaks (from viral genotyping). Eight of the nine countries had established case-based surveillance and could report on all or most of the indicators from routine reporting systems. Several countries did not provide district-level data, although it is known that these data are collected. The pilot exercise confirmed that all proposed indicators were useful and feasible, although some quality issues were identified including difficulties with the transmission of district-level data.

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A self-evaluation tool designed by ECDC was presented. This tool was developed to support public health experts in countries to measure progress towards elimination and to raise political awareness among public health communities. It is complementary to the WHO self-assessment tool. It consists of 10 primary questions, each generating an array of secondary questions, all of which require only yes or no responses. The spreadsheet generates an automated report based on scores achieved and a “spider-web” graph. The tool weights questions, and if resources permit, it will be converted to web-based access.

## **Proposed components of the verification process for measles elimination**

**Analysis of vaccination coverage data.** The proposed objective is to prove that all population cohorts <40 years of age are fully protected against measles. Countries routinely report national and sub-national coverage for measles and rubella containing vaccines doses 1 and 2 (MCV1/RCV1), (MCV2/RCV2), respectively, and SIA coverage data to the WHO European Regional Office. Coverage data are among infants and children <24 months of age and reported annually through the WHO/UNICEF Joint Report Form (JRF). For the purposes of verification, these two sources of data will be supplemented in certain countries by sero-surveys, coverage surveys, analyses of age and vaccination status performed on confirmed and discarded measles and rubella cases, and other sources, as available. It will also be important to analyze coverage among under-vaccinated groups such as the Roma ethnic group, philosophical refusers, etc.

**Epidemiological analysis of disease incidence.** Case-based data will be required to facilitate the proposed verification process for measles and rubella elimination. Thirty-five and 37 of the 53 countries in the Region conduct case-based measles and rubella surveillance, respectively, although not all countries report these data to the Regional Office. Measles and rubella surveillance activities are not integrated in some member states, but the situation should improve when the Regional Office published the new measles and rubella surveillance guidelines in 2010. The timeliness and completeness of reporting from some Member States is inadequate, complicating data analysis and outbreak investigation. The WHO International Health Regulations (IHR) specify that outbreaks of public health importance be reported; some Member States are reporting data from measles outbreaks. National measles surveillance reporting formats for transmission to WHO and ECDC are consistent.

The Regional Office conducts on-going analysis and dissemination of measles and rubella epidemiology in accordance with the standardized indicators recommended by WHO, in addition to detailed analysis of outbreak investigation data. These analyses also generate data on high-risk groups, and vaccine effectiveness. It is also possible to study epidemiological trends over a period of three years.

**Analysis of the molecular epidemiology of measles and rubella viruses.** The Regional Office has established an integrated laboratory network whose primary objectives is to provide laboratory confirmation of all suspected measles and rubella cases, and to genotype virus strains. Serum and oral fluid specimens can be tested. A number of indicators have been established to monitor routine laboratory performance, and all network laboratories have achieved high-quality performance. Data from private laboratories are not generally included in



national reporting systems. Furthermore, laboratory and epidemiological databases are poorly integrated in most countries. Funding for the laboratory network is currently limited and requires strengthening.

Analysis shows that measles strain D6 has not been identified in the Region for the past two years. The origin of strains is being tracked, in addition to the extent of import-related spread around imported cases. Less information is available to date on circulating rubella strains in the Region.

Surveillance indicators for CRS are under development in the European Region and will be incorporated into the regional surveillance guidelines following specific consultations scheduled in 2010.

**Overall quality of epidemiological surveillance.** The timeliness and completeness of measles and rubella data reporting to national ministries and to WHO are currently relatively low. The proportion of cases with laboratory investigation is high in those countries conducting case-based surveillance, but low in countries reporting aggregate data and/or clinically-confirmed cases only. The recommended detection rate for suspected measles cases was achieved in only 13 out of 53 countries in 2009; however it should be noted that many Member States do not report discarded cases. The definition of a measles or rubella outbreak (or chain or transmission) varies substantially between countries, and reporting of the recommended indicator on outbreaks with virus genotype information is still very limited in the Region. However, it is hoped to resolve some of these issues when the new regional surveillance guidelines are introduced in 2010. The timeliness of initiating outbreak investigations is generally poorly reported. Only 60% of reported outbreaks include data on source of infection.

**Sustainability of national immunization programmes.** Measles and rubella vaccines are components of national immunization programmes, which in itself is a component of a health care delivery system. Areas that should be monitored in the verification process include sustainability of financial support, resource allocation, programme management and service delivery performance. These qualitative data will serve to describe the maturity of the national immunization programme and triangulate with and confirm the quantitative indicators.

The specific role of the sustainability of national immunization programmes in the verification process will need to be defined more clearly in due course. The following areas were presented. To demonstrate financial sustainability, countries could be expected to monitor the percentage of immunization programme expenditure and vaccine procurement from public funds, and the existence of specific line items in ministry of health budgets. Countries may need to demonstrate the sustainability of resources available for immunization service delivery. Countries may also be expected to demonstrate the sustainability of programme management through the existence of cMYPs, NITAGs, district micro-plans to increase routine vaccination coverage and the capacity to monitor vaccine supply, coverage, and SIAs planning. Finally, countries could be expected to demonstrate service delivery performance, that is, the capacity to meet reporting requirements, implement strategies to raise and sustain coverage, and involve local leaders.

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## **Structure and function of Measles and Rubella Elimination Regional and National Measles Verification Commissions**

The basic structure and terms of reference (TORs) of the Regional Commission and National Commissions for the Verification of Measles and Rubella Elimination (MRRVC and MRNVCs, respectively) were presented. Members of the MRRVC and MRNVCs will be independent, technical experts with no conflicting participation in programme implementation. These commissions will serve an important advocacy role in promoting the elimination goal and reminding countries of the need to accelerate the implementation of activities leading to elimination.

The core task of the MRRVC is to declare Member States free of virus transmission for  $\geq 3$  years since the last confirmed case and eventually to declare the Region measles- and rubella-free. The Regional Director of WHO European Regional Office will appoint the MRRVC members and the Regional Office will serve as Secretariat to the Regional Commission. It is proposed that the MRRVC will report to the Regional Director and share its findings with ETAGE. The final TORs adopted by the MRRVC will be determined by the MRRVC in consultation with WHO European Regional Office and Member States.

The MRNVCs' core task is to compile, analyze and report annually the evidence to MRRVC to support the claim that its Member State has no indigenous transmission of measles virus. Commission members will be appointed by the respective Minister of Health. It is proposed that MRNVCs be established sooner rather than later, in order to draw attention to the elimination goal and to accelerate the national advocacy role and begin the national self-assessment process. The data compilation and analysis work of the MRNVCs will be conducted in collaboration with respective national immunization programmes.

## **Operationalization of the verification process in the European Region**

The operationalization of the verification process will require that the major components of evidence should be standardized – epidemiological analysis, molecular epidemiology, quality surveillance, high population immunity and sustainability of national immunization programmes. The process will be an on-going, evidence-based evaluation of measurable indicators, wherein procedures are clearly defined and any information gaps are identified and resolved. Efforts will be made to accelerate the implementation of rubella and CRS elimination activities in order to bring it more closely into line with the current status of measles elimination activities.

A proposed timeline was presented for moving this process forward and finalizing the verification framework in consultation with technical experts and member states. It is proposed to convene a country consultation in September 2010 on further developing the processes and criteria for verification of measles elimination in the Region prior to the establishment of the MRRVC in November 2010. It is further proposed to begin establishing MRNVCs from 2011. Funds must be identified urgently to support this important work. It is currently hoped that the first meeting of the MRRVC can be scheduled in 4<sup>th</sup> quarter 2010. This timing will be opportune in view of the 2010 target date for the elimination goal and other global and regional scheduling.

## Discussion

In discussion, it was proposed to reduce the large number of indicators, given the potential burden that these may place on ministries in certain countries. It was suggested that the indicators should be divided into two groups – those that are absolutely crucial for verifying elimination, and others that are helpful but not essential to the verification process. The indicator on the *adequacy of case and outbreak investigation* was strongly defended as an essential requirement for verifying elimination. It was suggested that use of the indicators proposed in the WHO European Region framework on the detection rate and identified source of infection could be applied before national measles incidence falls to <1 per million population.

It was also questioned whether monitoring the sustainability of national immunization programmes will be critical to the verification process, and whether national commissions will have the necessary expertise to assess sustainability. It was suggested that this component may serve a more limited role of providing background to facilitate a qualitative assessment of the strengths and weaknesses inherent in a national immunization programme. As such, it was suggested that no new performance indicators per se need to be created in order to monitor programme sustainability beyond what is currently collected in the WHO/UNICEF Joint Report Form.

The adoption of PAHO's core criteria for verification was recommended – i) absence of confirmed cases for  $\geq 3$  years in the presence of high population immunity, ii) absence of indigenous virus strains, and iii) achievement of  $\geq 80\%$  of outbreaks adequately investigated. It was also recommended that the verification process might be conducted by epidemiological blocks or other country groupings within the Region, rather than embarking on the process in all 53 countries simultaneously. The main difference that would occur when a block is considered measles-free is that the countries of that block would not be required to report annually in so much depth as those countries which are having on-going difficulties achieving the elimination goal. Again, most participants felt that this approach would support well the advocacy component of the verification process at country level, and would also be operationally useful for the European Regional Office and Headquarters to monitor progress. One proposal was to move towards verification in the Russian Federation and newly independent states (NIS) countries, or the northern area of the Region, first, and to use this achievement to focus attention on on-going transmission in Western European countries. This issue will require further thought and deliberation.

The question of how long measles and rubella surveillance should be maintained before the interruption of transmission could be verified was addressed. It was agreed that the absence of confirmed cases for one year would indicate that transmission has been interrupted, but PAHO has decided to keep the more conservative approach of waiting for 3 years to add a sustainability component. It was also noted that since some cases of rubella are asymptomatic and some CRS cases shed rubella virus for an extended period, it might be prudent to maintain a period of 3 years' vigilance to be confident of interruption of both measles and rubella transmission.

The role of national commissions and the proposed scope of criteria and indicators to assess whether individual countries could reasonably be expected to achieve all indicators was also discussed. Countries should not be disqualified if they fail to achieve one specific indicator, for

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example, of very high levels of homogeneous vaccination coverage with two doses of measles vaccine. The group endorsed the concept of “aspirational targets” such that national commissions should monitor the compiled evidence in order to assess the quality of the overall effort to interrupt transmission from different perspectives, and not recommend and insist upon unachievable indicators. The danger was highlighted of assuming that the achievement of, say, national vaccination coverage with MCV1 and MCV2 of 95% might still not prevent small outbreaks in clusters on unvaccinated children.

The difficulty of establishing one set of criteria appropriate and feasible for all Member States was discussed with the focus on the differences in public health conditions and resource availability between the poorest and the wealthiest countries in the European Region. However, it was also noted that exceptions should not be made for western Europe. The key issue is to establish a method to ensure that no case of rash and fever and no newborn CRS case would be missed. Industrialized countries will need to provide evidence that they have achieved the absence of confirmed cases for  $\geq 3$  years in the presence of high population immunity and the absence of indigenous virus strains, and the Regional Commission will need to review and consider the completeness and accuracy of that evidence.

Certain global issues regarding indicators for elimination were highlighted. The target of measles incidence  $< 1$  per million population has been dropped in favour of an indicator of reaching zero endemic measles cases. The numerator of this indicator includes laboratory-confirmed plus epidemiologically-linked plus import-related cases (but not imported cases). Participants discussed whether clinically-confirmed cases should be included. Others stated the case for monitoring all cases – clinically-confirmed, lab-confirmed, epidemiologically-linked, imported and import-related – as part of routine surveillance work.

It was proposed that countries monitor two separate tracks – “pure” measles incidence that includes endemic (non-import-related) lab-confirmed and epidemiologically-linked cases, and “all” measles incidence that includes endemic and non-endemic lab-confirmed cases and clinically-confirmed cases. The second track is important until such time as the quality of surveillance reaches a level considered high enough to drop clinically-confirmed cases with confidence that they are unlikely to be caused by measles virus.

Reestablishment of endemic transmission in a country is currently defined by the WHO Regional Office for Europe and WHO Headquarters as occurring when an imported measles case results in transmission for  $> 12$  months. However, it is recognized that this definition is arbitrary and subject to further scientific debate. It was agreed that the definition of the reestablishment of endemic transmission should be reflected in the framework document.

## Recommendations

1. The participants felt that the demonstration of programmatic components of political commitment for elimination and efforts to overcome public and professional resistance to vaccination should be included among the qualitative aspects of the verification process. It was recommended that the Regional Office take steps to co-opt the support of national professional associations in industrialized countries in order to lobby for political commitment to achieve elimination.
  2. It was proposed that WHO HQ might consider incorporating selected measles and rubella elimination indicators into the annual JRF reports.
  3. The revised framework document will be circulated for review and comments to all participants, along with this report. Then it was recommended that a technical consultation with Member States be convened to review the revised framework prior to implementation.
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## **Annex 1 Programme**

### **Technical consultation on regional verification of measles and rubella elimination**

**26–27 January 2010, Copenhagen, Denmark**

**Tuesday, 26 January**

<b>09:30-10:00</b>	<b><i>Registration and coffee/tea</i></b>	
<b>10:00-10:30</b>	<b>Introduction, meeting objectives</b> - Chair - Rapporteur	
<b>10:30-11:00</b>	<b>Status of measles and rubella elimination in the WHO European Region</b>	<b>WHO Regional Office for Europe</b>
<b>11:00-11:20</b>	<b>Experience of verification of measles and rubella elimination in the WHO Region for the Americas</b>	<b>WHO Regional Office for the Americas</b>
<b>11:20 -11:40</b>	<b>Experience of verification of measles and rubella elimination in WHO Region for the Western Pacific</b>	<b>WHO Regional Office for the Western Pacific</b>
<b>11:40 – 11:50</b>	<b>Questions and answers</b>	
<b>11:50 -12:10</b>	<b>Self-assessment tool for monitoring national progress towards measles and rubella elimination</b>	<b>WHO Regional Office for Europe</b>
<b>12:10 – 12:30</b>	<b>Self-assessment tool for monitoring process and outcomes of national public health programmes towards elimination of measles and rubella</b>	<b>European Centre for Disease Prevention and Control</b>
<b>12:30 – 13:30</b>	<b><i>Lunch</i></b>	

<b>Components of verification process</b>		<b>WHO Regional Office for Europe</b>
<b>13:30 – 13:50</b>	<b>Analysis of vaccinated population cohorts</b>	
<b>13:50 – 14:10</b>	<b>Epidemiological analysis of disease incidence</b>	
<b>14:10 – 14:30</b>	<b>Analysis of molecular epidemiology of measles and rubella viruses</b>	
<b>14:30 – 14:50</b>	<b>Overall quality of epidemiological surveillance</b>	
<b>14:50 – 15:10</b>	<b>Sustainability of the national immunization programme</b>	
<b>15:10- 15:40</b>	<i>Coffee/tea</i>	
<b>16:00-17:30</b>	<b>Discussion</b>	
<b>17:30</b>	<i>Reception</i>	

**Wednesday, 27 January**

<b>09:00-09:30</b>	<b>Structure and function of Measles and Rubella Elimination Regional and National Measles Verification Commissions</b>	<b>WHO Regional Office for Europe</b>
<b>09:30-10:00</b>	<b>Discussion</b>	
<b>10:00-10:30</b>	<b>Operationalization of the verification process in the European Region – partners, responsibilities, timeline</b>	<b>WHO Regional Office for Europe</b>
<b>10:30-11:00</b>	<i>Coffee/tea</i>	
<b>11:00-12:00</b>	<b>Discussion</b>	
<b>12:00-13:30</b>	<i>Lunch</i>	
<b>13:30-14:30</b>	<b>Way forward</b>	
<b>14:30</b>	<b>Closing</b>	

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## **Annex 2 Participants**

### **Technical consultation on regional verification of measles and rubella elimination**

**26–27 January 2010, Copenhagen, Denmark**

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