



ECDC **CORPORATE**

Annual Report of the Director

2016

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Abbreviations

ABAC	Accrual-Based Accounting, the EC integrated budgetary and accounting system
AMR	Antimicrobial resistance
ARHAI	Antimicrobial resistance and healthcare-associated infections
CAF	Common Assessment Framework
CCB	Coordinating Competent Body
CDC	Centers for Disease Control and Prevention, USA
CPCG	Committee on procurement, contracts and grants
CRM	Customer Relationship Management
DPO	Data protection officer
ECHO	European Civil Protection and Humanitarian Aid Operations
EAAD	European Antibiotic Awareness Day
EARS-Net	European Antimicrobial Resistance Surveillance System network
EEA/EFTA	European Economic Area/European Free Trade Association
ELITE	European <i>Listeria</i> Typing Exercise
EFSA	European Food Safety Authority
EMA	European Medicines Agency
ENIVD	European Network for Diagnostics of Imported Viral Diseases
ENP	European Neighbourhood Policy
ENPI	European Neighbourhood and Partnerships Instrument (or ENI – European Neighbourhood Instrument)
EOC	Emergency Operations Centre
EPIET	European Programme for Intervention Epidemiology Training
EPIS	Epidemic Intelligence Information System
EpiNorth	Co-operation Project for Communicable Disease Control in Northern Europe
EQA	External quality assessment
ERLI-Net	European Reference Laboratory Network for Human Influenza
ESAC-Net	European Surveillance of Antimicrobial Consumption network
ESCAIDE	European Scientific Conference on Applied Infectious Disease Epidemiology
EU	European Union
EUCAST	European Committee on Antimicrobial Susceptibility Testing
EUPHEM	The European Programme for Public Health Microbiology Training
EuroCJD	European and allied countries collaborative study group of Creutzfeldt-Jakob disease
EuSCAPE	European survey on carbapenemase-producing <i>Enterobacteriaceae</i>
EVD	Emerging and vector-borne diseases
EWRS	Early Warning and Response System
FWD	Food- and waterborne diseases and zoonoses
HAI	Healthcare Associated Infections
HAI-Net	Healthcare Associated Infections surveillance network
HIV	Human immunodeficiency virus
HSH	HIV, sexually transmitted infections and viral hepatitis
ICT	Information and Communication Technology
IRV	Influenza and other respiratory viruses
MediPIET	Mediterranean Programme for Intervention Epidemiology Training
MERS-CoV	Middle East respiratory syndrome coronavirus

MMR	Measles, mumps and rubella
MRSA	Meticillin-resistant <i>Staphylococcus aureus</i>
NFP	National Focal Point
NMFPs	National Microbiology Focal Points
OCS	Office of the Chief Scientist
PHC	Public Health Capacity and Communication unit
RMC	Resource Management and Coordination unit
SAS	Scientific Assessment Section
SLA	Service level agreement
SMAP	Strategic Multiannual Work Programme
SMT	Senior management team
SRS	Surveillance and Response Support unit
STEC	Shiga toxin-producing <i>Escherichia coli</i>
STI	Sexually transmitted infections
TB	Tuberculosis
TESSy	The European Surveillance System
VBORNET	European Network for Arthropod Vector Surveillance for Human Public Health.
VectorNet	European Network for Arthropod Vector Surveillance for Human Public Health and Animal Health
VENICE	Vaccine European New Integrated Collaboration Effort
VPD	Vaccine-preventable diseases
VTEC	Verotoxin-producing <i>Escherichia coli</i>
WHO/EURO	World Health Organization, Regional Office for Europe

Foreword by the Chair of the Management Board

As recently re-elected Chair of the Management Board, who, as a long-serving member of the Management Board, was also involved in the development of ECDC for many years, I feel in an excellent position to measure the Centre's progress.

2016 was marked by two events for which ECDC provided much-appreciated support to the European Commission and the Member States:

- The sudden outbreak of Zika virus kept ECDC busy with additional disease monitoring tasks, the production of a number of Zika risk assessments, and the development of preparedness materials.
- A large multi-country outbreak of *Salmonella* was detected. ECDC's staff contributed to the detection of the outbreak thanks to new standard protocols for whole genome sequencing (WGS) that was introduced in 2015 and is now integrated in surveillance activities, proving the relevance of WGS in disease surveillance. The European Commission and the Member States were able to implement the adopted countermeasures and thus contribute to a significant reduction of *Salmonella* in Europe.

More generally, 2016 was another year for further consolidation and improvement:

- Further steps were taken to implement Decision 1082/2013/EU on serious cross-border health threats and provide concrete technical input to the Commission
- ECDC published 38 Rapid Risk Assessments to support the Member States and the Commission, efficiently addressing new disease threats for Europe
- ECDC continues to improve its disease surveillance system: surveillance platforms and processes will be optimised and ease the work load for the Member States
- The interactive Atlas of Communicable Diseases, regularly updated situation maps for disease vectors, data modelling tools, several resource directories, and to-the-point *Evidence Briefs* ensure that ECDC's mission to prevent and address communicable diseases throughout Europe is supported by tools that give health professionals and policymakers access to up-to-date information on European public health issues.

In 2016, the Management Board continued to monitor the implementation of the Board's recommendations adopted in June 2015 on the basis of the 2015 external evaluation. This will further strengthen the Centre's work over the coming years.

I would like to take this opportunity to thank our former deputy Chair Tiiu Aro for her dedication over the last four years. In 2016, Anni-Riitta Virolainen-Julkunen was elected as the Management Board's new deputy Chair.

Finally, I would like to thank Andrea Ammon, who in May 2015 has agreed to assume the role of Acting Director. Over the last two years she has successfully managed the Centre and consistently ensured that the Centre's output met or exceeded expectations. The outstanding results presented in this report are proof of her successful leadership.

Daniel Reynders
Chair of the ECDC Management Board

24 February 2017

Introduction by the Director

ECDC has been awarded the European Health Award 2016, and congratulations are due to ECDC's hard-working and dedicated staff. In a ceremony on 28 September, the 19th European Health Forum–Gastein honoured ECDC's European Antibiotic Awareness Day (EAAD) as an outstanding project 'aimed at improving public health or healthcare in Europe'. This is a great honour, not only for ECDC but also for the countries who spread the message in their national campaigns. Their hard work and dedication have made the EAAD a success.

During the whole of 2016, the Zika virus outbreak caused considerable international concern and demanded the full attention of our scientists. ECDC teamed up with WHO and the US CDC on travel advice for the affected countries, produced a number of Zika virus risk assessments, issued a case definition for Zika virus infection, and conducted a literature review on cost-effective mosquito control.

On 26 July, ECDC signed the lease for a new building. We will relocate in 2018, and we are making good progress towards providing a better working environment for our staff.

Throughout the year, ECDC provided scientific and technical support to the European Commission, the Parliament, and the Member States. In 2016, ECDC responded to 41 formal requests received from the European Commission, 19 of which were forwarded from Members of the European Parliament.

Several other important activities of 2016 deserve to be mentioned: we finalised the ECDC annual work programmes for 2017 and 2018, following the new programming cycle for all EU agencies; assessed communicable disease prevention and control systems, the microbiology infrastructure, and human resource capacity development in the former Yugoslav Republic of Macedonia; examined and tackled vaccination hesitancy; and worked on lifelong vaccination strategies in the context of changing demographics.

Assessing the epidemic potential of disease outbreaks, both in and outside the EU, is an important aspect of ECDC's work. This is why ECDC participated in the first mission of the European Medical Corps, which was carried out in cooperation with ECHO (European Civil Protection and Humanitarian Aid Operations): in May 2016, ECDC experts travelled to Angola to assess the implications of the Angolan yellow fever outbreak for EU citizens.

It has now almost been two years since I took office as ECDC's Acting Director. I would like to express my gratitude to the ECDC Management Board for their confidence, their trust in me, and their unwavering support for the Centre. As Acting Director, my focus has been on ensuring the seamless operation of the Centre, and I will continue doing so until the new director takes up post.

Andrea Ammon
Acting Director ECDC

27 February 2017

Executive summary

Overview: 2016 at a glance

ECDC delivered more than 90% of the outputs promised in its 2016 Work Programme. Many of these outputs are linked to the implementation of Decision 1082/2013 on serious cross-border health threats, and all of them are linked to Strategic Multiannual Programme (SMAP 2014–2020).

ECDC core functions: main achievements

Surveillance. The interactive online Surveillance Atlas of Infectious Diseases was significantly expanded; 44 diseases plus antimicrobial resistance data are now included. ECDC developed a blueprint for the Surveillance System Reengineering project, launched in 2015, to improve the user experience of ECDC surveillance tools and reduce the burden for Member States. ECDC also laid the foundations for the evaluation of the EU/EEA public health surveillance systems (EPHESUS), a four-year project to strengthen efficiency and public health usefulness of surveillance systems at the EU level. New objectives were defined on using whole genome sequencing (WGS) data for surveillance, outbreak detection, and outbreak investigation. Proposals for revised case definitions were collected to inform the implementing act to Decision 1082/2013/EU, which is expected from the European Commission during 2017.

Epidemic intelligence and response. ECDC produced a total of 43 Rapid Risk Assessments, 38 of which were published. ECDC also published 45 Epidemiological Updates on its website, 39 of them on the Zika virus. ECDC started the revision of the methodology and procedures for Rapid Risk Assessments to further improve the consistency of methods and ensure the involvement of Member States and international agencies. Zika country classifications were reviewed and updated in cooperation with WHO and the US CDC to produce risk maps for the affected countries and provide travel advice.

Scientific advice. Six scientific advice documents were published. ECDC responded to 41 scientific requests from the European Commission, 19 of which were forwarded from Members of the European Parliament. Three public consultations were launched: on neuraminidase inhibitors for the prevention and treatment of influenza, on proposals for draft EU guidelines on the prudent use of antimicrobials in human medicine, and on rotavirus vaccination in infancy. Eighty scientific papers were published in peer-reviewed journals. ESCAIDE, ECDC's flagship scientific conference, attracted over 600 participants from over 50 countries.

Microbiology. ECDC completed the second and third pan-EU/EEA monitoring of microbiology laboratory capabilities for the EU-wide surveillance of communicable diseases and epidemic preparedness. The EULabCap index, which rates the microbiology capacity of Member States in the area of public health, reached 7.6/10 in 2015. The results show that Member States are moving fast toward the 2020 objectives. Ten external quality assessments for the EU networks of laboratories were conducted in 2016. A survey of WGS capacity in the Member States showed a massive increase over the last two years in the proportion of Member States that use WGS-based typing.

Preparedness. ECDC continued to provide technical support to the European Commission on a number of tasks linked to the implementation of Article 4 of Decision 1082/2013/EU on serious cross-border threats to health. During the year, focus on preparedness support shifted from Ebola to mosquito-borne diseases (Zika) and migrant health, including training activities, a simulation exercise, and several country visits. A workshop on emergency risk communication for public health emergency management was organised jointly with the Asian Europe Foundation, with participants from both Europe and Asia.

Response. ECDC participated in the first mission of the European Medical Corps framework, in cooperation with DG ECHO. The ECDC mission participants sent to Angola in May 2016 assessed the risk of yellow fever for EU citizens. ECDC also supported the WHO and the Global Outbreak Alert and Response Network (GOARN) with the deployment of French-speaking epidemiologists in Haiti to support the response to the cholera outbreak after hurricane Matthew in October 2016. Other missions included support to Romania (STEC affecting young children), Ukraine (polio outbreak) and Greece (assessment of the risk of transmission of communicable diseases among migrants).

Public health training. Following an extensive consultation, the EPIET and EUPHEM programmes were integrated into one fellowship programme with two paths (epidemiology and public health microbiology) and a fully harmonised logistic and organisational framework. The new continuous professional development programme (CPDP) is under development, with a formal launch planned for 2017. A new collaboration agreement with ASPHER marks a closer collaboration with European schools of public health.

International relations. ECDC continued to provide technical pre-accession support to EU enlargement countries. Fourteen technical cooperation events were held, with a total participation of 141 experts. ECDC

conducted an assessment of communicable disease prevention, surveillance, and disease control systems in the former Yugoslav Republic of Macedonia. ECDC continued its technical cooperation with the ENP partner countries through a project funded under the European Neighbourhood Partnership Instrument: nine meetings were organised, with a total of 93 experts. An internal evaluation of the ECDC mobilisation of ECDC and EU Member States experts for deployment in Guinea in 2015 was conducted. The evaluation pointed out the lessons learnt and made recommendations on how to strengthen ECDC's capacity to mobilise experts for deployment in the field to support outbreak response in and outside the EU.

Health communication. In 2016, a new communication strategy was approved, which will form the basis for ECDC's communication efforts in the coming years. An important aspect of this strategy is the integration of risk communication and national preparedness planning. ECDC published a total of 158 reports in 2016, including 38 Rapid Risk Assessments and 69 surveillance reports. The Centre's presence in social media grew substantially, partly as a consequence of the Centre's communication on Zika. More than 40 countries participated in the European Antibiotic Awareness Day (EAAD); the initiative was awarded the prestigious European Health Award 2016.

Eurosurveillance. In 2016, *Eurosurveillance* celebrated its 20th anniversary with a scientific seminar which was attended by a number of internationally well-recognised speakers. In 2016, the journal received 864 submissions from more than 60 countries, and 234 items were published (acceptance rate around 20%). The impact factor in 2016 increased to 5.98, which puts *Eurosurveillance* among the top-ten of infectious disease journals. *Eurosurveillance* will launch a new publication platform in 2017 which will include a new website, more user-friendly tools, and integrated workflows.

ECDC Disease Programmes: major achievements

Antimicrobial resistance and healthcare-associated infections. ECDC published the final results of its prospective European survey of carbapenemase-producing Enterobacteriaceae. A total of 455 hospitals in 36 countries participated in the survey. Also published were the first estimates of the burden of healthcare-associated infections for the EU/EEA. ECDC expanded its directory of online resources for the prevention and control of antimicrobial resistance and healthcare-associated infections. Over 40 countries across Europe participated in the ninth European Antibiotic Awareness Day 2016 (18 November), marked by national events and campaigns on prudent antibiotic use. ECDC also continued to act as a key contributor to the Transatlantic Taskforce on Antimicrobial Resistance (TATFAR).

Emerging and vector-borne diseases. The outbreak of Zika virus kept ECDC busy with risk assessments, country classifications for travel advice, the case definition/surveillance system, a preparedness plan, and a literature review on vector control. ECDC started the development of a modelling tool on vector control strategies for West Nile fever in Europe. Surveillance of West Nile disease was further strengthened with real-time data and maps which were made available on the ECDC online disease atlas. ECDC's online distribution maps for mosquitoes, ticks and sandflies now include countries around the Mediterranean basin. ECDC disease experts reviewed a number of options for the gradual harmonisation of Lyme borreliosis surveillance in the EU and identified gaps in the current systems. The case definition for Lyme neuroborreliosis was finalised so that it could be submitted to the EU Commission.

Food- and waterborne diseases and zoonoses. One of the main highlights in 2016 was a cross-sectoral, EU-wide collaboration on a large multi-country outbreak of *Salmonella*. Member States and ECDC were able to pick up and verify the signals of the outbreak through application of MLVA and whole genome sequencing (WGS) on *Salmonella* Enteritidis. It demonstrated that when routine methods for signal detection are combined with WGS, the detection and investigation of FWD outbreaks in the EU/EEA can be significantly improved. Forty-seven Urgent Inquiries were reported through EPIS. ECDC further developed the ELiTE project, which continues to break ground in understanding the molecular epidemiology of listeriosis.

HIV, sexually transmitted infections and viral hepatitis. The HIV and STI networks met in Bratislava in a joint meeting with the WHO Regional Office for Europe to discuss the next steps for improving surveillance and to share best practices. During the meeting, a newly launched HIV modelling tool for HIV incidence and prevalence was presented. ECDC published a paper on people unaware of their HIV infection. Together with the WHO Regional Office for Europe, ECDC published the annual report on HIV/AIDS surveillance in Europe. Additional ECDC surveillance reports covered gonococcal antimicrobial resistance, hepatitis B and hepatitis C. ECDC published a study on the determinants of infection among sex workers. Monitoring of the implementation of the Dublin declaration was continued.

Influenza and other respiratory viruses. ECDC and the WHO Regional Office for Europe continued their joint influenza surveillance and the publication of a weekly influenza bulletin for Europe during the influenza season. A technical workshop on immunising healthcare workers was held. It featured an e-learning pilot module and also focussed on knowledge sharing and the exchange of best practices in conducting vaccination campaigns for healthcare workers in the Member States. ECDC published a report on vaccination recommendations and coverage

rates in the EU Member States for the 2013–14 and 2014–15 influenza seasons, based on surveys conducted by the VENICE network.

Tuberculosis. ECDC published guidance and a policy briefing on tuberculosis control in vulnerable and hard-to-reach populations as a key element to eliminate tuberculosis in Europe. The annual joint ECDC–WHO–Europe report on tuberculosis surveillance and monitoring in Europe was presented on World TB Day. The first report on molecular surveillance of multidrug-resistant tuberculosis (MDR TB) was published, as well as a handbook on tuberculosis laboratory diagnostic methods in the EU. Consultancy, exchange visits and training efforts continued in five WHO high-priority countries: Bulgaria, Estonia, Latvia, Lithuania, and Romania. Eleven peer-reviewed publications were published in scientific journals.

Vaccine-preventable diseases. ECDC launched several tools aimed to help public health professionals and immunisation programme managers in Europe to prevent and respond to vaccine hesitancy. Two guidance documents were published during the 2016 European Immunisation Week. ECDC kicked off work to better understand the specific determinants of HPV vaccination hesitancy and concerns over safety issues. In the context of the burden of vaccine-preventable diseases in older age groups, ECDC organised a workshop on 'Finding the balance in lifelong vaccination'. ECDC improved the sentinel surveillance systems for pertussis and invasive pneumococcal disease. At the request of the European Commission, ECDC monitored a temporary shortage of pertussis vaccines.

Mission statement

The Centre's mission is laid down in Article 3 of the Founding Regulation¹, which states:

'The mission of the Centre shall be to identify, assess and communicate current and emerging threats to human health from communicable diseases. In the case of other outbreaks of illness of unknown origin, which may spread within or to the Community, the Centre shall act on its own initiative until the source of the outbreak is known. In the case of an outbreak which clearly is not caused by a communicable disease, the Centre shall act only in cooperation with the competent authority, upon request from that authority.'

The Centre's mandate can be derived from Article 168 of the Treaty on the Functioning of the European Union (EU), with an overarching principle of ensuring a high level of human health protection in the definition and implementation of all Union policies and activities.

ECDC operates according to its core values: service orientation, quality based and one ECDC.

The ECDC vision

ECDC is a strong and trusted partner enabling and supporting the Member States and the European Commission in protecting everyone in the EU equitably from communicable diseases.

Strategic work areas

- **Providing evidence for effective and efficient decision making.** We are supporting efficient public health decision-making by providing timely, accurate and relevant information.
- **Strengthening public health systems.** We are strengthening European capacities and capabilities to effectively prevent and control of communicable diseases.
- **Supporting response to threats.** We are supporting effective health threats detection, assessment and control.

How we work

- Our work is founded on scientific excellence: independence, quality and relevance.
- We deliver through disease-specific activities and generic public health functions.
- We carry out our work in partnership with our stakeholders.
- Our work is supported by efficient administrative and IT tools and services.
- The way we work is inspired by our core values.

Structure of the Work Programme

In accordance with ECDC's Founding Regulation, an Annual Work Programme based on a strategic multiannual programme 2014–2020 (SMAP), adopted by the Management Board at the beginning of 2014, guides the Centre's work. The headings in the Annual Report of the Director therefore relate to the strategies defined in the SMAP.

¹ Regulation (EC) No 851/2004 of the European Parliament and of the Council of 21 April 2004 establishing a European centre for disease prevention and control, Official Journal of the European Union. 2004; L 142:1–11.

Part I. Policy achievements

1. Surveillance and epidemic intelligence

1.1 Surveillance

Context

Surveillance is one of the basic tools for preventing and controlling infectious diseases. Consistent and comparable surveillance data of good quality enable public health professionals to monitor the spread of diseases and assess the effectiveness of interventions to prevent them. Supporting EU-level surveillance is one of the core tasks given to ECDC in its Founding Regulation, and this is reiterated in Decision 1082/2013/EU on serious cross-border threats to health.

ECDC's overarching priorities in relation to surveillance are to add more value to the data it gathers by making them available in new, user-friendly formats; to decrease administrative burdens on data providers in the Member States; and to take advantage of the possibilities opened by emerging technologies, in particular molecular typing for surveillance and information technologies.

Results achieved in 2016

In 2016, the [Surveillance Atlas of Infectious Diseases](#) was significantly expanded and now covers almost all diseases/health topics under EU/EEA surveillance. A total of 44 diseases plus antimicrobial resistance data are now included in the Atlas (compared with 25 in 2015), and data quality indicators are also displayed. The underlying data are updated weekly, monthly or yearly, depending on the disease/health topic.

ECDC also designed a new geoportal that will be the entry point for accessing all geographical resources including surveillance data from the Atlas, vector data, environmental and climate data. A 'determinants dashboard' will be developed in 2017, allowing users to estimate disease risks associated with the distribution of determinants. The new geoportal will go live in 2017.

The surveillance system reengineering project (SSR), initiated in 2015, aims to ensure optimal surveillance platforms, processes and data models. These will result in fast and integrated IT infrastructures for surveillance and applications. The SSR project will improve user experience when interacting with ECDC surveillance tools and simplify work for Member States and ECDC. In 2016, ECDC developed the blueprint of the project to ensure a comprehensive approach which extends to all ECDC surveillance systems. The new integrated surveillance system will link the different existing systems (TESSy, TTT, EPIS) ensure a better data flow, a better user experience, a reduced burden, and gains in efficiency, both for the Member States and ECDC. A new approach to data validation will reinforce Member State responsibility for data quality and reduce the burden associated with data submission. A roadmap is currently under preparation to establish a timeline for implementing the new system.

In 2016, ECDC also laid the foundation for the evaluation of EU/EEA public health surveillance systems (EPHESUS), a four-year outsourced project for 2017-2020. It aims to evaluate all infectious disease surveillance systems at EU/EEA level to strengthen their fitness for purpose and efficiency and increase their public health usefulness.

The national focal points for surveillance, epidemic intelligence and microbiology met in April 2016 to provide input to the SSR project, particularly with regard to the feasibility of machine-to-machine reporting. Machine-to-machine reporting seems to be only feasible for countries whose IT systems are already compatible with TESSy. Machine-to-machine reporting only adds value to a small number of diseases which would benefit from real-time reporting. ECDC will offer support for machine-to-machine reporting to all countries that are willing to switch.

Following up an evaluation of molecular surveillance of food- and waterborne diseases (FWD), new objectives were defined that emphasise whole genome sequencing (WGS) data for surveillance, outbreak detection and outbreak investigation. In the context of investigating multinational outbreaks, ECDC offered WGS services to countries without WGS capacity, thus allowing more impactful investigations. In 2016, thanks to WGS-based evidence provided by ECDC, the European Commission took measures to contain a multinational outbreak of *Salmonella* which originated from one of the largest egg farms in Europe. Outbreak detection now features monthly monitoring for *Salmonella* serotypes. A tool was developed to analyse the data and send alerts if a significant departure from the baseline data is detected in a monitored serotype.

Proposals for revised case definitions were collected in 2016 to inform the implementing act to Decision 1082/2013/EU on serious cross-border health threats, which will be published by the European Commission in 2017.

1.2 Epidemic intelligence

Context

Monitoring and assessing threats to health in Europe from infectious diseases are ECDC's core tasks. The European Commission and Member States have come to rely on the Centre's Rapid Risk Assessments and technical support when faced with serious multi-country infectious disease threats.

Results achieved in 2016

In 2016, the Centre produced 43 Rapid Risk Assessments (RRA), 38 of which were published. Threats included the Zika virus outbreak, Legionnaires' disease in EU travellers returning from Dubai, multi-resistant tuberculosis, *Salmonella* Stourbridge infections, avian influenza A(H7N9), a re-emerging multi-country WGS-defined outbreak of *Salmonella* Enteritidis, and plasmid-mediated colistin-resistant Enterobacteriaceae. In addition, ECDC published 45 Epidemiological Updates on its website, 39 of them on Zika virus.

ECDC started to revise the current methodology and procedures for Rapid Risk Assessments in order to ensure the consistent use of methodologies and improve the involvement of Member States and international agencies.

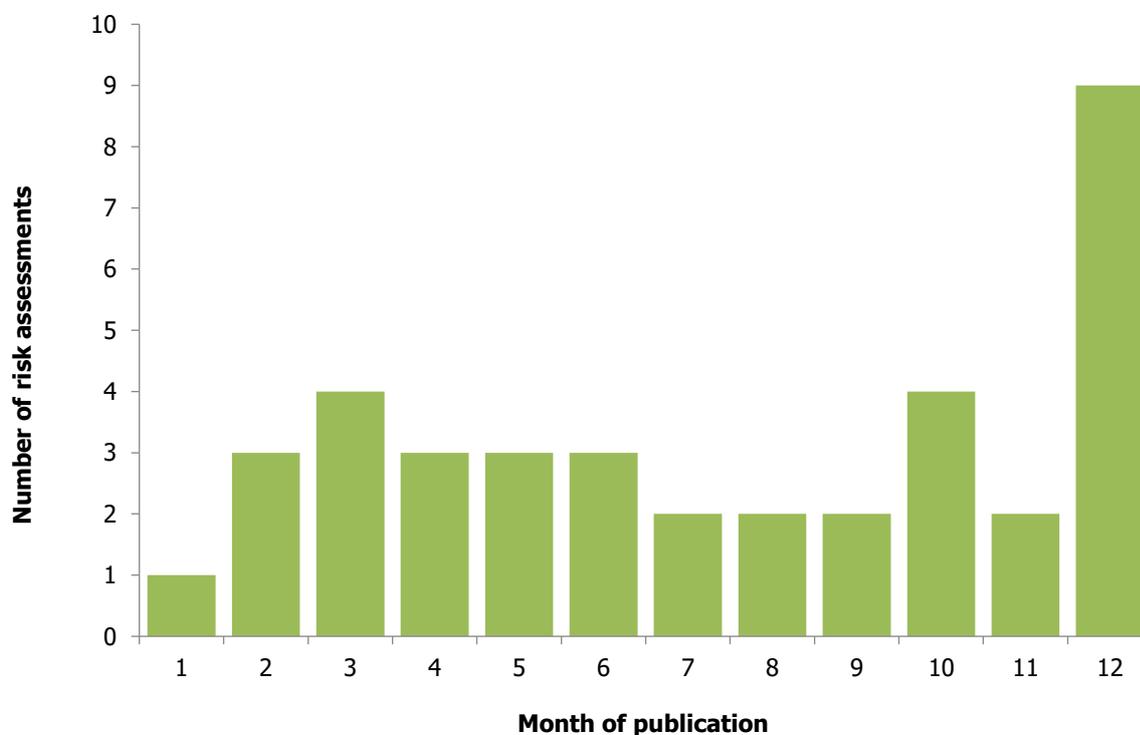
A new Threat Report app for mobile devices was launched to disseminate the Centre's threat reports and updates. The application gives direct access to key reports on communicable disease threats in the EU.

During a meeting held in Copenhagen, Zika country classifications were reviewed and updated in cooperation with WHO and the US CDC. This made it possible for the three organisations to issue common recommendations for travel advice, determine the risk in the affected countries (endemic or sporadic presence of the virus), and align their response activities.

Finally, ECDC set up a strategy for data management in the area of epidemic intelligence that should allow for better data interchange between the different epidemic intelligence databases.

ECDC also assessed the potential public health risks related to communicable diseases at the Rio de Janeiro Olympic and Paralympic Games.

Figure. Rapid Risk Assessments by month of publication, 2016



2. Scientific support

2.1 Scientific advice

Context

ECDC's output of scientific advice is highly valued by our stakeholders. It provides a European dimension which complements national initiatives and saves resources by producing high-quality, evidence-based advice for the Member States. ECDC's cross-cutting Scientific Advice function ensures that all advice is produced in a consistent, rigorous and transparent way. For its scientific advice, ECDC attaches high importance to evidence-based methods that are suited to public health issues. Having a common evidence base and performing an EU-level analysis of technical issues facilitates cooperation between Member States and the EU. Using evidence-based methods also ensures the transparency of the advice process at ECDC, making it open to scrutiny from peers, stakeholders and the public. ECDC's scientific output is produced in collaboration with ECDC's counterpart organisations in the Member States.

The ECDC Advisory Forum brings together senior experts from the Competent Bodies network to advise the Director on the quality of the Centre's scientific work. The Forum plays a key role in prioritising topics for ECDC's scientific advice and in avoiding duplication of scientific work at the national level.

ECDC's ESCAIDE conference, which provides a platform for sharing and discussing developments in infectious disease epidemiology, is also seen as an opportunity for networking. The conference is attended by hundreds of epidemiologists every year.

In 2013, ECDC helped establish the EU Agencies' Network on Scientific Advice (EU ANSA). ECDC works within this network with its fellow agencies to ensure a consistent approach and best practices in the production and distribution of scientific advice across the EU system.

Results achieved in 2016

In 2016, ECDC developed a new scientific strategy. The aim of ECDC scientific advice is to support decision-making at the EU and country levels by providing comprehensive and reliable summaries of the most up-to-date evidence in relation to public health issues of concern to the EU/EEA. Following the revision of the ECDC scientific advice output category, a total of six scientific advice outputs were published in 2016: one expert opinion, three systematic reviews, and two public health guidance documents (Chlamydia control, tuberculosis control in vulnerable and hard-to-reach populations).

In 2016, ECDC responded to 41 formal scientific requests received from the European Commission, 19 of which were forwarded from Members of the European Parliament.

ECDC's Advisory Forum continued to play a vital role by providing feedback and peer reviews. This includes developing priorities for topics and areas that would benefit from ECDC's scientific advice and guidance.

ECDC launched three public consultations: on neuraminidase inhibitors for the prevention and treatment of influenza (March 2016), on proposals for draft EU guidelines on the prudent use of antimicrobials in human medicine (September 2016) and on rotavirus vaccination in infancy (October 2016). The aim of such public consultations is to allow for input from a broader range of interested parties in order to further increase the quality and relevance of the Centre's scientific advice. The technical input provided by ECDC to the EU guidelines on the prudent use of antimicrobials in human medicine is available as a technical report on the Centre's website (February 2017). Other outputs are currently being finalised.

In addition to the outputs listed above, 80 scientific papers were published in peer-reviewed journals in 2016.

In 2016, ECDC continued to deliver training courses on evidence-based practices and decision-making. Sixty-one ECDC staff members and 78 experts from Member States participated in the seven training workshops offered since 2012. The feedback received from participants was consistently positive. Every workshop is evaluated, and course content and training materials are regularly updated based on the results of the evaluation.

The 2016 ESCAIDE conference attracted over 600 delegates from more than 50 countries; 370 abstracts were received, 35 of which were late breakers. Since the number of reviewers should grow in line with the number of submissions, a number of measures was implemented in 2016 to ensure consistent and fair abstract selection. Plenary and parallel sessions were well received, and the overall satisfaction level of participants with the conference was high.

2.2 Microbiology

Context

Under the EU Health Strategy, every Member State should have access to routine and emergency diagnostic and reference laboratory services to detect, identify, characterise and subtype human pathogens of public health significance. This requires maintaining and constantly adapting laboratory testing capabilities at clinical, national and supranational reference levels. Rapid microbial and drug resistance screening tools are now getting incorporated in routine point-of-care practices. Whole genome analysis is transforming microbiological diagnostic and typing approaches, revealing novel markers of virulence and drug resistance. Yet, there is a largely unmet need to critically assess their accuracy and public health usefulness. In addition, national reference laboratories need access to training and external quality assessment (EQA) schemes for novel technologies to ensure comparability of surveillance data. ECDC's Microbiology Support function assists the Centre's network of partners in the Member States to maintain and further develop their public health microbiology capacity based on the monitoring of their individual country capacity and the EU collective capacity. ECDC and several laboratory networks linked to the Centre's Disease Programmes organise EQA schemes to support the proficiency of laboratories to test for key pathogens and drug resistance traits. In the area of microbiology, ECDC and its networks have agreed on a roadmap for the gradual, coordinated and cost-efficient introduction of data generated by molecular typing technologies into EU-level surveillance and outbreak investigations.

Results achieved in 2016

In 2016, ECDC carried out 58 technical support activities, for an estimated amount of EUR 1.8 million that contributed to the consolidation and more efficient use of existing capacities of the EU public health microbiology system for EU-wide surveillance of communicable diseases and epidemic preparedness (see Table below), conducted through the disease programmes surveillance networks.

In 2016, ECDC completed the second (2014) and third (2015) rounds of pan-EU/EEA monitoring of microbiology laboratory capabilities for the EU-wide surveillance of communicable diseases and epidemic preparedness. Thirty countries participated in 2014; in 2015 it was one country less. A report on a set of agreed indicators (EULabCap) was validated by the Member States and approved for publication. The EULabCap index, which ranks the microbiology capacity of Member States in the area of public health, reached 7.6/10 in 2015, a fair to high level (2013: 6.8). The results show that Member States are moving fast toward the 2020 objectives. In 2017, the national focal points for microbiology will discuss and assess the results achieved for the period 2014–2015 (midterm review).

Ten external quality assessment (EQA) for the EU networks of laboratories were performed in 2016, with a coverage of 50% to 100%, depending of the pathogens. ECDC developed an EQA strategy with standard criteria for topic prioritisation and performance indicators for evaluating each scheme's usefulness, service quality, cost efficiency, and added value.

ECDC published an expert opinion on the EU-added value of whole genome sequencing (WGS) for enhanced surveillance. The roadmap for the integration of molecular and genomic typing into European surveillance and epidemic preparedness was implemented for the surveillance of five priority diseases. The Centre carried out a survey of national WGS capacity in the Member States, which showed a significant increase in the proportion of Member States that use WGS-based typing over the last two years. Eighteen Member States – eight more than previously – have the capacity to survey at least one the priority diseases defined in the ECDC roadmap. Another milestone in the implementation of the roadmap was achieved in 2016, when the Centre helped Member States solve the first multi-country outbreak of food-borne salmonellosis through WGS investigation.

Regarding laboratory preparedness for emerging threats, ECDC coordinated the mapping of laboratory capabilities at EU level for detection of Zika virus and advised the EMERGE Joint Action project ('Efficient response to highly dangerous and emerging pathogens at the EU level').

The further integration of EU clinical laboratories and other public health laboratories into the surveillance and alert systems for human and zoonotic pathogens also made progress: ECDC supported the Consumers, Health, Agriculture and Food Executive Agency (CHAFAEA) on a study on cost-benefit analysis of reference laboratories for human pathogens. The Centre, in collaboration with EFSA, supported the laboratory-based surveillance of zoonotic pathogens (as part of the EU's One Health approach). ECDC also supported the European Commission's efforts to develop joint database solutions for the use of WGS technology for food safety and public health applications in the EU.

Table. Summary of outsourced microbiology support activities 2016, by ECDC disease programme and technical area

ECDC Disease Programme or Section	Network or project	Pathogens covered	Areas covered by outsourced microbiology activities – 2016									
			External quality assessment	Training	Strain collection	Supranational reference services	Laboratory support to outbreak response	Molecular typing	Advice and technical guidance	Laboratory capacity assessment	Microbiology technology assessment	
ARHAI	EARS-Net	<i>Streptococcus pneumoniae</i> , <i>Staphylococcus aureus</i> , <i>Enterococcus faecalis</i> , <i>Escherichia coli</i> , <i>Klebsiella pneumoniae</i> , <i>Pseudomonas aeruginosa</i>	X									
	EUCAST	Antimicrobial-resistant bacteria and fungi		X					X	X	X	
	HAI-Net CDI	<i>Clostridium difficile</i>			X	X		X				
EVD	EVD-LabNet	Emerging viral pathogens	X			X	X	X	X			
FWD	FWD-Net	<i>Salmonella enterica</i> , Shiga toxin-producing <i>E. coli</i> , <i>Listeria monocytogenes</i> , <i>Campylobacter jejuni/coli</i> , <i>E. coli</i> , hepatitis E virus	X	X	X	X	X	X	X	X		X
	EuroCJD	Variant Creutzfeldt–Jakob disease (vCJD)		X	X	X	X	X	X			X
	ELDSNet	<i>Legionella</i> spp.		X					X			X
IRV	ERLI-Net	Influenza virus		X	X	X		X	X			
HSH	Euro-GASP	<i>Neisseria gonorrhoeae</i>	X	X	X	X		X	X	X		
	HIV							X		X		
VPD	EDSN	<i>Corynebacterium diphtheriae</i>									X	
	Eupert-LabNet	<i>Bordetella pertussis</i>	X	X								
	IBD-LabNet	<i>Neisseria meningitidis</i> , <i>Haemophilus influenzae</i> , <i>Streptococcus pneumoniae</i>	X		X	X		X			X	
TB	ERLTB-Net	<i>Mycobacterium tuberculosis</i> complex	X	X	X	X		X				
EPM	Routine molecular typing operations	<i>Salmonella enterica</i> , Shiga toxin-producing <i>E. coli</i> , <i>Mycobacterium tuberculosis</i>						X	X			
MCS	WGS capacity NMFP survey	Pathogens in the roadmap version 2.1, 2016-2019							X		X	
Total number of activities per area			7	8	7	8	4	11	7	6	4	

ARHAI: Antimicrobial Resistance and Healthcare-Associated Infections; EVD: Emerging and Vector-borne Diseases; IRV: Influenza and other Respiratory Viruses; FWD: Food- and Waterborne and Zoonoses Diseases; HSH: HIV, Sexually Transmitted Infections and Viral Hepatitis; VPD: Vaccine-Preventable Diseases; TB: Tuberculosis; EPM: Epidemiological Methods; MCS: Microbiology Coordination Section; EARS-Net: European Antimicrobial Resistance Network; EUCAST: European Committee on Antimicrobial Susceptibility Testing; HAI-Net CDI: Healthcare-Associated Infections Network – *Clostridium difficile* infections; EVD-LabNet: Emerging Viral Diseases Expert Laboratory Network; FWD-Net: Food- and Waterborne Diseases Network; EuroCJD: Creutzfeldt–Jakob Disease International Surveillance Network; ELDSNet: European Legionaire's Disease Surveillance Network; ERLI-Net: European Reference Laboratory Network for Human Influenza; Euro-GASP: European Gonococcal Antimicrobial Surveillance Programme; Eupert-LabNet: European Pertussis Laboratory Network; IBD-LabNet: Invasive Bacterial Disease Laboratory Network; ELRTB-Net: European Reference Laboratory Network for Tuberculosis.

3. Preparedness and response

3.1 EU and country preparedness support

Context

Preparedness planning, the identification of current gaps in preparedness and capacity, and capacity building are critical if the EU and its Member States are to respond effectively to major epidemics and other serious cross-border health threats. Recent international threats showed how important it is to be able to rely on good scientific evidence for preparedness activities, engage in enhanced cooperation with critical sectors, and share good practices across countries. The European Commission and the EU/EEA Member States, via the Health Security Committee, have committed to work together to further improve preparedness and to ensure that preparedness plans in Europe are interoperable between countries and sectors. Article 4 of Decision 1082/2013/EU on serious cross-border threats to health establishes an ambitious agenda for cooperation between Member States and the European Commission. Providing technical support in this context is one of ECDC's top priorities. In addition to this, ECDC operates an Emergency Operations Centre (EOC).

Preparedness planning has always been a top priority for ECDC. ECDC's public health emergency plan enables the Director to rapidly mobilise resources to support an EU-level response to serious cross-border health threats. The plan is constantly updated and reviewed to reflect lessons learned from crisis simulation exercises and real-life emergencies. The importance of the public health emergency plan – and the preparedness activities aligned with it – were further emphasised by Decision 1082/2013/EU.

Results achieved in 2016

In 2016, ECDC continued to provide technical support to the European Commission on the implementation of Article 4 of Decision 1082/2013/EU on serious cross-border threats to health. Most notably, ECDC delivered an analysis and report on preparedness arrangements in the Member States. ECDC also worked on methodologies, indicators and tools to assess preparedness in the Member States. ECDC supported the development of the action plan 2017–2019 which supports the implementation of decision 1082/13/EC.

In September 2016, ECDC held a joint workshop with the Asian Europe Foundation on emergency risk communication for public health emergency management. The workshop, with participants from Europe and Asia, which were joined by delegates from WHO, the United Nations Office for Disaster Reduction (UNISDR), the Harvard School of Public Health, RAND Corporation, and ASPHER, focused on integrating risk communication into public health emergency preparedness. Keynote speeches, case studies and working group exercises gave participants a wide range of discussion points.

In Sofia, Bulgaria, ECDC, in collaboration with WHO and TRAINEX, held a training and simulation exercise in May 2016. Participants from 27 countries took a two-day training course to strengthen their knowledge and skills on preparing and conducting simulation exercises. The training course was followed by a two-day multi-sectoral, cross-border simulation exercise based on an outbreak scenario of a mosquito-borne viral disease. Country peer reviews were held on polio (Cyprus and Poland), mosquito-borne diseases (Malta) and pandemic influenza preparedness (Iceland).

Starting in 2017, the tools, methodologies, and training modules on public health emergency preparedness developed over the last two years will be used to support capacity building in Member States. New projects for 2016 included a new strategic planning guidance on public health emergency preparedness that provides countries with a list of elements and activities for emergency plans and a review of enablers and obstacles for community preparedness/organisational preparedness which focuses on how various groups (from health professionals to school children) can be engaged in emergency preparedness planning.

ECDC published a tool to strengthen preparedness at migrant reception centres. A 'Preparedness planning guide for diseases transmitted by *Aedes aegyptii* and *Aedes albopictus*' was also released in 2016.

3.2 Response and emergency operations

Context

One of ECDC's core tasks is to provide technical support to the EU-level response to disease threats. Decision 1082/2013/EU on serious cross-border threats to health strengthens the coordination between the European Commission and Member States in this area. ECDC's experts and the EU Early Warning and Response System on Public Health Threats (EWRS), which ECDC operates on behalf of the European Commission, are key resources for the EU-level response to cross-border health threats. ECDC public health experts support the European Commission and Member States in the planning for, and response to, emergencies. ECDC's public health emergency plan therefore enables the Director to rapidly mobilise resources to actively support the EU-level response to serious cross-border threats to European public health. The plan is constantly updated and reviewed to reflect lessons learned from crisis simulation exercises and real-life emergencies. The importance of the public health emergency plan – and the preparedness activities aligned with it – were further emphasised by Decision 1082/2013/EU.

Results achieved in 2016

ECDC participated in the first mission of the European Medical Corps framework, in cooperation with DG ECHO. The ECDC mission participants sent to Angola in May 2016 assessed the risk of yellow fever for EU citizens. The mission concluded that there was no risk of spread to the EU Member States.

ECDC also supported the WHO and the Global Outbreak Alert and Response Network (GOARN) with the deployment of French-speaking epidemiologists in Haiti to support the response to the cholera outbreak after hurricane Matthew in October 2016.

In February 2016, an ECDC team travelled to Romania to assess a multi-country outbreak of Shiga toxin-producing *Escherichia coli* (STEC) infection associated with haemolytic uraemic syndrome that affected mostly young children.

In April 2016 a mission team was sent to Ukraine to support WHO efforts against an outbreak of polio.

From April to May 2016, two EPIET fellows assessed the risks of disease transmission among migrants. The mission concluded that there was a need to develop syndromic surveillance in refugee camps in order to detect communicable diseases right at the point of arrival.

4. Training and capacity building

4.1 Public health training

Context

The defence against communicable diseases in the EU depends on a competent workforce at all levels. ECDC's mandate to coordinate and support training programmes in order to ensure that Member States have a sufficient number of trained specialists is described in Article 9 (6) of its Founding Regulation and Article 4 of Decision 1082/2013/EU. The ECDC Public Health Training Strategy 2015 proposes three strategic objectives:

- To strengthen and maintain the workforce in the Member States and at the EU level through relevant training of key national experts, to ensure adequate capacity for communicable disease preparedness, prevention, detection, assessment and control (nationally and cross-border). This is ensured through the ECDC fellowship programme, a two-year learning-by-doing programme, with a field epidemiology (EPIET) and a public health microbiology (EUPHEM) path; and the Continuous Professional Development Programme (CPDP) that targets mid-career and senior public health professionals.
- To strengthen and maintain a network of European and global training partners, to support capacities for training activities at the local, subnational, national and community levels. Partners are national institutes for public health, national reference laboratories, schools for public health, national focal points for public health training and global partners, such as Association of Schools of Public Health in the European Region (ASPHER), the Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET), and WHO. ECDC provides the scientific leadership for MediPIET, a field epidemiology training programme in the Mediterranean region established by the Centre in 2012 with funding of the European Commission and currently managed by a Spanish consortium.
- To support training in the Member States by providing a common virtual training infrastructure; this is done through the ECDC Virtual Academy (EVA) and an online collaborative platform (FEM Wiki).

Results achieved in 2016

The merger of EPIET and EUPHEM into a single ECDC Fellowship Programme (with EPIET and EUPHEM paths) was finalised, following consultations with National Focal Points, the EPIET and EUPHEM forums and the ECDC Advisory Forum. In 2016, a cohort of 39 fellows was recruited (21 EPIET fellows, 7 EUPHEM fellows and 11 fellows from national EPIET-associated programmes); 36 fellows graduated. At year's end, 76 fellows were enrolled (38 from Cohort 2015 and 39 from Cohort 2016). The programme conducted 29 training site visits and held an introductory course and taught seven training modules. Fellows contributed to field investigations in and outside the EU/EEA.

In 2016, 59 mid-career and senior experts from EU/EEA Member States participated in a short course entitled 'Control of multi-drug resistant organisms'; 25 experts from EU/EEA Member States took the short course 'Principles of public health surveillance and time series analysis'. The ECDC Summer School was attended by 32 participants from 21 EU/EEA Member States, 18 from MediPIET countries, and 12 experts from ECDC. Senior-level exchanges were successfully continued, with 10 participants in 2016. The concept for a continuous professional development programme (ECDC CPDP) was discussed by the Joint Strategic Committee, the Competent Bodies and the Advisory Forum. The programme will start in 2017. Existing building blocks like the ECDC Summer School, the Senior Exchange Initiative, short courses and e-learning opportunities will be complemented by training courses developed in collaboration with ECDC disease programmes, ECDC Units, and external partners.

In 2016, the ECDC Virtual Academy (EVA), a platform for online learning, provided two editions of the 'Abstract writing course' (100 participants each). EVA also launched a course on seasonal flu vaccination campaigns for healthcare workers (90 participants). A roadmap for e-learning (2017–2020) was finalised. Two standalone e-learning courses ('Introduction to outbreak investigation' and 'Rapid risk assessment') are in production.

The first cohort of six MediPIET fellows graduated in December 2016.

In March 2016, ECDC signed a collaboration agreement with ASPHER, an association that represents over 100 public health schools in Europe. A survey was conducted among the schools of the network to explore areas of common interest in the field of communicable diseases. This will lead to a first mapping of the curricula in 2017 and the creation of a network of schools with whom collaboration can be further developed (e.g. joint activities, exchange of trainers, competency development).

4.2 International relations

Context

Emerging pathogens and epidemics originating in other continents can threaten public health in the EU. ECDC therefore needs to maintain lines of communication with key technical counterparts around the world, most importantly with the World Health Organization and its Regional Office for Europe. ECDC also works closely with other centres for disease prevention and control, such as the US CDC. Another important area of ECDC's work in international relations is marked by developing technical cooperation and exchange of information with the EU enlargement countries and the European Neighbourhood Policy partner countries. ECDC works with the health authorities in these countries to integrate them into the EU's infectious disease surveillance and rapid alert systems and to help them align with the *EU acquis* in the area of communicable disease prevention and control. Mobilisation of ECDC experts outside of the EU, such as in Guinea during the Ebola outbreak, and the establishment of the EU Medical Corps in February 2016 – a new EU framework to facilitate the mobilisation of medical and public health teams for response and preparedness operations inside or outside the EU – are major changes that need to be reflected in the mid-term review of the ECDC international policy and planning of activities until and beyond 2020.

Results achieved in 2016

ECDC continued to provide technical pre-accession support to EU enlargement countries² by inviting experts from these countries to ECDC meetings. In 2016, ECDC organised a total of 14 technical cooperation events for EU enlargement countries; 141 experts participated. The Regional Seminar on Communicable Disease Surveillance in Budva, Montenegro, was instrumental to discuss a regional approach to improve surveillance and response systems in the Western Balkan countries and Turkey. A pilot initiative to report surveillance data to TESSy on selected diseases served as a valuable opportunity for countries to submit data that meet the standards of EU/EEA Member States as per *EU acquis*.

All EU enlargement countries, as well as eight European Neighbourhood Policy (ENP) partner countries were successfully integrated in the ECDC epidemic intelligence information systems for travel-associated Legionnaires' disease and food- and waterborne diseases and zoonoses (EPIS ELSDNET and EPIS FWD).

Upon request from the European Commission, ECDC conducted an assessment of communicable disease prevention, disease surveillance, and disease control system in the former Yugoslav Republic of Macedonia. The assessment was conducted during a country visit by a team of ECDC and EU Member State experts, with the participation of officials from the European Commission. The team held a total of 64 review meetings in more than 30 institutions at the national, regional, and municipal levels. Preliminary findings from this assessment were communicated to the national public health authorities immediately after the country visit.

The first ECDC stakeholder survey (2016) on added value of ECDC technical cooperation with EU enlargement countries showed that EU enlargement countries appreciate EU-funded activities and acknowledge that the majority of technical cooperation activities have a big impact on their pre-accession preparations.

In 2016, ECDC continued its technical cooperation with the ENP partner countries through a project funded under the European Neighbourhood Partnership Instrument. The objective of the project was to support the progressive participation of ENP partner countries in ECDC activities. For the final year of implementation of the project, nine meetings and joint activities were organised, bringing together a total of 93 experts.

ECDC continued to provide technical support to Ukraine and Moldova, following the recommendations made after the assessments of their national systems for the prevention and control of communicable diseases, performed in 2015.

An internal evaluation on ECDC's mobilisation of ECDC and EU Member State experts for deployment in Guinea in 2015 was conducted in 2016. The evaluation aimed at strengthening the deployment of experts by ECDC for outbreak response within and outside the EU. The evaluation looked at all aspects of the mobilisation of experts and their deployment. The results of the evaluation showed that ECDC's efforts to mobilise experts for deployment in Guinea were highly appreciated: 87% of all stakeholders agreed that the activities of the ECDC-mobilised experts added value, and 100% of the external stakeholders stressed that ECDC's intervention was in line with the actual needs in the field. The evaluation report also proposes a number of improvements. An action plan is expected to be implemented in 2017.

² Financial support provided by the European Commission (DG NEAR), Grant Contract ECDC-IPA4/2015/361-042

5. Communication

5.1 Health communication

Context

ECDC's partners and the wider public health community expect the Centre to communicate its scientific output in a timely manner. The obligation to communicate results and make them available via the Centre's website is set out in Article 12 of ECDC's Founding Regulation. But the importance of health communication goes beyond this. The EU and its Member States have come to regard coordination of risk and crisis communication, based on robust and independent evaluation of public health risks, as a vital area of cooperation when responding to serious cross-border threats to health. Being able to rapidly agree on a set of coherent, technically sound core messages about a threat can be a huge support to response efforts.

Results achieved in 2016

ECDC published a total of 158 reports in 2016. The reports published in 2016 included 38 Rapid Risk Assessments and 69 surveillance reports. Together with WHO, ECDC publishes the web-based *Flu News Europe*. Reports are available online as PDF documents or, as in the case of the Annual Epidemiological Report, as stand-alone HTML pages. The number of subscribers to the publications newsletter increased by 520, to 2832. ECDC is increasingly publishing data, graphs, maps and infographics as downloadable, copyright-free assets, which makes it easy for partners and stakeholders to re-use ECDC content. The weekly threat report, for example, is published with an additional slide presentation.

The ECDC web-portal saw a record number of visits in 2016, largely due to the heightened interest in Zika. Overall, 2 285 000 website sessions were recorded for 2016, compared with 1 160 000 in 2015. The number of followers on ECDC's Twitter account also grew by 30%, with over 3 700 new followers in 2016. ECDC's dedicated Twitter account on outbreaks grew more dynamically, from around 1 100 followers in 2015 to over 2 300 followers by the end of 2016, a trend that is observed among all ECDC Twitter accounts.

Throughout the year, ECDC provided a professional press office service for health journalists. In close cooperation with the European Commission and the Health Security Committee (HSC), including the HSC Communicators' network, ECDC provided support to shape the EU-wide communication response, for example by contributing to the workshop for the HSC Communicators' network held by the European Commission in June 2016, by updating the lines to take on Zika, and by supporting a conference call between the HSC Communicators' Network and the HSC working group on Zika in December 2016.

Over 40 countries across Europe participated in the European Antibiotic Awareness Day 2016, which was marked by national events and campaigns on prudent antibiotic use during the week of 18 November. The European Antibiotic Awareness Day project won the European Health Award 2016 at the European Health Forum Gastein. ECDC continued to partner with WHO for the World Antibiotic Awareness Week.

ECDC developed a number of health communication tools and guides and produced evidence reviews in order to support countries in their public health campaigns and in effective risk communication. Topics included vaccine-preventable diseases and social media strategy development.

Taking into account the second external evaluation of ECDC, a new ECDC communication strategy was prepared in close collaboration with ECDC National Focal Points for Communication and the communication counterparts in the European Commission. It was adopted by the ECDC Management Board in November 2016. This strategy will guide ECDC communication work until 2020.

5.2 Eurosurveillance

Context

Eurosurveillance is ECDC's scientific journal. It is internationally recognised as a leading platform for peer-reviewed publications on the epidemiology, surveillance, prevention and control of communicable diseases, with a focus on Europe. The journal is published weekly at www.eurosurveillance.org. All articles are open access (available without restrictions) and there are no author fees.

Results achieved in 2016

In 2016, *Eurosurveillance* celebrated its 20th anniversary with a scientific seminar held in conjunction with the ESCAIDE conference and attended by several well-recognised speakers. The seminar attracted around 150 participants, and feedback was very positive. A special print edition of *Eurosurveillance* reviewed the evolution and achievements of the journal over the last 20 years.

Eurosurveillance continues to attract submissions of good quality; in 2016, the total number of submissions increased to 864 (770 in 2015), an average of 72 per month. A total of 234 items was published: 73 rapid communications, 122 regular articles, and 39 in other categories (editorials, letters, news and miscellaneous). The acceptance rate was around 20%. Nearly 500 experts acted as peer-reviewers and dedicated their time to support the decision-making process by sharing their views and comments on articles before publication.

The geographical focus of submitted and published articles remained Europe, submissions in 2016 came from well over 60 countries. As in previous years, the journal published some articles from countries outside of Europe that were of relevance for public health overall and Europe in particular.

Content covered in 2016 included topics that were also high on the public health agenda: Zika and the sexual transmission of the virus; plasmid-mediated colistin resistance conferred by the *mcr-1* gene; methods and approaches for the surveillance and diagnostics of *Clostridium difficile*; influenza vaccination effectiveness in children; emergence and surveillance of enteroviruses causing severe respiratory illness; and food- and waterborne outbreaks.

The journal's impact factor in 2016 increased to 5.98, which puts *Eurosurveillance* among the top-ten of infectious disease journals. In the SCImago journal rank, *Eurosurveillance* featured in the top 25 per cent in four categories (medicine general, virology, public health, environmental and occupational health). On the social media channel Twitter, the number of followers continued to increase and followers frequently referred to *Eurosurveillance* content in their tweets.

During 2016, the productive collaboration with the editorial board continued, in particular with the associate editors. A new publication platform will be launched in the third quarter of 2017 which will include a new website, more user-friendly tools, and integrated workflows.

6. Disease Programmes

6.1 Antimicrobial resistance and healthcare-associated infections

Context

With antimicrobial resistance (AMR) and healthcare-associated infections (HAIs) moving ever higher on the EU and global agenda (EU action plan³ and WHO global action plan on AMR⁴), European initiatives have focused on improved surveillance, the prudent use of antimicrobials, infection prevention and control, and the need for new antibiotics. The alarming trend of increasing resistance to last-line antimicrobial agents in gram-negative bacteria will require close surveillance and concerted efforts at the EU and international levels. Despite recent successes, awareness of the prudent use of antibiotics is poor in many Member States, particularly in conjunction with infection prevention and control measures among the general public and healthcare professionals. Up until recently, Member States did not share best practices or success stories in preventing and controlling AMR and HAIs. ECDC and its partners are working to change this.

Results achieved in 2016

ECDC continued to coordinate and support European networks on surveillance of AMR (EARS-Net), surveillance of antimicrobial consumption (ESAC-Net), surveillance of HAIs (HAI-Net), and standardisation of antimicrobial susceptibility testing. In November, ECDC released its yearly update of EU data on AMR and on antimicrobial consumption. The update included all data available from the dedicated EARS-Net and ESAC-Net databases. AMR surveillance data from EARS-Net are now available online from ECDC's Surveillance Atlas of Infectious Diseases.

In November, ECDC published the final results of its prospective [European survey of carbapenemase-producing Enterobacteriaceae \(EuSCAPE\)](#) in 455 hospitals in 36 countries. The survey showed that, on average, 1.3 patients per 10 000 hospital admissions had a carbapenemase-producing *K. pneumoniae* or *E. coli* infection, which are highly drug-resistant bacteria, with the highest incidence found in southern and south-eastern Europe. The survey also highlighted the need to develop a European surveillance system to inform risk assessment and control programmes.

ECDC produced four new Rapid Risk Assessments related to AMR and HAIs: on carbapenem-resistant *Enterobacteriaceae* (CRE), on plasmid-mediated colistin resistance in *Enterobacteriaceae*, on carbapenem-resistant *Acinetobacter baumannii* in healthcare settings, and on *Candida auris* in healthcare settings. The risk assessment on invasive cardiovascular infection by *Mycobacterium chimaera* associated with the 3T heater-cooler system used during open-heart surgery was updated.

ECDC published its [first estimates of the burden of HAIs for the EU/EEA](#). The cumulative burden of six types of HAIs on the health of the EU/EEA population was estimated to be higher than the total burden of all other 32 communicable diseases included in the Burden of Communicable Diseases in Europe (BCoDE) 2009–2013 study.

To support the dissemination and sharing of best practices and effective strategies, ECDC expanded its [Directory of online resources for the prevention and control of AMR and HAIs](#) – a repository of guidance documents from EU and international agencies, professional societies and EU Member States – and added resources on the prevention of surgical site infection, on endoscope decontamination, and on the prevention of infections in endoscopic surgery. Also updated were the online resources on perioperative prophylaxis.

In partnership with WHO's World Antibiotic Awareness Week (14–20 November), over 40 countries across Europe participated in the 9th European Antibiotic Awareness Day 2016 (18 November), which was marked by national events and campaigns on prudent antibiotic use. ECDC also cooperated with campaigns on prudent antibiotic use in the United States, Canada, Australia and New Zealand during the same week. ECDC also published an evidence brief for policymakers with options to address the threat posed by bacterial infections resistant to last-line antibiotics.

ECDC also continued to act as a key contributor to the collaboration between the EU, the United States, Canada and Norway in the field of AMR (Transatlantic Taskforce on Antimicrobial Resistance – TATFAR).

³ [Action plan against the rising threats from antimicrobial resistance](#), Communication from the Commission, the European Parliament and the Council – COM (2011) 748, November 2011

⁴ [Global action plan on antimicrobial resistance](#), WHO World-Health Assembly, May 2015

6.2 Emerging and vector-borne diseases

Context

Emerging and vector-borne diseases pose a special challenge to ECDC and national public health authorities because of the complexity of their transmission patterns and their potential to cause large and sudden outbreaks, like the Zika virus in 2016, which generated a WHO public health emergency. In recent years, several vector-borne disease outbreaks have occurred in Europe, along with the increased establishment and spread of invasive mosquitoes. The spread of ticks into new areas has also been observed.

It is anticipated that novel and unusual outbreaks of emerging and vector-borne diseases will occur, with the added risk of these diseases becoming endemic in some areas in Europe. Most vector-borne diseases have their own complex epidemiological features, such as seasonality and periods of pathogen persistence in reservoirs or vectors without occurrence of human disease. They can quickly (re-)emerge or be (re-)introduced under the suitable conditions. During the transmission season, ECDC shared real-time maps of cases for all of Europe, giving national health authorities (e.g. blood transfusion authorities) timely information to support their decision-making. ECDC also collects data so that public health experts can better understand the factors that trigger sudden outbreaks.

Results achieved in 2016

The sudden outbreak of Zika virus – which started already at the end of 2015 – led to the production of several risk assessments (including recommendations regarding sexual transmission). Together with WHO and the US CDC, the Centre worked on the Zika country classifications for travel advice. ECDC established a case definition/surveillance system for Zika virus infection in the EU/EEA and developed a preparedness plan. ECDC also initiated a literature review on information needed to implement efficient vector control measures for *Aedes aegypti* and *Aedes albopictus*.

ECDC prepared, or contributed to, 15 Rapid Risk Assessments on significant EVD outbreaks: Zika virus infection (8), yellow fever (2), Crimean-Congo haemorrhagic fever (1), Lassa fever (1), Rift Valley fever (1), and mass gatherings (2).

The development of a modelling tool was initiated to appraise and compare vector control strategies against West Nile fever in Europe. The interface of the desktop application and a pilot study were conceptualised. Another modelling tool for the decision-making process for the surveillance and vector control of dengue, chikungunya and Zika in Europe is under preparation. The first step will be a systematic review.

The surveillance of West Nile disease was strengthened in 2016, with the involvement of more countries outside the EU. Real-time data and maps are available on the ECDC Atlas for West Nile fever cases in Europe. These activities will also increase blood safety.

ECDC and EFSA continued to collect and consolidate data on arthropod vectors for both human and animal diseases (VectorNet project). ECDC's distribution maps for mosquitoes, ticks and sandflies cover the countries around the Mediterranean basin.

A consortium of experts reviewed the epidemiological situation of tick-borne diseases in the EU, with a focus on Lyme borreliosis in humans and *Borrelia* spp. in ticks. In January 2016, an expert meeting was organised to facilitate the gradual harmonisation of Lyme borreliosis surveillance in the EU. The case definition for Lyme neuroborreliosis was finalised for submission to the EU Commission.

A network of laboratories (EVD Lab-Net) replacing the ENIVD network was established in May 2016. The new network provides support for the early detection and confirmation of emerging vector diseases. In 2016, the primary focus was on Zika virus diagnostics. The network works in close collaboration with other EU initiatives to avoid overlaps in work.

6.3 Food- and waterborne diseases and Legionnaires' disease

Context

Food- and waterborne diseases and Legionnaires' disease often cause clusters and outbreaks due to contaminated food, water, environment, or infected animals and humans. These epidemiological characteristics, along with the potentially large economic impact on trade, productivity, the tourist industry, and human health makes the early detection and investigation of outbreaks important. In order to identify public health risks and implement timely control and prevention measures, the European public health community relies on multidisciplinary collaboration and regular communication between the food safety, veterinary, environmental and community healthcare sectors. This is one of the reasons why the European Food Safety Authority (EFSA) is a key partner of ECDC.

A key objective of ECDC's Food- and Waterborne Diseases and Legionnaires' Disease (FWD) Programme is to improve the EU-level surveillance of this group of diseases. New technologies, such as automated molecular typing and whole genome sequencing (WGS) of pathogens, are seen as having the potential to do this. Strengthening the public health microbiology capacity of the Member States through external quality assurance schemes also continues to be important.

Results achieved in 2016

One of the highlights in 2016 was a cross-sectoral, EU-wide collaboration in solving a large multi-country outbreak of *Salmonella* originating from one of Europe's largest egg producers. Member States and ECDC were able to pick up and verify the signals of the outbreak through the application of MLVA and WGS techniques on human and non-human *Salmonella* Enteritidis isolates. The cross-sectoral collaboration with EFSA and EURL for *Salmonella*, and epidemiological and microbiological investigations in the Member States, were crucial to establish links between the human cases and the egg production chain. This outbreak demonstrates that when routine methods for signal detection are combined with WGS, the detection and investigation of FWD outbreaks can be significantly improved. Seven Member States were affected in 2016, and the investigation is still ongoing, but using the evidence collected, the European Commission and the Member States were already able to implement countermeasures which are expected to lead to a significant reduction of human *Salmonella* infections in Europe.

A number of outbreaks and investigations were reported through the EPIS FWD platform (47 'Urgent Inquiries'). This allowed ECDC and public health experts to exchange technical information and assess whether these public health threats were of relevance for the European Union. In response, four ECDC Rapid Risk Assessments and four joint Rapid Outbreak Assessments with EFSA were produced.

ECDC further developed the ELITE project, which continues to break ground in understanding the molecular epidemiology of listeriosis through the extended use of WGS and other technologies. A workshop was organised to introduce the concept of sequencing analysis of *Listeria* isolates, test the concordance of several analytical pipelines, and build competence in those Member States that are not yet using this technology for outbreak investigation. A total number of 2 690 isolates was sequenced under ELITE from 2010–2015.

ECDC and EFSA jointly published the annual Zoonoses Report. Also published with EFSA was the summary report on antimicrobial resistance in zoonotic indicator bacteria from humans, animals and food. ECDC continued to offer EQA schemes for *Salmonella* and *Campylobacter* (antimicrobial sensitivity testing) and *Salmonella*, VTEC and *Listeria monocytogenes* (typing).

The FWD NEXT expert group, together with experts from the US CDC and Public Health Canada, contributed to a White Paper on the integration of WGS for the global surveillance of food- and waterborne diseases.

Following a multi-country outbreak of hepatitis A virus (HAV) in 2013 and 2014, ECDC published a report on the susceptibility of the EU/EEA population to HAV due to the re-emergence of hepatitis A as a foodborne pathogen.

A Rapid Risk Assessment on a cluster of travel-associated Legionnaires' disease cases among EU travellers returning from Dubai (26 cases) was published. ECDC was invited to send a senior expert to join the WHO mission to Dubai to assess the situation.

The ECDC FWD professional exchange programme (FWDEEP) continued with visits to Germany, Italy and Scotland on topics such as diagnostic and molecular typing methods and data analysis. The exchange programme offers a hands-on learning opportunity for public health experts to develop their skills and competences and aims to have a significant impact on public health laboratory capability, disease surveillance, disease detection, and response to food- and waterborne outbreaks.

6.4 HIV, sexually transmitted infections and viral hepatitis

Context

As disparate as sexually transmitted infections, viral hepatitis and HIV seem, there are a number of obvious cross-cutting issues, for example similar determinants of transmission of infection or the fact that they share the characteristics of silent epidemics, with long-term negative sequelae that cause problems with regard to surveillance, prevention and control. Dedicated programmes for each of these diseases need specific evidence and data, which are hard to obtain – and even harder to validate. These data are essential to inform EU policymakers on the true burden of these diseases and the effectiveness of measures to stop and/or reduce harm.

Dedicated national programmes on HIV, sexually transmitted infections (STI) and viral hepatitis also often need significant advocacy to be adequately resourced, and disease-specific data may help support this advocacy.

Results achieved in 2016

In March 2016, the HIV and STI networks met in Bratislava in a joint meeting with the WHO Regional Office for Europe to discuss the next steps for improving surveillance and sharing best practices. Meeting participants expressed their appreciation for the newly launched [HIV modelling tool](#), which was developed by ECDC. This tool uses surveillance data to estimate the number of people living with HIV, the annual number of new infections, the average time between infection and diagnosis, and the number of people in need for treatment. In 2016 a number of countries used the modelling tool to estimate their HIV incidence and prevalence. It also helped ECDC, based on data from all EU countries, to estimate the number of people living with HIV at 810 000, with one out of seven unaware of their HIV-positive status.

ECDC continued to coordinate the EU-level surveillance of HIV, STIs and viral hepatitis infections. The annual *HIV/AIDS surveillance in Europe* report, prepared jointly with the WHO Regional Office for Europe, was published for World AIDS Day on 1 December. In the area of STIs, ECDC published a sentinel surveillance report showing the recent trends in gonococcal antimicrobial resistance, which continues to be an issue of global concern. ECDC also published two short annual surveillance reports on hepatitis B and hepatitis C. In 2016, most of the work on hepatitis was devoted to exploring alternative data sources that can describe the burden of hepatitis disease, e.g. by setting up a protocol on the sero-prevalence of hepatitis C in Europe.

A first expert meeting was convened to discuss how to develop the surveillance of HIV drug resistance in Europe. A first proposal will be released in 2017.

ECDC experts contributed to a study on the determinants of infection among sex workers, which was published in *The Lancet HIV*. It presented evidence for the negative impact of criminalisation and restrictive legislation on the transmission of HIV among sex workers.

ECDC continued to monitor the implementation of the 2004 Dublin Declaration on Partnership to fight HIV/AIDS in Europe and Central Asia. A monitoring report and an Evidence Brief on pre-exposure prophylaxis for HIV prevention in Europe were published. More reports on specific issues will be published in 2017.

In response to requests for technical support, ECDC organised expert country missions to Croatia, Bulgaria and Malta.

Negotiations were concluded for the draft of two memoranda of understanding with the European Association of the Study of the Liver (EASL) and with the International Union against sexually transmitted infections (IUSTI) in order to develop joint projects.

6.5 Influenza and other respiratory viruses

Context

Seasonal influenza continues to have one of the highest morbidity and mortality impacts on the EU population. In addition, zoonotic influenza and other emerging respiratory viruses threaten public health in unsuspected and unexpected ways. Strong virological and epidemiological surveillance is needed to guide vaccination programmes for seasonal influenza. In 2009, the EU Council adopted a Recommendation⁵ which sets a target of 75% of vaccination coverage among the elderly and the risk groups for severe influenza. In addition, strong (pandemic) preparedness at the level of surveillance, laboratory activities and comprehensive actions in line with Decision 1082/2013/EU on serious cross-border threats to health are needed.

Examples of zoonotic influenza viruses of concern include avian influenza A(H5N1) (since the 1990s), avian influenza H5N8, H7N9, H7N7 and H10N8, and swine influenza A(H1N1). An example of an emerging non-influenza respiratory virus of concern is the Middle East respiratory syndrome coronavirus (MERS-CoV).

Common needs across this group of diseases include: the need for strong surveillance systems for seasonal influenza/re-emerging respiratory viruses (disease severity, serological profiles); monitoring the overall impact of seasonal, zoonotic and pandemic influenza; the need for a strong reference laboratory network in the EU; sustainable structures to promote vaccination and assess vaccine effectiveness/safety; and active participation in global surveillance and disease networks (laboratories, vaccination, research).

Given the nature of the diseases, international collaboration is vital, in particular with the WHO Regional Office for Europe, WHO headquarters and other key international partners such as the US CDC and China CDC.

Results achieved in 2016

ECDC and the WHO Regional Office for Europe continued their joint influenza surveillance and the publication of the weekly influenza bulletin for Europe (www.flunewseurope.org) during the influenza season. ECDC's other areas of work for WHO included technical work on surveillance for respiratory syncytial viruses, an estimation of the burden of disease for influenza, a severity assessment of pandemic influenza, and the strain selection process for influenza vaccines.

Zoonotic influenza viruses and other emerging respiratory viruses were monitored in real time through ECDC's epidemic intelligence function. ECDC regularly assesses the risk posed by these viruses, especially when unusual or unexpected human cases are reported. In 2016, ECDC produced six risk assessments on respiratory viruses, e.g. on seasonal influenza, highly pathogenic avian influenza A(H5N8) and enterovirus.

ECDC arranged a technical workshop on campaigns to achieve a higher vaccination rate in healthcare workers. An e-learning module (beta version) was launched on this topic and additional materials such as toolkits were released.

ECDC continued its funding for the external I-MOVE network. I-MOVE provides estimates of seasonal influenza vaccine effectiveness. In 2016, ECDC funded several multi-country studies on the effectiveness of seasonal influenza vaccines used in Europe.

ECDC also launched a public consultation to solicit expert opinions on neuramidase inhibitors for the prevention and treatment of influenza. The feedback (six contributions) will be incorporated in an evidence-based expert opinion scheduled for 2017.

ECDC published a report on vaccination recommendations and coverage rates in the EU Member States for the 2013–14 and 2014–15 influenza seasons, based on surveys conducted by the VENICE network⁶.

ECDC continued to support the European Influenza Surveillance Network (EISN) and the European Reference Laboratory Network for Human Influenza (ERLI-Net). ECDC provided technical support for the laboratory testing for influenza viruses.

In November, a country visit to Iceland was conducted to review the current pandemic preparedness plan.

⁵ [Council Recommendation 2009/1019/EU of 22 December 2009 on seasonal influenza vaccination](#)

⁶ Vaccine European New Integrated Collaboration Effort. The VENICE network objectives is to collect, share and disseminate information on national immunisation programmes through a network of professionals and provide information useful to build up methodologies and provide guidance for improving the overall performance of the immunisation systems in the EU/EEA Member States.

6.6 Tuberculosis

Context

The EU/EEA Member States, EU enlargement countries, and countries covered by the European Neighbourhood policy have different epidemiological profiles with regard to tuberculosis (TB): five eastern and south-eastern European countries have medium and high burdens of (drug-resistant) TB while the western European countries are mostly low-burden countries, with the possibility of progressing towards TB elimination.

In low-burden settings, people at risk for TB are often found in vulnerable, hard-to-reach populations. Also, TB in migrants contributes to the epidemiology. In medium- and high-burden countries, TB is more often found in the general population.

Diagnosing and treating patients is the main public health strategy. This requires sufficient human and financial resources and innovative strategies that allow for early case finding and optimal treatment. ECDC's *Framework action plan to fight tuberculosis in the European Union*, developed in 2008, provides a strategic framework for the fight against TB in EU Member States. ECDC implements its strategy by jointly organising TB surveillance with the WHO Regional Office for Europe, by coordinating a laboratory network to strengthen TB laboratory diagnosis, by developing scientific advice targeted to the EU/EEA situation, and by directly supporting Member States.

Since its foundation, ECDC has cooperated very closely with the WHO Regional Office for Europe. Together the two organisations have produced several joint annual surveillance reports on TB, covering all 53 countries of the WHO European Region. Since 2012, these reports have become joint annual surveillance and monitoring reports which measure progress against the objectives of ECDC's *Framework action plan* and WHO's Regional Office for Europe *Tuberculosis action plan for the WHO European Region 2016–2020*.

Results achieved in 2016

In 2016, ECDC published guidance on tuberculosis control in vulnerable and hard-to-reach populations as a key element to eliminate tuberculosis in Europe. In parallel with the guidance document, a policy briefing was targeting decision makers.

The annual joint ECDC–WHO report on tuberculosis surveillance and monitoring in Europe was presented at World TB Day on 24 March 2016. At this occasion, ECDC also released the first report on molecular surveillance of multidrug-resistant tuberculosis (MDR TB) and a handbook on laboratory diagnostics for tuberculosis in the EU. The handbook provides an agreed list of key diagnostic methods and protocols. A social media campaign was organised on the ECDC website, Twitter and Facebook with personal stories of patients and their healthcare providers from France, Slovakia and United Kingdom.

Work continued on supporting five WHO high-priority countries: Bulgaria, Estonia, Latvia, Lithuania, and Romania. ECDC organised a consultancy, an exchange visit and a training course to assist these countries with the prevention and control of TB and multidrug-resistant TB. In 2016, one training course in Finland and one exchange visit in Estonia were organised, attended by experts from the five countries. The topic of the training was the management of latent TB infections and the exchange visit covered TB contact investigations.

ECDC also contributed to the session 'Towards the end of tuberculosis' of the informal Council of EU Health Ministers (EPSCO) in Bratislava in October 2016.

Eleven peer-reviewed scientific publications were published in scientific journals. Topics included the analysis of tuberculosis surveillance data (AIDS and *Eurosurveillance*), external quality assessments for TB and drug resistance in the EU (PLOS One) and the results of several ECDC projects (BMC Infectious Diseases, European Journal of Public Health, *Eurosurveillance*, Public Health, and Public Health Action). An additional four editorials were published in the European Respiratory Journal, *Eurosurveillance*, Lancet Infectious Diseases, and Lancet Respiratory Medicine.

ECDC continued to organise and support the TB surveillance network and the network of TB reference laboratories. Both networks held annual meetings in 2016. A surveillance meeting in Bratislava was organised jointly with the WHO Regional Office for Europe.

As in previous years, external quality assessments were organised on TB diagnostics and molecular typing and whole genome sequencing. Laboratory training sessions were held covering different topics.

6.7 Vaccine-preventable diseases

Context

The implementation of effective national vaccination programmes across Europe has been one of the major public health successes of recent decades. Infectious diseases that used to kill thousands of children each year have now become very rare. To continue this trend and to safeguard the health of people in the EU/EEA it is essential that these efforts are maintained. ECDC's Vaccine-preventable Diseases (VPDs) Programme supports the Commission and Member States in addressing EU-wide challenges with regard to VPDs and vaccination and supports the implementation of the EPSCO 'Council conclusions on vaccination as an effective tool in public health' adopted in 2014.

Addressing the challenges that national vaccination programmes face in Europe means that the VPD Programme has to play a proactive role as knowledge agent and developer of technical guidance. Examples of these challenges include: sizeable populations across the EU (clustered or scattered) that are either not vaccinated or under-vaccinated; continued outbreaks of diseases such as measles and rubella that are targeted for elimination; evidence that waning, or changes to the pathogen, may be undermining some vaccination programmes (e.g. pertussis). In addition, the availability of new vaccines for different age groups (e.g. adolescents or the elderly) opens a perspective on life-long vaccination calendars. A multi-disciplinary approach is needed to address these challenges. Also needed are more multi-country studies on vaccine effectiveness, vaccine safety and vaccination coverage, coordinated at the European level.

Results achieved in 2016

In 2016, ECDC launched several innovative tools aimed to help public health professionals and immunisation programme managers in Europe to develop targeted approaches to prevent and respond to vaccine hesitancy. Two guidance documents were published during the 2016 European Immunisation Week: 'Let's talk about protection' (updated edition) and 'Let's talk about hesitancy'. The guidance documents and related toolkits are designed to be adapted to national contexts to ensure that their messages are conveyed in the most efficient way. Seven countries had already adapted the tools for national use, and in 2016 work has started for an adaptation in Austria, Italy, and Greece.

With the dramatic decrease of HPV vaccination coverage rates in some Member States, ECDC has initiated work to better understand the specific determinants of HPV vaccination hesitancy and concerns over safety issues. Together with the HPV Board (coordinated by the University of Antwerp) ECDC has begun to monitor hesitancy on HPV vaccination in social media.

In the context of changing demographics and the observed burden of vaccine-preventable diseases in older age groups, ECDC also organised a workshop during the 2016 European Health Forum in Gastein on 'Finding the balance in lifelong vaccination'. A project was launched to assess adult and lifelong vaccination in Member States, and provide data and scientific evidence on the burden of vaccine-preventable diseases in adult groups to provide policymakers with information on how vaccination programmes could be adapted to provide better protection.

In 2016, ECDC improved the sentinel surveillance systems for pertussis and invasive pneumococcal disease (IPD). Surveillance is conducted through hospital-based networks in which laboratory experts, epidemiologists and clinicians work together to rapidly detect and diagnose pertussis and IPD cases. The goal is to keep track of the impact and effectiveness of vaccinations and to monitor antimicrobial resistance and serotype replacement.

At the request of the European Commission, ECDC monitored a shortage of pertussis vaccines that resulted in an updated Rapid Risk Assessment comprising of public health options to respond to the situation. In the context of increased cases of diphtheria in the EU/EEA (70 cases in 2015 compared with 14 in 2010), ECDC produced a Rapid Risk Assessment on a fatal case in Belgium and assessed the EU-wide situation with regard to diphtheria antitoxin availability and procurement.

ECDC also developed an action plan aimed to guide activities for polio eradication and support Europe's polio-free status. The action plan focuses on containment aspects (e.g. identification of poliovirus-essential facilities and destruction of all remaining polio-type-2 viruses stored in laboratories).

Finally, the [EU Vaccine Scheduler](#) tool continued to be among the most visited features on ECDC's web portal, with around 234 000 visits in 2016, or 54 000 unique visitors.

7. Management

7.1 General management

Context

Providing the Centre with strategic direction, leadership and good governance is essential. The Director, who is responsible for general management, leads this area of activity and is supported by a small number of staff in the Office of the Director.

ECDC's Founding Regulation provides for two governing bodies, the Management Board and the Advisory Forum. The Corporate Governance Section in the Office of the Director is mainly responsible for ensuring the delivery of substantive, logistical and programmatic support for high-level meetings of the Management Board, the Advisory Forum, the Audit Committee, and the Coordinating Competent Bodies. Through its work, the Section has an impact on the Centre's ability to take key management and programme decisions forward.

It is important that ECDC's products and communications are scientifically correct and impartial. As ECDC relies on many internal and external experts who together shape the scientific position of ECDC, it is necessary to have an independence policy in place that ensures transparency and identifies conflicts of interest. Implementation of this policy is overseen by a compliance officer.

Since May 2015, ECDC has an Acting Director responsible for ensuring a smooth transition of operations until a new ECDC Director is elected in March 2017.

Results achieved in 2016

During its thirty-eight meeting in November 2015, the Management Board unanimously re-elected Dr Daniel Reynders as its Chair; Anni-Riitta Virolainen-Julkunen from Finland was elected as Deputy Chair.

ECDC submitted the building questionnaire to the Budgetary Authority in February 2016. The European Parliament and the Council approved on 24 and 26 May 2016, respectively. Following the approval of the project, ECDC signed the lease for the new premises on 26 July 2016. On the same day, ECDC gave notice to the property manager of its current building.

ECDC's independence policy was finalised and approved by the Management Board. An electronic system for the submission of declarations of interest was deployed in order to minimise the amount of errors in the submitted documents. This facilitates the implementation of the independence policy and also increases the compliance rate.

The Annual Meeting for National Coordinators of the ECDC Coordinating Competent Bodies (CCB) was held in September 2016 in Stockholm. The aim of the meeting was to enable the National Coordinators (NCs) of the CCBs to share best practices on how to ensure cooperation between ECDC and the Member States and to identify ways for further improvement. The meeting also provided the opportunity to obtain feedback on the implementation of the ECDC Country Support Strategy, the ECDC Continuous Professional Development Programme (CPDP) and the future development of ECDC Disease Networks. The participants were also updated on the planning for the ECDC customer relationship management (CRM) system and the Centre's revised independence policy. In addition, the criteria for selecting host countries for the ESCAIDE conference were presented and discussed. For the first time, the CCB meeting was organised back-to-back with the 46th Advisory Forum meeting.

The second annual stakeholder survey was conducted in 2016 and provided useful feedback on how to set priorities and improve ECDC's interaction with external stakeholders. ECDC also finalised the Single Programming Document (SPD) 2017, which was approved by the Management Board, and prepared the final draft of the Single Programming Document 2018, which was sent to the EU institutions for consultation in January 2017, in accordance with the Framework Financial Regulations. The SPD contains the strategic objectives/staff policy plan for the next three years, the annual work plan, and the annual draft budget.

7.2 Collaboration and cooperation with EU institutions and Member States

Context

ECDC's mandate is to operate as a network organisation. Most of the disease prevention and control resources ECDC draws on – including public health laboratories and disease experts – are located at the Member States' national public health institutes and associated academic bodies. The Centre's key partners are the Competent Bodies and ECDC's official national counterpart organisations, which were formally appointed by the Member States. The ECDC Director undertakes country visits to better understand the public health systems and policies of individual Member States and nurtures the relationship with ECDC's host country, Sweden.

The Centre is part of the EU family of institutions and organisations and collaborates closely with other members of this family to ensure its actions are coherent with EU policy objectives and properly coordinated with those of other EU bodies, primarily the European Commission's Directorate-General for Health and Food Safety (DG SANTE). The Centre also has contacts with other European Commission DGs, e.g. the Directorate-General for Research and Innovation, the Directorate-General for Enlargement, and the Directorate-General for Humanitarian Aid and Civil Protection. ECDC is active in the EU Agencies Network, which shares best practice and regularly works with other EU agencies, most notably the European Food Safety Authority (EFSA) and the European Medicines Agency (EMA). Finally, ECDC has a strong partnership with the European Parliament. ECDC's Director has an annual exchange of views with the European Parliament's Committee for the Environment, Public Health and Food Safety (ENVI) and submits annual written reports to the Committee for Budgetary Control (CONT). In addition, the Director is often called to the European Parliament for an exchange of views or to provide information on a specific disease and/or outbreak.

Results achieved in 2016

Maintaining and improving coordination with the Member States and the European Commission remained a top priority. In 2016, ECDC continued supporting the European Commission for the implementation of Decision 1082/2013/EU on serious cross-border threats to health which provides a legal framework for the cooperation between the European Commission and Member States via the Health Security Committee (HSC). ECDC provided the HSC and the European Commission with regular updates and technical support on questions related to communicable disease threats. ECDC also had frequent contacts with its partner DG, DG SANTE. Regular meetings and video conferences took place both at operational and strategic levels.

In June 2016, the Management Board adopted a new ECDC country support strategy, outlining a common and coordinated approach to needs assessments, the determination of priorities, and the implementation of capacity building activities. The objectives are to define with the Member States the needs and opportunities in countries, regions and across the EU; to agree with the Coordinating Competent Bodies and the Advisory Forum on country-driven transparent methods for the determination of priorities for ECDC country support activities; and to plan and implement – together with the Coordinating Competent Bodies – cost-efficient and well-structured ways to support public health activities in the Member States. Areas include training courses, sharing of experiences and best practices, country preparedness, country capacity strengthening, laboratory support, surveillance support, and support to policymaking.

ECDC continued to invest in partnerships with individual Member States. Collaboration with ECDC's host country Sweden was strengthened through a meeting of the Swedish Minister for Health, Mr. Gabriel Wikström, and Andrea Ammon, ECDC Acting Director, in November 2016.

In the spring of 2016, the Centre forwarded a new building project proposal to the Budgetary Authority, Parliament and Council. The proposal was presented to the Committee on Budgets in the European Parliament and to the Budget Committee of the Council, and received a favourable opinion from both institutions.

The annual exchange of views between ECDC Acting Director Andrea Ammon and the ENVI Committee of the European Parliament took place in February 2016. ECDC also participated in several exchanges of views and conferences in the European Parliament, for example on the Zika virus outbreak, TB and HIV/AIDS, and AMR and healthcare-associated infections. The Acting Director continued to nurture the Centre's relations with ECDC's European Parliament contact member in the ENVI Committee, Kateřina Konečná (GUE/NGL, Czech Republic), who visited the Centre on 14 June 2016.

ECDC continued to be active in the Network of EU Agencies, in particular with EFSA and EMA. Cooperation between ECDC and EMA is now well established, particularly on issues relating to antimicrobial resistance and vaccines.

7.3 Resource management and organisational development

Context

ECDC provides the structure, means, services and expertise to manage ECDC's human and financial resources in the most efficient and effective way. Following the reorganisation and further integration of Procurement, Finance, and Mission and Meetings, the introduction of e-Administration (based on the Commission e-PRIOR application suite) has been a major step towards making ECDC more efficient. By further increasing the efficiency of the administrative and operational processes that regulate the Centre's core activities, the burden associated with the administration of the Centre is reduced. In addition, as staff restrictions are inevitable it provides the opportunity to further clarify roles and responsibilities and increase compliance and reliability.

Regularity and cost-consciousness of the underlying transactions, efficient operations in all areas of the Resource Management and Coordination Unit remain a continuous area of focus and improvement.

Results achieved in 2016

In 2016, ECDC hired 27 new staff members; an additional five staff members with a start date in 2017 were also recruited in 2016. As of 31 December 2016, ECDC had a total of 260 staff members. All EU Member States, with the exception of Luxembourg and Croatia, are represented among the Centre's staff. The Centre continued to adopt the implementing rules to the revised EU staff regulations with regard to staff entitlements, promotions and working conditions.

Budget execution in terms of commitment appropriations at year end reached 98.02%, equivalent to EUR 57.1 million. The budget execution in terms of payment appropriations at year end reached 79.26%, equivalent to EUR 46.1 million. ECDC's commitment and payments forecasting application improved budget implementation.

The use of electronic workflows for procurement, based on the European Commission's DIGIT application e-PRIOR, and improvements in procurement monitoring made it possible to complete 316 procurement procedures in 2016. The infrastructure for the electronic submission of tender documents was put in place.

ECDC organised 191 meetings and supported 792 staff business trips during 2016.

All in all, ECDC continued to improve and strengthen its internal processes, in particular with regard to contract management and project management. Regular contract management training sessions were provided for staff interacting with ECDC's contractors.

ECDC continued to implement the instructions from the European Commission for common templates (*Single programming document* and annual report). The Centre further developed its activity-based budget, which was fully operational in January 2016.

The second annual stakeholder survey showed a high level of appreciation of ECDC and its activities. The implementation of the ECDC Joint Action Plan continued to be monitored in response to Management Board recommendations after the second external evaluation of ECDC.

Internal communication and knowledge services were further improved in 2016. The ECDC intranet was migrated to a new platform, new versions of the document and knowledge management systems gained further functions and improved on integrity. The ECDC Library was able to ensure the continuity of its collection and expand and improve its services.

7.4 Information and communication technologies

Context

Information and Communication Technologies (ICT) plays an important role in enabling ECDC's core missions such as surveillance, epidemic intelligence and response. Some key information systems operated by ECDC are The European Surveillance System (TESSy), the Epidemic Intelligence Information System (EPIS), the ECDC web portal, and the EU's Early Warning and Response System (EWRS) on public health threats, which the Centre operates on behalf of the European Commission. Operating and developing these systems at all times requires highly secure, interoperable and robust infrastructures. In addition, ECDC depends on ICT systems to support its administrative processes.

Maintaining and further developing ECDC's ICT systems requires significant investments of both staff time and financial resources. In pursuing its ICT strategy, the Centre allocates ICT resources with two key objectives in mind:

- Enable ECDC's mission by efficiently and effectively supporting the Centre's ICT needs for users at ECDC, from the European Commission and from the Member State.
- Enable ECDC to continue to improve its ICT systems and processes in terms of quality and cost efficiency.

Results achieved in 2016

ECDC developed an IT Strategic Management Framework covering an IT vision, an IT stakeholder analysis, IT goals, IT principles, and an IT strategy. The implementation will continue in 2017.

ECDC's ICT services fulfilled the performance standards set in the Service Level Agreements (SLA) with internal users and the European Commission: 97% of the 8 240 requests and incidents were fulfilled in time; 13 of the 25 business applications under the SLA had an uptime of 100% (lowest uptime: 99.95%); 24 of the 28 infrastructure back-end system had an uptime of 100% (lowest uptime: 99.99%). A total of 277 change requests were handled, and 160 application releases or new applications were tested and deployed. To save mission and travel costs, 1 052 audio- and videoconferences were handled (948 in 2015). The security of the IT networks was improved, and 28 746 intrusion attempts were prevented.

ECDC maintains approximately 30 information systems that support business users. The maintenance of existing systems includes multiple activities, namely fixing defects, upgrading technical platforms and making small improvements to existing functionalities. In 2016, ECDC's extranets, ECDC's intranet, and the Centre's CRM platform were migrated from an old version of Microsoft SharePoint to the latest Microsoft Dynamics software version.

In addition to maintaining its existing systems, ECDC invested significant efforts to improve some of the legacy systems and to add new functionalities:

- Two modules covered under the Surveillance Systems Reengineering initiative were completed: modelling business processes and business data. The definition of the functional application model was nearly completed.
- The implementation of the new Web Portal started in the last quarter of 2016, adopting Drupal, a widely used free and open source content-management framework; the new portal will be available by mid-2017.
- The customisation of a new publishing platform for *Eurosurveillance* started. This externally hosted platform will replace the current web platform.
- The Epidemic Intelligence Information System (EPIS) was improved with functionality to support management of joint and non-human clusters, in a joint agreement with EFSA.
- The Helicwin.net application for monitoring healthcare-associated infections was expanded with additional modules.
- The new electronic Declaration of Interest application, launched at the end of 2015, was updated and improved.

A number of quality initiatives were implemented such as a mechanism to resolve the most important software production defects, based on their severity and how critical they are for ECDC's mission; a project management tool to provide more detailed information on ICT costs (available in 2017); a review of the key roles, authority and responsibilities at the operational level of ICT; the mapping of several key ICT processes; quality metrics to assess the impact of improvements and determine quality objectives; a draft procedure for software maintenance to ensure shorter delivery time; a revised approach for software requirements to improve their quality and maintainability; the use of internationally recognised IT models and frameworks.

Non-exhaustive list of mission-relevant ICT products and services

System/application	Description
Early Warning and Response System (EWRS)	Supports critical communication of information and threat alerts between the European Commission, Member States, other EU agencies and WHO.
Epidemic Intelligence System (EPIS)	Supports communication of public health events, threats and collaboration between surveillance networks of several disease programs (e.g. European Legionnaires' Disease Surveillance Network and others)
The European Surveillance System (TESSy)	Supports collection, validation, cleaning, analysis and dissemination of data for public health surveillance; data are provided by EU Member States and other associated countries.
Threat Tracking Tool (TTT)	Supports the collaboration and management of public health threats, including the preparation of the weekly Communicable Disease Threats Report and coordination during a public health emergency.
Emergency Operations Centre (EOC)	A set of ICT solutions that support access to information and support the management of public health emergencies.
ECDC web portal	Supports an important part of ECDC's external communication, e.g. information for the public, download of publications
Surveillance Atlas of Infectious Diseases	Launched in 2014, this tool provides interactive access to surveillance data. It is accessible via ECDC's web portal.
<i>Eurosurveillance</i>	Supports the edition and publication of <i>Eurosurveillance</i> , a journal on communicable diseases with more than 11 000 active electronic subscribers.
ECDC Extranets	Supports collaboration of public health networks, working groups and institutional bodies (MB and AF). Currently, ECDC manages more than 20 extranets.
eLearning/LMS	Currently under implementation; will allow ECDC to offer e-learning in support of its public health training activities.
Customer Relationship Management (CRM)	Supports the centralised management of competent bodies, nominated experts and other external contacts.
Intranet	Tool for internal communication and to support of internal processes
Document Management System	Supports the management of electronic documents, providing a single point of controlled access to documents
E-mail system	Supports electronic internal and external communication.
Remote access to ECDC systems	Allows the continuity of work by ECDC staff when away from the Centre's premises, e.g. during missions and on stand-by duty.

Part II (a). Management

1 Management Board

During its thirty-eight meeting in November 2015, the Management Board unanimously re-elected Dr Daniel Reynders as its Chair; Anni-Riitta Virolainen-Julkunen from Finland was elected as Deputy Chair.

In 2016, the Management Board adopted the ECDC Independence Policy revision, the Country Support Strategy and a Communication Strategy. The Board also approved the ECDC process and criteria for engaging in EU-funded projects on public health/communicable disease prevention and control.

The Board continued to monitor the implementation of the recommendations on the second independent external evaluation of the Centre. The Management Board also approved the Annual Report of the Director 2015, adopted the ECDC Single Programming Document 2017, and discussed the priorities of the Single Programming Document 2018. In addition, the Board endorsed the Final Annual Accounts of 2015, including the Report on Budgetary and Financial Management, took note of the Supplementary and Amending Budgets for 2016, approved the Draft Budget for 2018, and adopted the Centre's Budget and Establishment Table for 2017.

The Management Board also carried out interviews for the election of the Director of ECDC for the period 2016–2021 and, following the unsuccessful election (none of the candidates received a 2/3 majority of votes), reviewed the vacancy notice and decided to reopen the call for ECDC Director's position. The Board unanimously agreed to appoint Andrea Ammon as the Acting Director until the new Director takes office.

The Board also took note of the update of the management Board Working Group on Complementarity between management Board and Advisory Forum. The final conclusions will be presented in its March 2017 meeting. The Board also took note of the presentation IMI2 DRIVE proposal - potential benefits, costs and issues in view of the production of a position paper by ECDC.

2 Major events

25–26 Feb	44th Advisory Forum meeting, ECDC
22 Jan	Videoconference: Task-Force on Shared Services (part of Heads of Agencies network), ECDC
26–27 Jan	Mr Michael Huebel, Head of Unit C3, Directorate-General for Health and Food Safety, and Deputy Head of Unit C3, Wolfgang Philipp, visit ECDC
27 Jan	Teleconference: ECDC Management Board Working Group Building Project, ECDC
2 Feb	Visit to ECDC: Professor Philippe Douste-Blazy, Special Advisor to the Secretary-General of the United Nations on Innovative Finance for Development, accompanied by the Ambassador of France and a delegation from the French Embassy in Sweden
5 Feb	ESCAIDE Scientific Committee Meeting 2016, ECDC
17–18 Feb	Heads of Agencies meeting, Brussels
17 Feb	Presentation on TB and HIV/AIDS at the Health Working Group of the ENVI Committee of the European Parliament
17 Feb	Exchange of views on Zika between the WHO and the ENVI Committee of the European Parliament; Question-and-answer session with ECDC and the European Commission's Directorate-General for Health and Food Safety
23 Feb	Annual Hearing of the acting ECDC Director before the ENVI Committee of the European Parliament, Brussels
8–10 Mar	36th Management Board meeting and Audit Committee, ECDC
18 Mar	African Caribbean Pacific – EU Joint Parliamentary Assembly, Brussels
22–23 Mar	Presentation and participation at the high-level Conference on International Health Security, Lyon
7 Apr	General Director of the CDC Iran visits ECDC

14–15 Apr	Presentation at the International Association of National Public Health Institutes (IANPHI), Bilthoven, the Netherlands
12–13 May	45th Advisory Forum meeting, ECDC
23–24 May	Presentation by rapporteur on the new premises proposal at the Committee on Budgets, European Parliament, Brussels
25 May	Heads of Agencies Meeting, Brussels
26 May	Presentation on the proposal for ECDC's new premises, Council of the European Union, Brussels
30 May	ECDC briefing for the diplomatic community in Stockholm, ECDC
14 Jun	ECDC's contact Member in the European Parliament/ENVI Committee, Kateřina Konečná (GUE/NGL, Czech Republic), visits ECDC
14–15 Jun	37th Management Board meeting and Audit Committee, ECDC
29 Jun	Academic Research Network on Agencification of EU Executive Governance (TARN) conference, Brussels
30 Jun	Address by Acting Director Andrea Ammon on occasion of the 125-year anniversary of Robert Koch Institute, Berlin
27 Jul	Visit by Mr Jimmy Kolker, Assistant Secretary Global Health, US Department of Health and Human Services, ECDC
7–8 Sep	Presentation by Acting Director Andrea Ammon at the joint ECDC–ASEF workshop - Building Capacities for Public Health Emergency; Risk Communication, Preparedness Planning and Training – Preparing for a Global Health Threat, ECDC
21–22 Sep	Presentation by Acting Director during One Health: The 1st European Interregional Conference 2016, Bucharest
13–14 Sep	46th Meeting of the ECDC Advisory Forum, ECDC
14–15 Sep	Annual Meeting of National Coordinators of Coordinating Competent Bodies, ECDC
28–30 Sep	Moderation by Acting Director of an ECDC workshop on life-course vaccination, European Health Forum Gastein 2016, Austria
3–4 Oct	Participation by Acting Director in an informal meeting of EU Ministries of Health, Bratislava
13 Oct	Visit by Dr Bernhard Url, Executive Director, European Food Safety Authority (EFSA), ECDC
17–19 Oct	Presentation of ECDC activities, Annual Meeting of the International Association of National Public Health Institutes (IANPHI), Shanghai
20–21 Oct	Participation in the Meeting of Heads of EU Agencies, Alicante
10 Nov	Participation by Acting Director in the plenary meeting of the Health Security Committee, Luxembourg
11 Nov	Presentation by Acting Director at Lunch Symposium at European Public Health Conference, Vienna
14 Nov	33rd Meeting of the ECDC Audit Committee, ECDC
15–16 Nov	38th Meeting of the ECDC Management Board, ECDC
17 Nov	Presentation by Acting Director on AMR and HAI in the European Parliament, organised by Health First Europe and chaired by MEP Karin Kadenbach, Brussels
18 Nov	Presentation by Acting Director at European Antibiotic Awareness Day – 'The Future is now', Brussels
23 Nov	Meeting with Swedish Minister for Health, Gabriel Wikström, and State Secretary, Agneta Karlsson, Ministry for Health, Stockholm
28–30 Nov	ESCAIDE (European Scientific Conference on Applied Infectious Disease Epidemiology) Conference, Stockholm

3 Budgetary and financial management

Fund source C1 (current year appropriations)

Budget execution in terms of commitment appropriations at year end reached 98.02%, equivalent to EUR 57.1 million.

Budget execution in terms of payment appropriations at year end reached 79.26%, equivalent to EUR 46.1 million.

Information on transfers and amending budgets

The Director exercised her right to amend the budget within the limitations of Article 27.1 of ECDC's Financial Regulation and approved budget transfers for EUR 1.5 million between several budget lines of the same and between titles.

Level of appropriations carried forward to the following financial year

ECDC carried forward the amount of EUR 10.9 million to 2017.

Implementation of appropriations carried forward from the previous financial year

Budget execution in terms of payment appropriations for the fund source C8 at year end reached 88.16%, equivalent to EUR 9.1 million.

Procurement procedures

The Procurement section dealt with a significant number of procedure: 27 open calls for tenders were finalised, along with one call for proposals, and 92 negotiated procedures; 23 reopened procedures within the ICT framework contracts were completed. Regular Committee on Procurement, Contracts and Grants (CPCG) meetings were held, resulting in the issuance of 31 CPCG opinions.

Interest charged by suppliers through late payments (> 30 days): EUR 986.67

Summary information on budgetary operations for the year

The core budget of the Centre for 2016 (EUR 58.2 million) remained at approximately the same level as in the previous year.

For additional information see Annex VI, annual accounts (see document MB 39/04): *Report on budget and financial management of the European Centre for Disease Prevention and Control*.

4 Human resources management

The Centre continued to adopt the *Implementing rules to the staff regulations*, following the revised *Staff regulations* (in areas such as working conditions and promotion).

The majority of the Centre's jobs (74.4%) are related to the implementation of activities linked to the Centre's operational work. A total of 17.5% of the jobs belong to 'administrative support and coordination', while 8.1% of the jobs are defined as neutral (i.e. primarily in the area of finance/accounting and internal control) (see Annex IV).

5 Assessment by management

ECDC has a system of management supervision and internal control in place to assure ECDC is managed effectively and efficiently. The main elements of the system are described below.

5.1 Management supervision

ECDC has five Units and a Director's Office. The Heads of Unit are responsible for the activities in their Units. There is also a level of middle management, where a number of Heads of Section are responsible for the activities. ECDC has a Senior Management Team (SMT), consisting of the Director and all the Heads of Unit, which plays a key role in the management of ECDC.

Quality management and planning activities are a crucial part of the ECDC management and control system. ECDC has a Multiannual Strategic Work Programme for the period 2014–2020 (SMAP). The implementation of the SMAP at mid-term was reviewed by the Management Board in November 2016. To avoid overlap with the three-year multiannual part of the Single Programming Document (SPD), which will be used for 2018–2020, it was decided to monitor ECDC's progress only through the SPD. A set of indicators approved in January 2014 as part of the SMAP is reported each year to the Management Board to assess the implementation of the Multiannual Programme. The Annual Work Programme is monitored internally on a quarterly basis and its implementation reported to the Management Board at each Management Board meeting and in the Annual Report of the Director. During the year, discrepancies are discussed with the Units and Programmes, and corrective actions are taken as necessary.

The Management Information System provides support to the organisation in the day-to-day implementation of the Work Programme. A comprehensive set of reports provides overviews and summaries for the monitoring of activities. A monthly dashboard of operational key data on budget execution and implementation of the Work Programme is communicated monthly to the SMT and managers.

In 2016, the Director of ECDC, as authorising officer (AO), delegated financial responsibility to the five Heads of Unit (authorising officers by delegation (AOD)). The Heads of Unit in turn delegate responsibility – but only in their absence – to the Deputy Heads of Unit. Should the Deputy Head of Unit be unavailable, the authority returns to the Director. Thereby, a very limited number of persons act as AO/AODs in ECDC. The AODs can enter into budgetary and legal commitments and authorise payments. However, all commitments above EUR 250 000 require the signature of the Director.

For the expenditures of 2016, the AODs sign a Declaration of Assurance to the AO, similar to the one signed by the AO herself, for the area for which they have been delegated responsibility. No reservations were raised by the AODs.

5.2 Internal control system in place

In this context, the internal control system cannot be described in its entirety but some key components are mentioned below.

ECDC has a set of internal control standards (ICS) which specify the requirements, actions and outcomes necessary to build an effective system of internal control that can provide reasonable assurance on the achievement of ECDC's objectives (see further description in Part III, Section 2).

The internal control system also includes a number of internal procedures. The internal procedures are approved by the Director of the Centre and include, for example, financial workflows and checklists for commitments and payments, guidance on conflicts of interest, a code of good administrative behaviour, and procurement procedures. New internal procedures are introduced when necessary, and existing procedures are revised in regular intervals. In 2016, new or revised internal procedures were put in place regarding, for example, response operations, the organisation of missions, the organisations of meetings, the recruitment and selection of temporary agents, the recruitment and selection of contract agents, the Director's decisions, the guiding principles for disease-specific work at ECDC, and the public access to documents.

There are also a number of additional Director's decisions (in the form of Administrative Decisions) regarding policies/rules in place.

ECDC has a number of centralised support and control functions in place. The most important ones being the centralised procurement function, the Committee on procurement, contracts and grants (CPCG), and the centralised financial ex-ante verification function.

The centralised procurement function is responsible for coordinating all procurement procedures, as well as the ECDC procurement plans. The purpose of the CPCG is to ensure that ECDC's procurements, grants, contracts and agreements are carried out in accordance with ECDC's financial rules.

Centralised financial ex-ante verifications are performed for all commitments and payments and divided up into ex-ante verification of commitments by the finance officer (Title 1 and 2 expenditure) and the budget officer (Title 3 expenditure) and ex-ante verification of payments by the financial verification officer for payments, all in the Finance and Accounting Section.

In accordance with ICS 8, ECDC has a procedure in place to ensure that overrides of controls or deviations from established processes and procedures are documented in exception reports, justified, duly approved before action is taken, and logged centrally.

In 2016, 40 such exceptions were recorded. The reasons for the exceptions were analysed and an action plan to reduce their number was developed.

A grant verification policy is also in place. The policy attempts to find an effective and efficient mix of control activities, such as audit certificates, external audits, and own verification missions. A specific grant verification plan (GVP) is developed every year, which determines the verifications to be performed for that specific year. In 2016, the two verifications selected in the GVP 2015 were contracted out to an external audit firm.

A policy on ex-post verifications of financial transactions has been in place since 2012. An ex-post plan for financial transactions is developed every year. For 2016, it was decided to focus on infrastructure and operating expenditure (Title 2 of the budget). The final report was issued in February 2016 for the Director's Declaration of Assurance.

ECDC has an anti-fraud strategy in place, following the guidelines issued by OLAF. The strategy was approved by the Management Board in the June 2015 meeting.

6 Budget implementation tasks entrusted to other services and entities

None.

7 Assessment of audit results during the reporting year

7.1 Internal Audit Service

ECDC is audited by its internal auditor, the Internal Audit Service of the European Commission (IAS). The audit work to be performed is defined in the risk-based IAS strategic internal audit plan. The latest plan was approved in November 2013 and covers the period 2014–2016. All observations and recommendations are taken into account and appropriate action plans are developed. The implementation of these actions is being followed up regularly and presented to the Audit Committee of the Management Board.

In 2016, the IAS performed an audit on the ECDC Procurement Process. The audit was performed in May 2016, and the final report was received in October 2016. The report included three very important observations and two important observations. The action plan prepared by ECDC was accepted by the IAS in December 2016. The action plan will be implemented throughout 2017.

7.2 European Court of Auditors

ECDC is audited every year by the European Court of Auditors (ECA). The audit provides a Statement of Assurance as to the reliability of the accounts of the Centre and the legality and regularity of the underlying transactions.

ECDC received an unqualified opinion⁷ for 2015, indicating that the accounts are reliable and the transactions underlying the accounts are legal and regular.

⁷ Unqualified audit opinion = the auditor's report contains a clear written expression of opinion on the financial statements or the legality and regularity of underlying transactions as a whole. An unqualified opinion is expressed when the auditor concludes that, on the whole, the underlying transactions are legal and regular and the supervisory and control systems are adequate to manage the risk.

Four comments were received in the final report from the ECA for 2015 (which do not call the Court's opinion into question). One related to various weaknesses affecting the transparency of the audited procurement procedures and the other three to comments on the budgetary management. ECDC has taken the appropriate actions.

The ECA audit of the 2016 annual accounts is ongoing. The first part of the audit was performed in October 2016. The audit will be finalised during spring 2017 and the draft report will be available by June 2017 at the latest.

In April 2016, ECDC also received the ECA's final special report (no 12/2016) entitled 'Agencies' use of grants: not always appropriate or demonstrably effective'. An action plan was prepared and is being implemented. Three actions have been fully implemented and the other five are to be completed in 2017.

8 Follow-up of recommendations and action plans for audits

At the end of 2016, in addition to five new observations received from the audit on the procurement process in October 2016, five very important observations, and eight important observations were officially open (from the 2014 internal audit of public health training in ECDC and the 2015 internal audit on data management in ECDC). However, seven (one very important and six important) of those observations are already implemented and ready for review by the Internal Audit Service (IAS). The implementation of the remaining eleven observations is ongoing and should be closed during 2017.

In addition, there are the five remaining actions to be implemented from the ECA's special report mentioned above. Also those are planned to be fully implemented in 2017.

9 Follow-up of observations from the discharge authority

Article 110 (2) of the ECDC Financial Regulation states: 'At the request of the European Parliament or the Council, the director shall report on the measures taken in the light of these observations and comments'.

This report provides an overview of the measures taken by ECDC in light of observations and comments made by the Discharge Authority on 28 April 2016 with respect to the implementation of the 2014 budget.

Table. European Parliament's observations and measures taken by ECDC

Reference	Observation of the Discharge Authority	Response and measures taken by ECDC
P8_TA(2016) 0168, paragraph 6	Calls on the Centre to continue as far as possible to reduce the level of committed appropriations carried over in the future by means of all available measures, for example by adopting best practice used in other agencies;	The Centre is committed to have the lowest possible level of carry-overs, including implementing best practices of other Agencies, within the limitations of its operational activities. [Ongoing]
P8_TA(2016) 0168, paragraph 8	Notes that with regard to its procurement procedures, the Centre has put specific focus on ensuring consistency in all tender documents; emphasises that the Centre's revised Committee on Procurement, Contracts and Grants is providing an additional quality control mechanism; calls on the Centre in particular to carry out careful checks on conflicts of interest in relation to tenders, procurement, recruitment and contracts in order to strengthen transparency;	In 2014 and 2015, ECDC has further revised its Independence Policy and has created an Internal Procedure for the implementation of the policy. The updated policy has been endorsed by the ECDC Management Board in June 2016. All staff is required to submit a declaration of interests before taking up duty. All staff involved in a particular procurement procedure, in addition, has to sign a declaration of absence of conflict of interest for that particular procedure. [Implemented]
P8_TA(2016) 0168, paragraph 9	Asks the Centre to apply strictly the measures pertaining to discretion and exclusion in public procurement, with proper background checks being carried out in every instance, and to apply the exclusion criteria so as to debar companies in the event of any conflict of interest, this being essential to protect the financial interests of the Union;	As part of the evaluation, it is systematically checked that tenderers provided Declarations of Honour, and that these are duly dated and signed. In addition, a check in the Central Exclusion Database (EDES) is carried out. These checks are documented in the evaluation report. Supporting evidence to prove the absence of an exclusion situation is systematically requested and checked from the successful tenderer before signature of the contract. [Implemented]

Reference	Observation of the Discharge Authority	Response and measures taken by ECDC
P8_TA(2016) 0168, paragraph 15	Welcomes the development and launch of the Surveillance Atlas of Infectious Diseases ('Atlas') on the Centre's web portal; notes that by the end of 2014, the Centre was publishing Union level data together with some international data for four diseases via the Atlas and encourages the Centre to continue with this project; regrets at the same time that the Centre's communication activities were largely restricted to publications on the Centre's web portal and that the Centre had not been identified by EU media as a key information provider; calls on the Centre to take steps to improve media presence;	The EU media is a key target audience of the ECDC communication activities. In the new draft communication strategy to be discussed by the ECDC Management Board in November 2016, we have added a new indicator on reach of ECDC in EU media, with a target of 5% annual increase compared to a 2015 baseline (3,865 press clippings with a print circulation of 58,756,373). The main way to achieve this target is to reach the 'traditional' media through our social media activities. Social media is the fastest growing ECDC communication outlet with a +40% increase in Twitter followers between 2014 and 2015, and a steady continuous increase also in 2016. [Implemented]
P8_TA(2016) 0168, paragraph 16	Acknowledges that all reports edited and published by the Centre were made available as downloadable documents on the Centre's web portal, as well as the fact that it is increasingly publishing data, graphs, maps and infographics as downloadable assets; notes that in 2014, a new section 'Data and Tools' was added to the Centre's web portal in order to provide a centralised entry point to interactive data, maps and other similar resources; regrets that information is not made available on the web portal in all Union languages;	The new draft ECDC communication strategy addresses the issue of translation of material as follows: Due to the high cost of translation, ECDC will continue to provide content targeted at the expert community in English only. Decisions on translating documents that are targeted at less technical audiences, for example, policymakers, will generally be made in consultation with the Member States, via their National Focal Points (NFPs) for communication, considering the public health relevance in each target language and weighting it against the cost implications. Although directly targeting the European public is mainly the responsibility of the Member States, there is nevertheless a basic obligation to provide public information and the EU's policy on multilingualism needs to be respected. Thus a limited set of key information for the public will be provided in all official languages, within the available budget decided by the Management Board. [Ongoing]
P8_TA(2016) 0168, paragraph 17	Calls on the Centre to enhance its procedures and practices aimed at safeguarding the financial interests of the Union and to actively contribute to a results-oriented discharge process;	ECDC is committed to safeguarding the financial interests of the Union. ECDC has an Anti-Fraud Strategy in place, as well as a system for annual ex-post verifications of grant agreements. [Ongoing]

Part II (b). External evaluations

External evaluation

ECDC's Founding Regulation requires the Centre to organise external evaluations every five years to assess how well it is performing its mission. The second independent external evaluations of ECDC, conducted by a consortium led by the Rome-based consultancy Economisti Associati, was concluded during 2014. The period looked at in the evaluation was 2008–2012, therefore progress made in 2013–2014 was not taken into account.

The report was discussed in the Management Board and the Board adopted a set of recommendations for action in response to the evaluation in its meeting in June 2015. Based on the evaluation and the recommendations of the Board, ECDC developed an action plan for the implementation of actions. The action plan was approved by the Management Board in November 2015.

The external evaluation report is available on ECDC website:

<http://www.ecdc.europa.eu/en/aboutus/Key%20Documents/ECDC-external-evaluation-2014.pdf>

Internal evaluations

In addition, ECDC adopted a new procedure for the internal evaluation of its work in 2015. The new procedure was tested in 2015 to assess the governance of IT and was endorsed by the SMT in February 2016. In 2016, a second internal evaluation was done on the deployment of ECDC experts in Africa.

The new procedure is in line with the implementation of the Internal Control Standard (ICS) 14 'Evaluation of Activities', which states: 'Evaluations of expenditure programmes, legislation and other non-spending activities are performed to assess the results, impacts and needs that these activities aim to achieve and satisfy. [...] Requirement: 14a) Evaluations are performed in accordance with the ECDC evaluation standards.'

All evaluations should be linked to activities in the Single Programming Document. Evaluations will generally be conducted ex-post and should be part of a multiannual plan approved by the Director. Evaluations are carried out for interventions such as: work programme activities, programmes, projects, processes, the work of disease networks and some of the more generic functions performed by the Centre (e.g. preparedness, epidemic intelligence).

Not in the scope of this procedure are:

- The five-year external evaluations⁸; internal evaluations complement the five-year external evaluations by providing additional evaluations of specific products or services
- Audits
- Specific internal self-assessments/evaluations performed by individual units, with the purpose to continuously improve their products or services (e.g. peer reviews, evaluations of unit-specific processes)
- PHE evaluations, CMMI, individual appraisals, as they follow dedicated methodologies.

In addition, the Financial Regulation (Art. 29(5)) requires regular ex-ante, interim or ex-post evaluations for certain interventions⁹.

The criteria applied to rank and select potential evaluation topics were: criticality of the process/activity, impact on customers, need for improvement, frequency of use and whether the process/activity is cross-organisational.

⁸ ECDC Founding Regulation, Article 14.5.b

⁹ 'Such evaluations shall be applied to all programmes and activities which entail significant spending and evaluation results shall be sent to the Management Board' (Evaluation ([Article 29\(5\) FR](#))).

Annual stakeholder surveys

In 2015, ECDC launched its first annual stakeholder survey for the members of the Management Board, the Advisory Forum, the Competent Bodies, the National Focal Points and relevant external stakeholders (EU institutions, relevant EU agencies, international organisations). The survey will be analysed and the results presented to the Management Board. Improvements will be proposed and implemented as part of an action plan.

Part III. Assessment of the effectiveness of the internal control systems

1 Risk management

1.1 Inherent nature and characteristics of ECDC's risk and control environment

ECDC deals with only direct expenditures. There are no Member States or implementing bodies involved in the execution of the budget. Most of the expenditures, apart from salaries and salary-related expenditures are therefore implemented through procurement procedures performed directly by ECDC.

The sections below describe the inherent nature and characteristics of ECDC's risk and control environment by area.

1.1.1 Scientific advice

One of the main objectives of ECDC is to deliver scientific advice to the Member States, the European Commission, and the European Parliament. The main risks here lie in that the delivered advice is seen by stakeholders as irrelevant, or that the scientific independence is being questioned. ECDC has therefore put in place an internal procedure as well as an electronic management and repository system for the delivery of scientific advice. Scientific independence is guaranteed by a strict system of selection of external experts that includes a review of declared interests to avoid any potential conflicts of interest. The relevance of the scientific advice is assessed by frequent consultations with the Advisory Forum and other stakeholders, as well as through a formal procedure to assess impact.

1.1.2 Disease surveillance

The main objective of EU surveillance is to integrate data collection systems and to establish standard case reporting for EU Member States. The surveillance data are analysed to monitor trends and provide decision-makers with timely and reliable data as basis for public health decisions. These activities face risks such as receiving data too late for any action potentially required, receiving inaccurate data or making mistakes in data analysis or interpretation. These risks are addressed by carefully planning the data calls long in advance, with clear deadlines, and by closely following up the data submissions and ensuring that reminders are sent; by accepting data only from authorised persons (nominated by a Competent Body); by at least two iterations of data validation prior to data analysis and another one prior to publication; and by a rigorous internal clearance involving multiple senior reviewers.

1.1.3 Preparedness

The main objective for ECDC's preparedness efforts is to support the capacities and capabilities of the European Commission and the Member States in having a high level of preparedness for dealing with cross-border health threats due to communicable diseases. Risks associated with these functions mainly relate to a mismatch between actual needs and support efforts. In order to mitigate these risks, ECDC works closely with the National Focal Points for Preparedness and Response to understand the gaps and needs at national and EU level.

In 2017, ECDC will again assist the European Commission in analysing the country reports on national preparedness under Article 4 of Decision 1082/2013.

1.1.4 Response

The main objectives for response are to detect emerging threats, assess them, and support response measures in the Member States. ECDC also supports the European Commission by operating the EWRS. Risks associated with these functions include the following: the risk of not detecting a threat; the risk of not assessing a threat correctly; the risk of not providing Member States with the support required; the risk of interruptions in the EWRS service to

the European Commission and Member States. To address these issues, ECDC developed a thorough methodology to monitor and assess threats, and implemented clearance process which ensures that threat assessments are cleared by the Head of Unit and the ECDC Chief Scientist. Standard operating procedures were developed and corresponding tools implemented. Finally, a high level of redundancy ensures that EWRS operations have no downtimes.

1.1.5 Public health training

The main objective of ECDC training activities is to train a sufficient number of specialists who can effectively detect and respond to cross-border communicable disease threats. The main identified risks relate to not striking the right balance between support to national and EU-level capacities. There is also the danger that Member States see ECDC training activities as a replacement of their own efforts, which could lead to the downsizing of national training programmes. Another risk is that training efforts do not meet actual needs. To address these risks, ECDC is in constant dialogue with the National Focal Points for Training, the EPIET/EUPHEM Training Site Forum, the Advisory Forum, and the European Commission. In 2016, ECDC has had a broad consultation on the fellowship programme (EPIET/EUPHEM) and in 2018 we are planning an external review of the programme.

1.1.6 Health communication

An important ECDC objective is to communicate scientific content to public health professionals, policymakers, the general public, and various stakeholders across Europe; these efforts include risk communication. In this area there are three main risks, namely that ECDC communicates incorrect or misleading information; that ECDC's risk communication activities are not properly coordinated with those of the European Commission or in the Member States; and that ECDC communication activities are seen not to be in line with the mandate of ECDC. In order to address these risks, ECDC has clear internal procedures which regulate the clearance of publication items. These procedures ensure that the relayed information is factual and correct. ECDC also works with the Risk Communicators' Network under the European Commission's Health Security Committee and has a system in place which provides advance information to the European Commission and the Member States on major communication outputs. A new communication strategy was adopted by the Management Board in 2016.

1.1.7 External relations

An important task for ECDC is to ensure good cooperation and coordination with the EU institutions, EU Member States, third countries, international partners, and other relevant stakeholders. ECDC is part of the wider EU family and works closely with the European Commission, in particular with the Directorate-General for Health and Food Safety (DG SANTE) as well as with other EU agencies. ECDC's International Relations Policy 2014–2020 was endorsed by the ECDC Management Board in 2014. It sets the priorities and objectives for ECDC actions in this field. This policy is fully aligned with existing EU policies and the ECDC Strategic Multiannual Plan 2014–2020 (SMAP). ECDC's relationships with the EU Member States are the basis of its work; consequently, relationships to Member States are very close in all areas, from disease surveillance to training.

ECDC works closely with the WHO Regional Office for Europe, coordinating activities and avoiding duplication of work. This has been achieved by regular contacts between technical counterparts and technical coordination meetings. Our relations with other stakeholders, e.g. learned societies, have grown through mutual interests and usually take the form of ECDC support to annual meetings.

In external relations, there is a reputational risk connected to how ECDC and its collaboration with external partners is perceived. There is also a risk that cooperation with ECDC creates more burden than it adds value, and that ECDC fails to properly balance activities related to EU Member States. Choosing inappropriate partners for collaboration can also hurt the reputation of the Centre. As regards the Commission ECDC and DG SANTE have appointed liaison officers and established regular meetings at all levels (operational, strategic) to mitigate possible risks and to ensure effective coordination.

In 2012, ECDC introduced a new way of official relations with the EU Member States and EEA/EFTA countries (through one national Coordinating Competent Body), with the National Coordinator, and with the EU enlargement and European Neighbourhood Policy (ENP) partner countries through the National Correspondent. At ECDC the coordination of activities is carried out by the International Relations section in the Director's Office. The Customer Relation Management System (CRM) for contact maintenance and appointments was made available to the Member States in November 2013.

With funding from the European Commission, ECDC has since 2013 been supporting MediPIET, a training programme and network covering 18 accession and ENP countries. Discontinuing funding after 2017 would severely endanger the sustainability of a programme that has successfully contributed to institutional capacity building in the region.

1.1.8 Resource management

The main purpose of resource management is to provide ECDC with the relevant structure, means, services and expertise to ensure the efficient operation of the Centre. The main objective is to manage ECDC's human and financial resources in the most efficient, effective and compliant way to support the successful achievement of the Centre's mission. The main risks lie in failing to deliver adequate and/or timely human and financial resources, business travel and meetings organisation services, facilities and logistics services, sound legal advice and internal control coordination. ECDC has therefore implemented a number of procedures and defined reporting requirements to make sure the support provided is appropriate, e.g. real-time dashboards, detailed yearly recruitment and procurement plans, monthly reporting for budget execution, and a Committee for Procurement, Contracts and Grants to ensure the legality, regularity and compliance with ECDC Financial Regulation.

1.1.9 Information and communication technologies

Information and Communication Technologies (ICT) are supporting the ECDC's core functions such as surveillance, epidemic intelligence and response. Maintaining and further developing ECDC's ICT systems requires significant investments of both staff time and financial resources. Operating and developing these systems at all times requires highly secure, interoperable and robust infrastructures. The main risks in that are ensuring the resources needed (human and financial) and proper management of external service providers. ECDC is mitigating that risk with continuous quality improvement initiatives, strengthening the IT PMO function, service-level agreements for the IT service delivery and real-time monitoring of the infrastructure.

1.1.10 Risk assessment for Single Programming Document

As part of the preparation of the Single Programming Document (SPD), a risk self-assessment exercise is performed every year. 'High' unmitigated risks are included in a risk register and an action plan is prepared. The identified main risks are also summarised and included in the SPD itself (see ECDC SPD 2017).

2 Compliance and effectiveness of internal control standards

Since 2006, ECDC has internal control standards (ICS) in place. These standards specify the necessary requirements, actions and expectations needed to build an effective system of internal control which allows to gauge the achievement of ECDC's objectives. These control standards were developed along the lines of the European Commission's Internal Control Standards, which are based on the International Committee of Sponsoring Organizations of the Treadway Commission (COSO) standards.

The ICS cover the areas of mission and values, human resources, planning and risk management processes, operations and control activities, information and financial reporting, and evaluation and audit.

Each ICS is made up of a number of requirements to be met. For each such requirement, ECDC has identified what is in place already, actions to be taken, the person responsible, and the deadline for entry into force.

A review of the implementation of the ICS was performed as part of the work for the Annual Report 2016. The results were validated by ECDC's management and discussed in the ECDC Audit Committee. ECDC has implemented all the ICS.

Part IV. Management assurance

1 Review of the elements supporting assurance

The main building blocks of the Director's Declaration of Assurance are:

- The Director's own knowledge of the management and control system in place.
- The declarations of assurance made by each Authorising Officer by Delegation to the Director.
- The results of the assessment of the implementation of Internal Control Standards.
- The results of the risk self-assessment exercises.
- The list of recorded exceptions.
- The status on the internal control and quality weaknesses reported.
- The results of the grant verifications known at the time of the declaration.
- The results of the ex-post verifications of financial transactions.
- The summary of OLAF activities.
- The observations of the Internal Audit Service known at the time of the declaration.
- The observations of the European Court of Auditors known at the time of the declaration.

2 Reservations

None.

3 Overall conclusions on assurance

Given the control system in place, the information attained from the building blocks above and the lack of critical findings from the Court of Auditors and the Internal Audit Service at the time of the declaration, there is no reason to question the efficiency or effectiveness of the control system in place.

Part V. Declaration of assurance

2016 Declaration of Assurance by the Director of ECDC

I, the undersigned, Andrea Ammon, Acting Director of ECDC,

In my capacity as authorising officer,

Declare that the information contained in this report gives a true and fair view.

State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.

This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls, the work of the Internal Audit Service and the lessons learnt from the reports of the Court of Auditors for years prior to the year of this declaration.

Confirm that I am not aware of anything not reported here which could harm the interests of the agency.

Stockholm, 27 February 2017



Andrea Ammon

Acting Director

Management Board's analysis and assessment

The Management Board has assessed the Annual Report of the Director for the financial year 2016. The Management Board appreciates the results achieved by the Centre and notes in particular the following:

On the content of the report:

- ECDC further increased its output, consolidated its structures and developed its partnerships. ECDC put particular efforts during 2016 for the Surveillance Systems reengineering project (SSR), which will optimise the surveillance platforms and processes, reduce the burden for Member States and ensure higher quality of data.
- ECDC was deeply involved in 2016 to monitor the outbreak of Zika virus during the whole year, and in particular to assess the risk in and for Europe.
- The Centre continued to support the Member States, and the EU institutions, in the scope of its missions: surveillance, scientific advice, preparedness and response, health communication, and the seven disease programmes. ECDC continued to strengthen its relations with the Member States through the Coordinating Competent Bodies and with its EU and international partners for a strengthened response to the threat of communicable diseases in Europe.
- ECDC continued to further implement decision 1082/2013/EC on serious cross-border health threats and provided concrete input to the Commission and the Member States.
- ECDC was able to ensure a high level of implementation of its initial Work Programme for 2016: 90% of the activities were fully implemented and 4% partly. As an example, ECDC prepared 43 Rapid Risk Assessments of which 38 were published.
- In 2016, ECDC implemented many actions to prevent and address communicable diseases across Europe and continued to provide many scientific outputs for guidance and some practical tools to give an easier access to information and data to health professionals and policy makers in Europe.
- ECDC made progress towards moving to new premises, with the approval by the Council and the European parliament of ECDC proposal, and ongoing preparation work for the design of the interior of the new building to suit the core ECDC functions.
- The Management Board continued to monitor the joint Action Plan adopted in June 2015 to address the recommendations of the management Board following the feedback received from the Second External Evaluation of ECDC.

On the structure of the report:

- The Annual Report for 2016 follows the common template to all EU agencies to ensure better comparability with other EU agencies by the discharge authority.
- Annex 1-a of the report presents the results of the indicators included in the Work Programme 2016. The Management Board notes that due to the unavailability of an Annual Stakeholder Survey for 2016, some of the data might be more difficult to obtain. The Management Board encourages ECDC to review the list of indicators for the Single Programming 2018 and present to the Board a revised list of indicators for the years ahead.
- Annex 1-b of the Report presents a systematic review of the implementation of the Centre expected outputs for 2016, as set in the Work Programme adopted by the Management Board in November 2015.

The Management Board also appreciates that, as in previous years, a separate short version of the report, adapted for a larger audience will be produced, which highlights the achievements, challenges and major outputs for 2016.

Annexes

Annex Ia. Results 2016 of the SMAP/annual programme indicators

Collaboration and cooperation

No.	Objective	Indicator	Target 2016	Verification	Result 2016
1	Achievement of timely and sustainable support to the Commission and relevant countries in the implementation of EU enlargement and ENP policies. Established and functioning working relations with relevant international partners.	Completion of an agreed list of joint activities established between ECDC and its international partners	Degree of completion of the Work Programme 2016, in the area of cooperation and collaboration: 80 % activities successfully implemented	Work Programme 2016 list of key outputs	87.5% (7 out of 8)
2	Achievement of a high level of effective communication and coordination between ECDC and its Competent Bodies	Satisfaction of the Coordinating Competent Bodies on the communication with ECDC	70 % satisfied with communication and coordination	Measure integrated into the annual stakeholder survey	91% of all stakeholders satisfied (Source: external stakeholders survey 2015 – NB: the Stakeholder survey has been discontinued, so it is difficult to get this information for 2016; a revision of the indicator will be proposed in 2017)

Surveillance

No.	Objective	Indicator	Target 2016	Verification	Result 2016
3	Support to the Commission and the Member States in the implementation of the epidemiological surveillance of communicable diseases and special health issues according to Article 6.5 of Decision 1082/2013/EU	Proportion of diseases and special health issues for which surveillance standards have been developed and agreed with the National Surveillance partners	Diseases and special health issues under surveillance reviewed according to the SMAP; standards implementation started for all diseases for which standards were agreed in 2014 and 2015	Steps to verify 100% achievement are: <ul style="list-style-type: none"> Yearly list of diseases for which the standards have been agreed Yearly report from TESSy on the number of diseases following these standards 	Surveillance standards postponed until EU/EEA surveillance systems evaluated within the EPHEsus project. First standards thus not to be expected before 2018.
3	High level of user friendliness and quality of uploading surveillance data.	Level of positive feedback from the Member States using machine to machine to upload TESSy data	- 100 % response to all requests - 80% users satisfied - Dashboard on quality indicators available to Member States for at least four additional diseases	Measure integrated into the annual stakeholder survey	<ul style="list-style-type: none"> Meeting with NFP for Surveillance concluded that machine to machine reporting is not feasible in all countries, nor necessary for all diseases. The new surveillance system will allow countries who wish to do so, to report automatically surveillance data to ECDC. n/a More effective approaches for reducing Member State burden are included in the new surveillance system to be implemented starting in 2017, including a more efficient data validation method.
5	Interactive outputs available for all diseases under surveillance	Proportion of diseases under surveillance for which online interactive outputs are available	Satisfaction with functionality: 80% All diseases under EU indicator-based surveillance	Outputs used measured by web statistics As measured in annual stakeholder survey	74% of stakeholders satisfied with interactive outputs available for diseases under surveillance (source: external stakeholders survey 2015 – NB: the Stakeholder survey has been discontinued, so it is difficult to get this information for 2016; a revision of the indicator will be proposed in 2017) 44 diseases plus antimicrobial resistance data are now included in the Atlas (compared to 25 in 2015)

No.	Objective	Indicator	Target 2016	Verification	Result 2016
6	Substantially increased power of surveillance by implementing molecular characterisation for selected diseases	Proportion of evaluated business cases for selected pathogens. Proportion of pathogens with molecular typing for surveillance modules in TESSy	- All business cases prepared for pathogens whose surveillance objectives have been agreed by AF in 2015 - Molecular surveillance in place for at least 60% of pathogens for which business cases have been prepared in 2015	Results of the pilot phase are verified by the Advisory Forum opinion <i>Note: The decision process might lead to a review of targets in 2017</i>	• All three surveillance business cases as per molecular surveillance roadmap (e.g. for carbapenemase-producing <i>Enterobacteriaceae</i> (CPE), gonococcal antimicrobial susceptibility, and invasive meningococcal diseases) have been developed and shared with National Focal Points for Surveillance and for Microbiology. • The implementation of the three surveillance systems is planned for 2017.

Epidemic intelligence and response

No.	Objective	Indicator	Target 2016	Verification	Result 2016
7	Provision of relevant, timely and quality rapid risk assessment to support the risk management carried out by the Member States and the Commission	<ul style="list-style-type: none"> Number of timely rapid risk assessments Proportion of rapid risk assessment assessed positively by Member States through the annual stakeholder survey 	<ul style="list-style-type: none"> (1) 80% of rapid risk assessments produced within the set deadline for each RRA (2) 100% within 4 weeks (3) 80 % yearly satisfaction of respondents 	<p>Timeliness: RRA statistics</p> <p>Quality: annual stakeholder survey</p>	<p>(1) RRA within agreed deadline: 82.5% including at ECDC own initiative (from external requests only: 86%)</p> <p>(2) RRA produced within 10 days: 85% including at ECDC own initiative (from external requests only: 93%)</p> <p><i>(65% of the RRAs originated from ECDC own initiative; 35% were produced following an external request (mostly from DG SANTE))</i></p> <p>(3) Satisfaction with rapid risk assessment</p> <ul style="list-style-type: none"> Timeliness: 88% Independence of judgment: 94% Completeness: 93% Usefulness: 93% <p>(source: external stakeholders survey 2015 – NB: the Stakeholder survey has been discontinued, so it is difficult to get this information for 2016; a revision of the indicator will be proposed in 2017)</p>

Preparedness

No.	Objective	Indicator	Target 2016	Verification	Result 2016
8	Support to the Commission and the Member States in the implementation of the preparedness Article 4 of Decision 1082/2013/EU as endorsed by the Health Security Committee, in particular in improving the interoperability and consistency of national preparedness planning, inter-sectoral coordination and business continuity planning.	<ul style="list-style-type: none"> (1) Proportion of planned ECDC activities (guidelines, seminars, workshops, exercises) undertaken to reach the objective (2) Proportion of ECDC products endorsed by the Health Security Committee 	<p>(1) 90% in 2015 including:</p> <ul style="list-style-type: none"> ECDC internal public health emergency plan tested and updated Extranet for National Focal Points for Preparedness and Response in place Consultation of Member States on guidance and metrics for operational planning <p>(2) 50% in 2016</p>	<ul style="list-style-type: none"> ECDC assessment reports of preparedness at national level for communicable diseases upon request of the HSC Verified by HSC meeting minutes 	<ul style="list-style-type: none"> (1) 100%. All activities planned in the Work Programme implemented. (2) Reports sent to Commission by ECDC and submitted by Commission to HSC. In most cases reports are discussed without formal endorsement. This is an indicator for which ECDC has currently little control. To be revised in 2017 by: 'Proportion of response in time by ECDC to requests from the Commission in the area of preparedness'

Scientific advice

No.	Objective	Indicator	Target 2016	Verification	Result 2016
9	High level of support of the Commission and Member States by producing quality scientific publications in the area of the priorities and mandate of the Centre	Quality of ECDC scientific publications in peer-reviewed journals remains high i.e. <ul style="list-style-type: none"> Average journal Impact Factor Average number of citations of each article 	IF > 3.8 > 10	Quality and citations base on the following databases: Scopus, PubMed and Embase	Average impact factor: 7.17 <i>(based on the last 5 years which provides a broader range of citation activity for a more informative and picture over time).</i> Average number of publications for each article: 22.67 <i>(covering period 2005-2015)</i>
10	High level of timely and adequate response to requests for scientific opinions by providing authoritative and reliable evidence-based scientific	<ul style="list-style-type: none"> Proportion of prioritised scientific topics executed. Proportion of requested items for scientific advice (ad hoc and planned) 	<ul style="list-style-type: none"> (1) 80 % of prioritised actions integrated in annual work programme (2) 80 % 	<ul style="list-style-type: none"> Comparison between IRIS (tool for scoring scientific priorities by the Advisory 	(1) Not applicable in 2016: until 2015, IRIS had been used to inform the work plan of the immediately following year. The change of timeline for the Centre's overall work planning made it necessary to use IRIS 2015 to inform the Centre's Work Programme 2017 (and not 2016).

No.	Objective	Indicator	Target 2016	Verification	Result 2016
	opinions and guidance to Member States, Commission and Parliament	timely delivered • Use of evidence-based opinions and guidance produced by ECDC	• (3) >70% of opinions and guidance	Forum) and the approved Work Programme • Source SARMS (internal database on external scientific advice requests) • Annual stakeholder survey	(2) 85% of formal external requests answered within the agreed deadline. The majority originated from DG SANTE, and of those 45% were related to written questions submitted by Members of the European Parliament. (3) 100% out of a selection of 34 publications, published in 2015 for scientific advice and surveillance reports. For all the publications, at least several respondents indicated they were aware and used the publication. The most known publications were: • Communicable disease threats report (CDTR) (weekly) • Infectious diseases of specific relevance to newly-arrived migrants in the EU/EEA • Risk-assessment seasonal influenza 2014-2015 • Expert opinion on the public health needs of irregular migrants or asylum seekers in the EU southern and south-eastern borders • Seasonal influenza vaccination in Europe – Vaccination recommendations and coverage rates, 2012–13 • EU summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2014 • TB in Europe: from passive control to active elimination – high and low incidence countries (source: external stakeholders survey 2015 – NB: the Stakeholder survey has been discontinued, so it is difficult to get this information for 2016; a revision of the indicator will be proposed in 2017)

Public health training

No.	Objective	Indicator	Target 2016	Verification	Result 2016
11	With special emphasis on the core capacities referred to in Article 4 of Decision 1082/2013/EU, a strengthened workforce in the Member States through adequate and relevant training.	Reaction: Participant satisfaction with ECDC training activities. Learning: Achievement of agreed learning objectives in relation to core capacities in ECDC fellowship programmes (EPIET/EUPHEM). Behaviour: Number of scientific articles of public health relevance by EPIET/EUPHEM fellowship during and 2 years after graduation	• > 80 % satisfaction • > on average 80 % achievement by all fellows • > 50% increase compared to the 2-year period before entering the programme	• Course evaluations • Incremental progress reports (IPR), Competencies Development Monitoring Tool (CDMT), mid-term and final reviews with fellows and supervisors. • Bibliometrics (PubMed, Scopus)	Reaction: • ECDC Fellowship Programme (EPIET/EUPHEM): 100% for Programme; 90% for Modules • Short courses: 86% (4 courses: Control of Multidrug Resistant Organisms (MDRO) Jan 2016 (90%); Summer School 2016 (87%); MDRO Sept 2016 (82%); Principles public health surveillance and time series analysis (85%)) <u>Learning achievements:</u> In Cohort 2014: • EPIET: from 12 EU-track fellows, 3 on extension, 2 due to maternity leave, 1 due to sick leave; 6 Member State-track fellows, all graduated in 2016. • EUPHEM: all 9 fellows (4 EU-Track and 5 Member State-Track) graduated in 2016 Behaviour: • Increase/decrease of publications: + 80% • Average number of annual publications per fellow before fellowship: 0.9; • Average number of annual publications per fellow in the 2 years after fellowship: 1.6; (Source: PubMed, Scopus, out of 28 fellows)

Microbiology support

No.	Objective	Indicator	Target 2016	Verification	Result 2016
2	Implementation of the ECDC microbiology strategy to ensure sufficient microbiology capacity within the EU, to detect and manage infectious threats.	Proportion of Member States having microbiological core capabilities and capacity, as defined by the ECDC Microbiology Strategy	• Second annual EULabCap monitoring of three components of laboratory capabilities i.e. primary diagnostics; national microbiology reference laboratory services and laboratory-based surveillance and epidemic response support • Joint assessment with Advisory Forum and competent bodies of lessons learned from comparison 2014 versus 2013 EULabCap indicators • Compare the laboratory EQA performance levels and EULabCap capability levels for surveillance of communicable diseases and antimicrobial resistance • Molecular surveillance strategy defined or revised for 10 diseases • Strengthened ECDC procurement process for external quality assessment schemes	Verification by technical audits of Member States and other components. [NB. The midterm evaluation may result in the formulation of specific targets and options for action.]	• Done: second report published in August 2016 • Done: May 2016 • Done: May/October 2016 • Done • Done

Health communication

No.	Objective	Indicator	Target 2016	Verification	Result 2016
13	Publication of topical online information within ECDC's remit through the web portal and social media channels	Usage of the ECDC web portal and social media channels	+ 10% web visitors and social media followers Certification by an external party (HON)	Web and social metrics used for verification Measure on quality will be in the annual stakeholder survey Health on the Net (HON) http://www.hon.ch for reference	+119% number of unique visitors, and + 97% number of sessions, largely but not only due to increased interest in Zika content +30% increase of number of followers of the corporate Twitter account - Quality of the web portal • Clarity of language 87% • Ease in finding 60% • Frequency of updates 74% • Quality and reliability 80% • Added value 83% - Response to the needs and expectations from social media: 53% <i>(source: external stakeholders survey 2015 – NB: the Stakeholder survey has been discontinued, so it is difficult to get this information for 2016; a revision of the indicator will be proposed in 2017)</i> HON certification will be pursued for the new web portal to be released in 2017.
14	Support to Member States and Commission in regard to public health campaigns and provide training and tools for risk communication.	Activities and actions delivered according to approved planning	100% delivery within agreed timelines	Records on file of activities and actions	100%: - European Antibiotic Awareness Day media toolkit was delivered as planned in advance of EAAD on 18 November. - Social media strategy guide for public health organisations was delivered in May 2016. - Coordinating Committee of the National Focal Points for Communication has been set up. - Support to ECDC-ASEF meeting on emergency risk communication and preparedness was provided.
15	Provision of scientific input to crisis communication in case of Communicable diseases events/emergencies coordinated by the Health Security Committee in liaison with the Commission according to articles 11 and 17 of Decision 1082/2013/EU	Proportion of lines to take (LTTs), press material shared	100% input to all critical events	Quality and timeliness verified by feedback from Commission on HSC actions and decisions	100% of LTTs and press releases were shared with the Commission. LTTs on Zika were further shared with the HSC Communicators' Network by the Commission. Input and support to HSC Communicators' Network and HSC Zika working group conference call on Zika sexual transmission was provided.
	Consolidate the high level profile and attractiveness of Eurosurveillance	Number of issues and items published Impact factor for Eurosurveillance	- 50 issues and 200 items published in 2016 - IF >2	Eurosurveillance web site Journal Citation Reports, Thomson Reuters	50 issues ; 234 items published IF = 5.98

Disease programmes

No.	Objective	Indicator	Target 2016	Verification	Result 2016
16	Strengthened Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	Number and type of tools, products and activities aimed at realising the SMAP deliverables.	90%	Measured and verified by Management Information System	90% (39/43) ARHAI= 7/8 EVD = 4/4 FWD = 10/11 HIV = 3/3 FLU = 4/5 TB = 2/3 VPD = 9/10
17		Satisfaction by the Member States on the value of the Disease Programmes	>80% satisfaction by two-third of the respondents	As measured by the annual stakeholder survey	See table below.

No.	Objective	Indicator	Target 2016	Verification	Result 2016
18		Added value of the disease programmes is periodically evaluated	Each programme is evaluated every 5 years and a follow-up plan is made and executed.		The preparation for a common protocol for the evaluation of the disease programme was started in 2016 and will be finalised in 2017. Subsequently, two disease programmes to be evaluated per year as from in 2017.

Satisfaction of Member States with the value of the Disease Programmes

	ARHAI	EVD	FWD	HSH	IRV	TB	VPD	Average
Relevance of priorities selected for the programme	86%	81%	82%	85%	87%	89%	83%	84%
Quality/reliability of the surveillance data collected	72%	74%	83%	58%	83%	88%	81%	77%
Efficiency of coordination of the programme (incl. networks)	77%	73%	83%	85%	74%	91%	71%	80%
Added value for Member States	86%	74%	84%	74%	87%	85%	80%	80%
Usefulness of scientific advice provided	84%	92%	87%	84%	91%	88%	81%	86%
Usefulness of laboratory support by ECDC	64%	69%	77%	78%	84%	88%	65%	75%
<i>Average per Disease Programme</i>	78.2%	77.3%	82.8%	77.3%	84.4%	88%	76.6%	
<i>Average number of respondents</i>	71	51	65	43	51	37	57	

Source: Annual stakeholders' survey 2015 *NB: the Stakeholder survey has been discontinued, so it is difficult to get this information for 2016; a revision of the indicator will be proposed in 2017)*

Ensuring independence

No.	Objective	Indicator	Target 2016	Verification	Result 2016
19	Implementation of the independence policy of the agency	Proportion of approved annual and specific declarations of interest (DoI) for delegates to Governing Bodies, ad hoc scientific panels, invited experts and ECDC staff members before participation to the specified activities as defined in the policy.	100 %	Data from the compliance officer	<p>Annual DoIs submitted by:</p> <ul style="list-style-type: none"> - nominated Management Board members and alternates: 84.4% - Management Board members and alternates attending meetings: 100% - nominated Advisory Forum members and alternates: 80.6% - Advisory Forum members and alternates attending meetings: 100% <p>External experts</p> <ul style="list-style-type: none"> - External experts for Rapid Risk Assessment: 100% - External experts at meetings: 80.4% - External experts for ad hoc scientific panels: N/A

Resource management and organisational development

No.	Objective	Indicator	Target 2016	Verification	Result 2016
20	Ensured best use of financial resources, timely correlated to the implementation of activities of the work programme.	Percentage of budget committed (C1) and percentage of payments executed (C1) in the same year as the commitment	<ul style="list-style-type: none"> 100% committed 80% paid 	Verified by Internal Audit Services	<ul style="list-style-type: none"> 98.02% of budget committed 79.26% of payments executed
		Percentage of invoices paid within the time limits of the ECDC Financial Regulation	<ul style="list-style-type: none"> 95% 		<ul style="list-style-type: none"> 75.61%
		Rate of cancellation of payment appropriations	<ul style="list-style-type: none"> 5% 	Total payments in year N and carry-forwards to Year N+1, as a % of the total EU funding and fee income, where applicable, received in Year N)	<ul style="list-style-type: none"> 3.47% 99.11% using the formula However it seems the target was not properly calculated in the work programme 2016. If dividing the balance of the outturn 2016 by the total revenue, the result is 4.5%. The target should be revised for the next SPD to follow the formula.
		Rate of outturn	<ul style="list-style-type: none"> 5% 		
21	Implementation of the <i>annual</i> work programmes, aligned with the SMAP in order to ensure the full implementation of the SMAP by 2020	Proportion of activities implementation of the Annual Work programme	85%	Verified by Internal Audit Services	<ul style="list-style-type: none"> 94% of activities implemented (90% completed, 4% partly) 5% postponed to WP2016 or WP2017 1% cancelled
	Ensured swift and timely fulfilment of the Agency's establishment plan correlated to the implementation of activities of the work programme	Average vacancy rate	5%	% of authorised posts of the annual establishment plan which are vacant at the end of the year, including job offers sent before 31st December	<ul style="list-style-type: none"> 9.3% Following the General court judgment from 24 September 2015 (Cases T-124/13 Italy vs Commission and T-191/13 Spain vs Commission) ECDC had not been able to publish posts on EPSO until the issue of translating vacancy notices into all EU languages was clarified. This issue severely affected ECDC's ability to fill posts in the latter part of 2015 and in the first quarter of 2016 causing a delay in recruitments. In addition, 30 % of vacant posts were filled by internal candidates successful in open competitions, creating in turn other vacancies.
		Percentage of staff satisfaction/engagement	65%	ECDC biannual staff survey	No survey took place in 2016, the next survey will take place in 2017 and results will be published in the Annual report 2017
	Timely improvements in the adequacy and effectiveness of internal control systems	Rate (%) of external and accepted internal audit recommendations implemented within agreed deadlines (excluding 'desirable')	<ul style="list-style-type: none"> - 100% for critical observations - 90% for very important - 80% for important 	Internal Control	36% (5 out of 14) recommendations were implemented within the originally agreed deadlines (original deadline in 2016).

Information and communications technologies

No.	Objective	Indicator	Target 2016	Verification	Result 2016
22	Ensured agencies operations by maintaining constant availability of IT services elements to ensure a smooth running of the Centre's activities (dedicated applications, databases, web portal)	Performance of ICT services in regards to: <ul style="list-style-type: none"> availability of enterprise infrastructure services and backend systems availability of hosted applications under SLA proportion of ICT front-office incidents resolved as per SLA. 	<ul style="list-style-type: none"> 99% each 100% each 90% 		<ul style="list-style-type: none"> 24/28 infrastructure services and backend systems had an uptime of 100%; lowest uptime = 99.99% 13/25 applications had an uptime of 100%; lowest uptime = 99.99% 97% (out of 8240 requests)

Annex Ib. Implementation of the Work Programme 2016

Most of the activities of the Work Programme for 2015 have been implemented. The following tables provide more detail on the implementation by activity, of the Work Programme as adopted by the Management Board in December 2013.

<i>Expected outputs 2016</i>	<i>Implemented</i>	<i>Comments</i>
Strategy 1.1 Surveillance		
1. The Atlas displays data for all diseases and conditions under EU/EEA surveillance for which this makes sense epidemiologically, and country profiles; (1,3) (related to SMAP deliverable 9.1.1).	Yes	
2. The Atlas displays data quality indicators for selected diseases to data providers (2).	Yes	
3. Feasibility study report for TESSy machine-to-machine reporting (6) (related to SMAP 9.1.4).	Postponed	On hold: very little support from NFPd
4. Molecular surveillance data included in routine surveillance outputs for Salmonella, Listeria, E. coli (VTEC/STEC) and multidrug-resistant M. tuberculosis; (related to SMAP deliverable 9.1.6).	Yes	
5. Molecular surveillance business cases as per roadmap; (7) (related to SMAP deliverable 9.1.6).	Yes	
6. Subject to recommendations in and approval of business cases developed in 2015: Molecular surveillance pilot operation as per roadmap (7) (related to SMAP deliverable 9.1.6).	Yes	
7. Surveillance standards monitoring report for prioritised diseases; (8) (related to SMAP deliverable 9.1.3).	Postponed	Postponed until approval of the results of the EPHEsus project (on performance of surveillance systems), before defining the standards
8. Advanced data quality reports for all diseases under enhanced surveillance; (2) (related to SMAP deliverable 9.1.2).	Yes	
9. Provide tailored surveillance outputs on specific countries and diseases, upon request, to support EU policies and actions.	Yes	
Strategy 1.2. Epidemic intelligence		
1. Make the EPIS tools accessible and available for neighbourhood and enlargement countries in a step wise approach in order to improve the exchange and quality of the information between those countries and Member States	Yes	
2. Develop new utilities linked to EPIS in order to improve the capacity to manage emerging threats in a standard and homogenous approach	Postponed	Waiting for input from Surveillance Systems reengineering (SSR) project
3. Implement the development and extension of TTT to ensure high quality event information on threats detected in Epidemic Intelligence	Postponed	Waiting for input from Surveillance Systems reengineering (SSR) project
4. Update materials and training sessions on quality and timely performance of risk assessments from Member States	Yes	
5. Improve the capacity of EWRS for preparing reports and exchange essential data and information on public health confirmed alerts	Postponed	Still in the design phase that took more time than expected
6. Update and improve the different procedures and processes in the areas of Epidemic Intelligence, in order to ensure an appropriate support to the needs of the Commission and the Member States	Yes	
Strategy 2.1 Scientific advice		
1. Continued to deliver targeted, high quality scientific advice that impacts policy decisions by: Further develop the Scientific Advice Repository and Management System (SARMS) to manage scientific advice requests directed to ECDC; i.e. deploy a new functionality that allows external stakeholders to directly interact with SARMS (SARMS-IF) Apply public consultation for at least 2 scientific advice outcomes	Yes	
	Yes	

<i>Expected outputs 2016</i>	<i>Implemented</i>	<i>Comments</i>
2. Aligned with SMAP deliverable 9.4.2 on becoming a trusted source of scientific advice: Continuing support to the ECDC scientific advice development process; providing a framework for scientific excellence.	Yes	
3. Achieved a harmonised, integrated, transparent process of scientific advice that is a significant contribution to the EU's communicable disease control, in collaboration with the Member States, the other EU Agencies, and other stakeholders. • Represent ECDC at the EU-ANSA network of "Chief Scientists" of EU Agencies; • Organisation of the ESCAIDE Scientific Conference, involving Commission services like SANTE, CHAFEA, and other EU agencies; • ECDC scientific development strategy and coordination;	Yes Yes Yes	
4. Offered training to Member States and stakeholders in new methods for evidence-based public health. Developed methods and tools to facilitate the use of evidence-based principles in daily work. Deploy the PRECEPT8 tool to our stakeholders.	Yes Postponed	Whole project delayed, expected 2017
5. Proposals developed on using new technology to improve the accessibility, utility and flexibility of ECDC's scientific outputs	Yes	SARMS 2.0, improvements in new web portal
Strategy 2.2 Microbiology		
Objective 1: Annual ECDC report on microbiology support activities 2015 and EULab Cap report on state of laboratory capabilities in EU/EEA 2013-2014	Yes	
Objective 2: Molecular surveillance strategies evaluated for 10 pathogens and multidrug-resistance targets	Yes	
Objective 3: 1. participate in the final workshop 2016 of Cost benefit analysis study of CHAFEA/SANTE on reference laboratories"	Yes	
Objective 4: Framework for oversight of External Quality Assessment schemes for EU laboratory networks developed	Yes	
Strategy 3.1 EU and Country Preparedness Support		
1. Development of literature reviews on effective response arrangements for pre-hospital and hospital preparedness to highly contagious diseases (i.e. VHF, respiratory viral diseases).	Partly	Change in priorities due to Zika: replaced by literature review on mosquito-borne diseases
2. Regional NFP workshops on planning for and evaluating operational national public health emergency response plans.	Yes	Plus one workshop with ACEF
3. Two regional courses on pre- and hospital preparedness (patient nursing and transportation).	Partly	One done, joint to simulation exercise week on mosquito-borne diseases
3. Two regional courses on pre- and hospital preparedness (patient nursing and transportation).	Yes	
4. Launch and dissemination of public health emergency preparedness toolkit (planning guidance, evaluation tool, training curricula, infographics on management of highly infectious patients).	Yes	
5. Repository of good practice in planning, evaluation and capacity building for PH preparedness to emergencies.	Yes	
6. Data and analysis on individual Member States crisis preparedness structures and capacities.	Yes	
Strategy 3.2 Response and emergency and operations		
1. Update and improve the different procedures and processes in the area of Emergency Operations and EU preparedness in order to ensure an appropriate support to the needs of the Commission and the Member States.	Yes	
2. Maintain the capacity to offer quick deployment of ECDC (1) to support the Member States response in front of cross border threats for health.	Yes	
Strategy 4.1 Training		
1. One fellowship cohort graduating from EPIET and EUPHEM, one new cohort selected and in place and fellowship training curriculum implemented as planned. The size of the cohorts depending on the outcome of the strategic discussions 2014-15.	Yes	
2. The ECDC Learning Management System firmly established with a growing number of e-courses.	Yes	

<i>Expected outputs 2016</i>	<i>Implemented</i>	<i>Comments</i>
3. Courses delivered according to the Catalogue of the ECDC CPD Programme, and a number of Senior Exchange Programme visits completed. The courses will be organised by blended learning (online and face to face).	Yes	
4. Scientific leadership and pedagogical support provided to the MediPIET Programme, including chairing of the Annual MediPIET Scientific Conference. Links between MediPIET and EPIET/EUPHEM strengthened through exchange of course participants and faculty.	Yes	
5. The work with different European and international networks of capacity building continuously strengthened, including establishment of an ASPHER/ECDC network of Schools of Public Health engaged in prevention and control of communicable diseases.	Yes	
6. Core competencies in Tuberculosis finalised, based on work initiated in 2015.	Cancelled	Not perceived as a priority anymore: replaced by initiation of a competency framework on public health emergency preparedness
Strategy 4.2 International relations		
1. Supporting the Commission on: (i) the follow-up phase after the countries' assessments in 2013 – 2015, (ii) conducting the assessment of a new country using the revamped tool that takes into account the Decision 1082/2013/EU, and (iii) preparing for the next assessment to be conducted in the following year	Yes Yes Yes	
2. Continuing implementation of the ECDC pre-accession assistance activities supported by the Commission (ECDC-IPA4, subject to award decision of proposal in 2015), including support to participation of EU enlargement countries' experts in ECDC disease network meetings and technical discussions.	Yes	
3. Policy and action plan on engaging EU pre-accession countries and ENP partners in disease networks and ECDC surveillance activities, including into ECDC thematic EPIS platforms	Postponed	Waiting for TESSY reporting
4. Follow-up project under European Neighbourhood Instrument (ENI) has been initiated and implementation started to support the development of technical cooperation between ECDC and ENP countries, if granted by the European Commission (new)	Yes	Done but with a different and smaller scale based on the grant received from TAIEX
5. Supporting the Commission on technical dialogue with East ENP countries having signed Association Agreements with the EU (Ukraine, Moldova, Georgia)	Yes	
6. Continue to provide adequate scientific and technical support and leadership to the further development and consolidation of the MediPIET programme	Yes	
Strategy 5.1 Health Communication		
1. Efficiently communicate ECDC scientific and technical contents using a broad range of channels (web portal, social media, press...)	Yes	
2. Provide capacity building support to the Member States on risk and crisis communication related to Decision 1082/2013	Yes	
3. Within the framework of the ECDC disease programmes provide communication toolkits and other support to the Member States	Yes	
Strategy 5.2 Eurosurveillance		
1. The website will be optimised with features commonly provided by other scientific journals to (i) offer modern functionalities design for the benefit of readers and authors alike, (ii) to allow editors to work more efficiently through a content management system.	Yes	
2. The visibility of the journal will be further enhanced by a scientifically attractive seminar marking the 20th anniversary of the journal, embedded in a large conference and presence of staff at scientific conferences.	Yes	
3. Follow up actions of the editorial board meeting mid 2015 will be implemented.	Yes	
4. Series of scholarly, educational articles aimed at capacity building and contribution to life-long learning.	Yes	
Strategy 6.1 Antimicrobial resistance and healthcare-associated infections - ARHAI		
HAI-Net: improved country participation in surveillance of surgical site infections (HAI-Net SSI) and HAIs in intensive care units (HAI-Net ICU); report on surveillance of surgical site infections 2013-2014, including mortality estimates	Yes	
Revised estimates of the burden of HAIs and AMR	Yes	

<i>Expected outputs 2016</i>	<i>Implemented</i>	<i>Comments</i>
HAI-Net: initiation of the third point prevalence survey in long-term care facilities	Yes	
HAI-Net: initiation of surveillance of Clostridium difficile surveillance	Yes	
Preparation of Surveillance Atlas of Infectious Diseases (incl. country summary sheets): AMR, antimicrobial consumption, HAIs, structure and process indicators on prevention and control of HAIs	Yes	
EARS-Net: annual report 2015 and updated interactive database on surveillance of AMR	Yes	
ESAC-Net: updated interactive database 2015 on surveillance of antimicrobial consumption and pilot reporting on antimicrobial consumption in hospitals	Yes	
Preparatory work for the 2nd European Survey of Carbapenemase-Producing Bacteria, including molecular typing	Yes	
Support the standardisation of antimicrobial susceptibility testing methods in Europe, External quality assessment exercise on performance and compliance with EUCAST standards of the laboratories participating in EARS-Net	Yes	
Continue the implementation of the directory (repository) of online resources for the prevention and control of HAI and AMR, including information on projects funded by the European Commission	Yes	
First toolbox of essential control options and interventions to prevent and control HAIs and AMR	Postponed 2017	Lack of resources (staff absent not replaced)
Country visits in response to requests from Member States	Yes	
Contribution to the 2nd Joint Interagency Antimicrobial Consumption and Resistance Analysis Report (JIACRA)	Yes	
Contribution to international cooperation initiatives such as the Transatlantic Task Force on Antimicrobial Resistance (TATFAR); Cooperation with WHO/Europe to implement the regional strategy on AMR	Yes	
9th European Antibiotic Awareness Day (EAAD), 18 November 2016	Yes	
Contribution to an "annual world antibiotic awareness campaign" as proposed by WHO in its draft Global Action Plan on AMR	Yes	
Support the WHO "SAVE LIVES: Clean Your Hands" hand hygiene campaign by publication of ECDC-related outputs on 5 May 2016	Yes	
Scientific advice to the Commission as to future AMR policies (impact assessment, advice on draft EU action plan on AMR, including on suitable indicators)	Yes	
Strategy 6.2 Emerging and Vector-borne Diseases – EVD		
1. In depth analysis of TESSy data and dissemination of specific reports/publications with integration of animal and/or vector data based on the One Health approach where appropriate.	Yes	
2. Timely surveillance of mosquito-borne diseases and development of an early information system.	Yes	
3. Laboratory capacity building for early detection and surveillance of EVDs through an outsourced network, in coordination with the Microbiology Coordination Section and other laboratory related EC initiatives to avoid overlaps.	Yes	
4. Data collection on disease vectors and the pathogens they transmit for updated vector distribution maps (mosquitoes, ticks and sand-flies), and ad hoc entomological support (through a joint project with EFSA via an outsourced network).	Yes	
5. Perform risk analyses of emergence of vector-borne diseases and develop assessment tools and risk mapping/forecasting/models, aiming for effective EVD surveillance and Member State preparedness.	Yes	
6. Assessment of pathogen importation through global traffic and trade and disease situation monitoring (dengue, chikungunya, zika etc.).	Yes	
7. Finalization of a case definition for Lyme neuroborreliosis, development of surveillance of Lyme borreliosis at the EU level (follow-up of previous piloting) to assess trends and burden of disease, and development of communication strategies.	Partly	Lyme is still under discussion with the member States
8. Technical advice for supporting preparedness and training programmes on EVDs at ECDC.	Yes	
8. Insure maintenance and development of tools that facilitate access to and analyses of relevant environmental data.	Yes	
Strategy 6.3 Food and Waterborne Diseases and zoonoses - FWD		
1. Strategic inter-agency structure established to support the implementation of joint molecular surveillance	Yes	

<i>Expected outputs 2016</i>	<i>Implemented</i>	<i>Comments</i>
2. FWD network and ELDSNet network meetings organised and meeting reports produced	Partly	The FWD network was replaced by a workshop on listeria sequencing assessment.
3. Production of at least one peer review publication on the analysis and interpretation of surveillance data submitted to ECDC in Eurosurveillance or another journal	Yes	
4. Report on public health risk associated with emergence of hepatitis E virus in EU/EEA	Yes	
5. Standard Operating Procedures for cross-sectoral investigation of mixed human, animal, food, feed, and environment molecular typing clusters is fully operational and linked to the SOP for Rapid Outbreak Assessment.	Yes	
6. The European Union Summary Report on zoonoses, zoonotic agents and foodborne outbreaks 2014, and The European Union Summary Report on antimicrobial resistance in zoonotic and indicator bacteria from humans, animals and food in 2014	Yes	
7. Surveillance report on Legionnaires' disease will be continued	Yes	
8. Reporting of quantitative AMR data from at least 20 Member States will be continued for monitoring human Salmonella and Campylobacter infections	Yes	
9. Expert Exchange Programme for food- and waterborne diseases and Legionnaires' disease (FWDEEP)	Yes	
10. ELITE: to finalise and publish the joint ECDC-EFSA- EURL-Lm report on epidemiology of Listeria based on simultaneous sampling of food and human isolates and description based on Pulsed Field Gel Electrophoresis (PFGE).	Postponed	Postponed due to lack of human resources in 2016
11. ELITE: to initiate the continuation study with whole genome sequencing.	Yes	
Strategy 6.4 HIV, Sexually Transmitted Infections and viral Hepatitis – HSH		
1. Continue to develop guidance on youth as well as scientific advice on sex work with the emphasis to support Member States in the implementation of comprehensive approaches to HIV, hepatitis B/C and STI prevention and control	Yes	
2. Conduct a European disease network meeting in the field of HIV and STI and ensure that the 'EU-plus' countries are informed about relevant developments for HIV/STI control by participation in this network meeting. Members of the networks will increase their impact by sharing and learning on best practices and experiences in surveillance, prevention and control from other countries	Yes	
3. Launch of a HIV and hepatitis B and C testing guidance	Yes	
4. Develop and possibly publish evidence based estimates of Member States- and EU-level at-risk population sizes, prevalence/incidence estimates and modelling data for HIV, Chlamydia and hepatitis B and C to help plan better the comprehensive approaches to HIV, hepatitis B/C and STI prevention and control in Member States	Yes	Dropped the work on hepatitis to focus work on prevalence study
5. Production at least one peer review publication on the analysis and interpretation of surveillance data submitted to ECDC in Eurosurveillance or another journal	Yes	
6. Data and analysis on Member State level to support EU policies and actions on key infectious diseases including HIV and viral hepatitis).	Yes	
7. Support the Commission in establishing a policy framework for HIV/AIDS, and hepatitis B/C prevention and control (possibly in conjunction with STI and TB) by providing data, evidence and guidance on best practice.	Yes	
Strategy 6.5 Influenza and other respiratory viruses - IRV		
1. Strengthen the routine surveillance mechanism for monitoring of severe respiratory disease, risk factors and influenza mortality. More flexible surveillance data outputs developed based on the Surveillance Atlas.	Yes	
2. Timely and high-quality risk assessment on emerging respiratory pathogens, outbreaks	Yes	
3. More EU Member States report seroepidemiological data and molecular strain typing results	Yes	Seroepidemiological data not a priority for the Member States
4. Timely vaccine effectiveness estimates provided with improved methodology (4)	Yes	

<i>Expected outputs 2016</i>	<i>Implemented</i>	<i>Comments</i>
5. Need for improved EU-level RSV surveillance reviewed. RSV is likely the respiratory virus with the second highest burden in EU and there is a vaccine for RSV in the pipeline. Currently a limited number of EU Member States report RSV surveillance data to ECDC as part of the influenza surveillance; however, the need for a routine surveillance system should be evaluated. An additional 0.5FTEs would be needed for this activity	Yes	
6. Three case studies on multi-sectorial pandemic or respiratory disease preparedness done	Partly	Topic changed to polio, due to change in priorities
7. Production at least one peer review publication on the analysis and interpretation of surveillance data submitted to ECDC in <i>Eurosurveillance</i> or another journal	Yes	
Strategy 13. Vaccine-preventable diseases - VPD		
"Strengthening EU-wide VPD surveillance and infrastructure for monitoring the impact of vaccination programmes": Continue providing technical support to Member States and the European Commission for the implementation of the 2011 Council Conclusions on Childhood Immunisation and the foreseen new Council Conclusions on immunisation. Continue efforts of the IMI ADVANCE project; Collaboration with the H2020 project I-MOVE-PLUS.	Yes	
Scientific Advice: Evidence for guidance document collected and guidance document published on priority diseases. 2016 will focus on finalising guidance on meningococcal B vaccination and further initiate guidance on pneumococcal vaccination in adults	Partly	Lack of human resources, but HPV guidance produced
Scientific Advice and Preparedness: Continue following developments of re-emerging VPDs (as for example poliomyelitis) and providing EU/EEA and Member States with support as needed.	Yes	
Scientific Advice: Further develop methodologies and guidance for strengthening of immunisation systems in the EU/EEA Member States under the umbrella of the VENICE project for both VPDs and influenza, as well as for strengthening the evidence base of immunisation programmes.	Yes	
Scientific Advice: Provide communication toolkits for healthcare workers supporting vaccination activities with a special focus on reaching vaccination-hesitant groups and piloting social marketing tools.	Yes	
Surveillance: data and analysis on EU Member States level of vaccine preventable diseases (rate of vaccination, national measures).	Yes	
Surveillance: Continue the implementation sentinel surveillance systems for pertussis as well as for invasive pneumococcal disease.	Yes	
Surveillance: Maintain high quality epidemiological, laboratory and molecular surveillance for VPDs.	Yes	
Surveillance: Further implement meningococcal molecular surveillance	Yes	
Surveillance: Production of at least one peer review publication on the analysis and interpretation of surveillance data submitted to ECDC in <i>Eurosurveillance</i> or another journal	Yes	
Public Health Microbiology: Maintain and strengthen the Invasive Bacterial Diseases (IBD) and pertussis laboratory networks and their activities	Yes	
Develop a protocol for conducting sero-surveillance studies on Vaccine Preventable Diseases	Yes	
Stakeholder Interactions: Organise the biannual VPD network meeting, bringing together a number of the sub networks for the first time since the new CCB structure was adopted; organise Eurovaccine 2016, in parallel with ESPID (European Society for Paediatric Infectious Diseases).	Yes	
Strategy 6.7 Tuberculosis - TB		
1. Scientific advice: Assessment of latent TB control as a programmatic intervention	Yes	
2. Update of the European Union Standards for Tuberculosis Care (ESTC)	Yes	
3. Scientific advice on interventions for TB prevention and control in hard to reach and vulnerable populations	Yes	
4. Evidence base for development of one or two scientific advice documents	Yes	
5. Coordination of Surveillance and Monitoring of TB in Europe, with an annual network meeting	Yes	
6. Coordination of laboratory network (European Reference Laboratory for Tuberculosis Network), with annual network meeting	Yes	

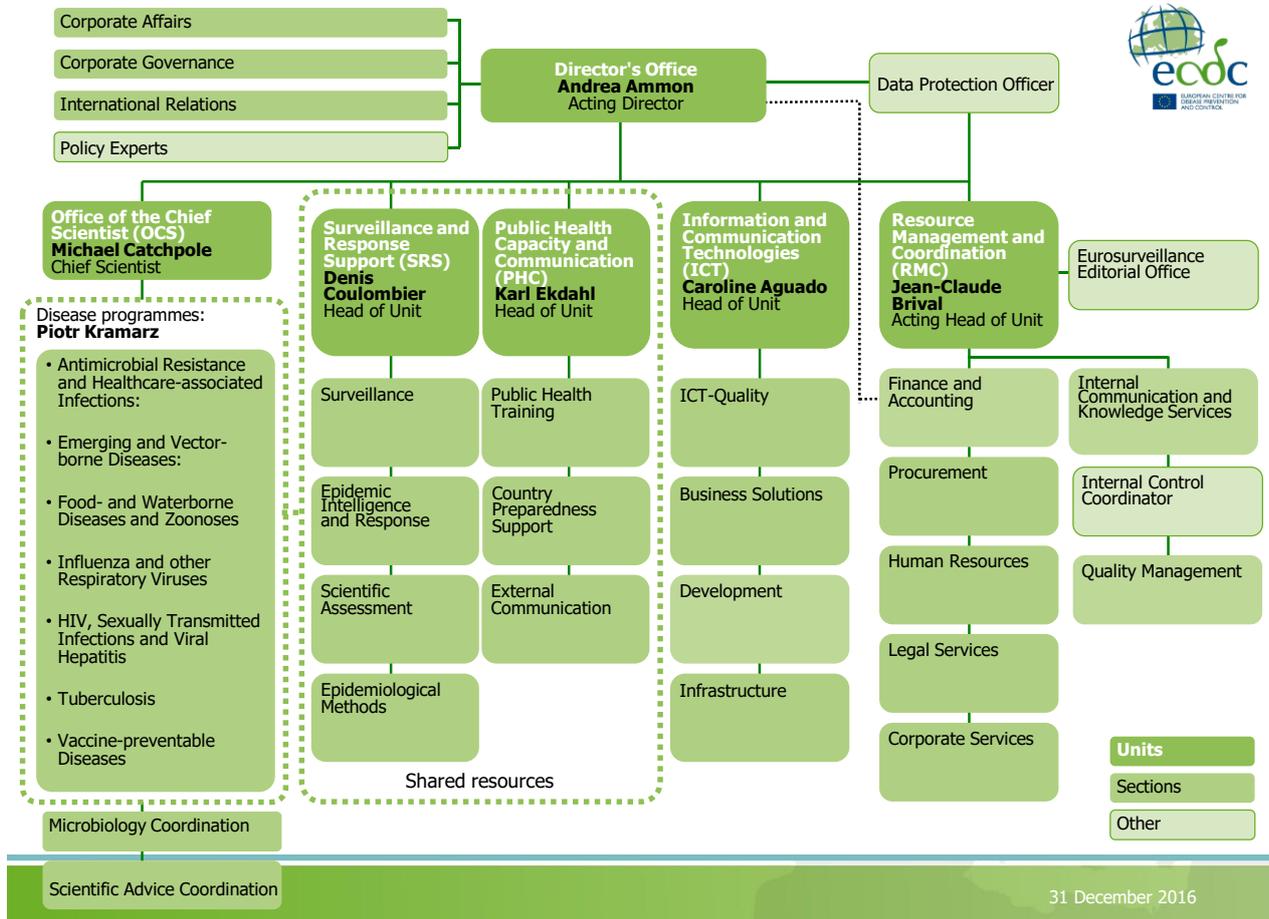
<i>Expected outputs 2016</i>	<i>Implemented</i>	<i>Comments</i>
7. Support to high priority countries with development and implementation of country strategies and activities for TB prevention and control	Yes	
8. Support to the Commission on development or monitoring the implementation of strategy document(s), e.g. an EU Action Plan on Communicable Diseases (HIV/AIDS, viral hepatitis, TB)	Cancelled	The Commission decided not to have an action plan
9. Support the Commission with data and analysis on Member State level to support EU policies and actions on key infectious diseases including tuberculosis (rate of infection, national measures, evidence-based interventions/actions)	Yes	
10. Production of at least one peer review publication on the analysis and interpretation of surveillance data submitted to ECDC in <i>Eurosurveillance</i> or another journal	Yes	
MANAGEMENT		
Strategy 7.1 General Management		
1. Midterm evaluation of the SMAP 2014-2020 leading to a proposal for revision to the MB.	Yes	
2. The submission of ADoI's and SDoI's follows a harmonised workflow using a - yet to be decided – format permitting easy storage and options for systematic review and collection of statistics.	Yes	
3. Search functions for the dual use of ADoI's are in place.	Yes	
Strategy 7.2 Collaboration and cooperation		
1. Implemented the procedures in ECDC regarding risk assessments, tools and guidance requested by the Commission to support implementation of Decision 1082/2013/EU	Yes	
2. ECDC Director has a well prepared and constructive annual exchange of views with the European Parliament's ENVI Committee	Yes	
3. Implemented the External Evaluation recommendations regarding cooperation with EU stakeholders	Yes	
4. Implemented the actions as agreed in the strategic cooperation paper signed with our host country Sweden	Yes	
Strategy 7.3. RESOURCES MANAGEMENT		
Human Resources		
1. New framework contract for medical services in place;	Yes	
2. Review of internal processes implementing the Staff Regulations and Implementing Rules carried out;	Yes	
3. New framework contract for accommodation support services in place.	Yes	
Finances and Accounting		
1. Interim evaluation of the ECDC wide implementation of the new FFR;	Yes	
2. Review of internal procedures;	Yes	
3. Specifications for electronic workflows infrastructure developed and implementation started;	Yes	
4. Annual report on performance of ex-ante verifications.	Yes	
Procurement		
1. Established proactive Procurement planning and preparation approach across the Centre in close collaboration with the programming exercise	Yes	
2. Improvement in excellence and compliance of Procurement and Contract Management activities	Yes	
3. eProcurement and green procurement development started and aligned with EU guidelines and tools like EU Green Procurement Policy, e-PRIOR and related electronic workflows	Partly	Green procurement is dependent upon the adoption of a Green policy
4. Implemented contract management best practices in the Centre and across our network of Agencies and other EU institutions.	Yes	
Legal services		
1. Provide regular ethics training for newcomers and others working at the Centre, and prepare for upcoming needs;	Yes	
2. Legal guidance to staff members that need to engage in agreements and/or activities with ECDC third parties;	Yes	
3. Provide guidance on state of compliance with Regulation 1049/2001 on public access to documents and develop best practise guidelines;	Yes	
4. Ad hoc advice regarding legal matters as requested.	Yes	

<i>Expected outputs 2016</i>	<i>Implemented</i>	<i>Comments</i>
Internal Control Coordination		
1. Report showing status on the implementation of and compliance with ECDC Internal Control Standards;	Yes	
2. Compliance reports produced in line with Compliance Review Plan;	Yes	
3. Internal Control Part of the Declaration of Assurance performed and included in AAR;	Yes	
4. Ex-post verification reports issued in accordance with annual work plans;	Yes	
5. Follow up of audit recommendations reported to AC and in AAR.	Yes	
Performance Management		
1. Preparation of the single programming document for 2017, following the new common standards for all EU agencies, including a review of the medium term plan	Yes	
2. Annual stakeholder survey to feed ECDC indicators	Yes	
3. Full implementation of the internal evaluation (2 internal evaluations foreseen)	Yes	
4. Project management methodology applied to all ECDC projects	Yes	
Corporate Services		
1. Manage the facility business as usual in an efficient way.	Yes	
2. Final ECDC Premises project: Complete the shortlisting and evaluation of proposed solutions Submit feasibility study to Management Board (March) Submit feasibility study to Budgetary Authority (April-June) Sign lease contract with awarded candidate	Yes	
3. Manage the Missions & Meetings business in an efficient way.	Yes	
Internal communication and knowledge services		
1. Action plan and amended IC strategy for Internal Communication activities based on evaluation;	Cancelled	Not implemented due to resource constraints
2. Newly implemented workflows in DMS;	Yes	
3. Integrated filing and archiving systems;	Yes	
4. Implementation of personalised features for Intranet/internal communication;	Yes	
5. Design of institutional repository ready and implementation started.	Yes	
6. Revised ECDC metadata core standard available.	Yes	
Strategy 7.4 Information and Communication Technology		
1. Maintenance of high availability of IT services	Yes	
2. Maintenance of the existing systems as per annual workplan	Yes	
3. Reengineered Surveillance systems as per application development roadmap to be defined in 2015	Yes	
4. Development of new core-business and administrative applications, and delivery of urgent developments in support to Serious Health Boarder Health Threat and PHE activities as per annual workplan (recurrent activity)	Yes	
5. Updated and continuous improvement processes	Yes	
6. Definition of the Architecture roadmap	Yes	

Annex II. Statistics on financial management

See Annex VI: Report on budget and financial management of the European Centre for Disease Prevention and Control (MB document MB39/04).

Annex III. Organisational chart



Annex IV. Establishment plan

ECDC establishment table 2017

Category and grade	Establishment plan in voted EU budget 2016	
	Officials	TA
AD 16		
AD 15		1
AD 14		5
AD 13		10
AD 12		12
AD 11		18
AD 10		24
AD 9		25
AD 8		18
AD 7		13
AD 6		1
AD 5		
Total AD		127
AST 11		2
AST 10		4
AST 9		4
AST 8		8
AST 7		12
AST 6		16
AST 5		9
AST 4		
AST 3		
AST 2		
AST 1		
Total AST		55
AST/SC6		
AST/SC5		
AST/SC4		
AST/SC3		
AST/SC2		
AST/SC1		
Total AST/SC		
Total		182

Information on the entry level for each type of post

Key functions (examples)	Type of contract (official, TA or CA)	Function group, grade of recruitment (or bottom of the brackets if published in brackets)	Indication whether the function is dedicated to administration support or policy (operational)
CORE FUNCTIONS			
Head of Department (please identify which level in the structure it corresponds to taking the Director as level 1)	Not applicable		
Head of Unit (please identify which level in the structure it corresponds to taking the Director as level 1)	TA (level 2)	AD 11, AD 12	Operational: Head of Unit
Head of Sector (please identify which level in the structure it corresponds to taking the Director as level 1)	TA (level 3)	AD 8	Operational or Support: Head of Section
Senior Officer	TA	AD 8	Operational: Senior Expert
Officer	TA	AD 5	Operational: Expert
Junior Officer	CA	FG IV	Operational: Scientific Officer
Senior Assistant	Not applicable		
Junior Assistant	Not applicable		
SUPPORT FUNCTIONS			
Head of Administration	TA	AD 12	Support
Head of Human Resources	TA	AD 8	Support
Head of Finance	TA	AD 8	Support (Head of Finance and Accounting)
Head of Communication	TA	AD 8	Operational (Health communication is part of the mandate of ECDC)
Head of IT	TA	AD 11	Operational: Head of Unit (ICT is key function to fulfil the mandate of ECDC, e.g. operating EWRS, TESSy)

Key functions (examples)	Type of contract (official, TA or CA)	Function group, grade of recruitment (or bottom of the brackets if published in brackets)	Indication whether the function is dedicated to administration support or policy (operational)
Senior officer	TA	AD 5	Support
Officer	TA CA	AST 4 FG IV	Support
Junior officer	CA	FG III	Support
Webmaster – editor	CA	FG IV	Operational (health communication is part of the mandate of ECDC)
Secretary	TA CA	AST/SC 1 FG II	Support
Mail clerk	Not applicable		
SPECIAL FUNCTIONS			
Data Protection officer	TA	AD 8	Support (this is the same post as the Head of the Legal Section)
Accounting officer	TA	AD 8	Support (this is the same post as the Head of Finance)
Internal Auditor	TA	AD 8	Support (Internal Control Coordinator)
Secretary to the Director	TA	AST 4	(Support)

Benchmarking against last year's results

Job type (sub) category	Year N-1 (%)	Year N (%)
Administrative support and coordination	16.9%	17.5%
Administrative support	16.5%	16.9%
Coordination	0.4%	0.6%
Operational	75.2%	74.4%
Top-level operational coordination	2.3%	2.7%
Programme management & implementation	61.6%	61.3%
Evaluation & impact assessment	0.0%	0.0%
General operational	11.2%	10.4%
Neutral	7.9%	8.1%
Finance/control	7.9%	8.1%
Linguistics	0.0%	0.0%

Annex V. Human and financial resources by activity

The activity-based budget (ABB) provides an overview of the use of human and financial resources by activity during the year. Since 1 January 2016, ECDC has been recording the working time staff members have spent per activity; 2016 was used to test this new method. Although the final results of the Activity Based Costing (final consumption of the budget) is available internally, results still need to be fine-tuned, based on lessons learnt during the test run.

Row Labels	Total FTE	Budget Title 1	Budget Title 2	Budget Title 3	Total Budget	Total %
1. Surveillance and epidemic intelligence	25.4	3,034,930	483,017	1,033,000	4,550,947	7.80%
1. Public health surveillance	5.6	563,280	106,107	449,000	1,118,386	1.92%
2. Molecular surveillance	0.4	53,335	7,860	-	61,194	0.10%
3. Methods to support disease prevention and control	4.7	578,993	89,792	335,000	1,003,785	1.72%
4. Management and administrative support	7.0	1,001,871	132,782	10,000	1,144,653	1.96%
Epidemic intelligence	7.7	837,452	146,477	239,000	1,222,929	2.10%
1. Epidemic intelligence	4.8	475,237	91,578	164,000	730,815	1.25%
2. Rapid assessment of public health events	2.9	362,215	54,899	75,000	492,114	0.84%
2. Scientific support (including microbiology)	14.7	1,991,262	280,926	992,000	3,264,189	5.59%
Scientific advice	9.4	1,238,259	178,273	877,000	2,293,533	3.93%
1. Scientific advice coordination	2.9	370,909	55,614	227,000	653,522	1.12%
2. Research coordination and studies	1.7	229,889	33,225	196,000	459,114	0.79%
3. Scientific liaison activities	0.6	46,617	11,432	384,000	442,049	0.76%
4. Management and administrative support	4.1	590,844	78,002	70,000	738,847	1.27%
Microbiology support	5.4	753,003	102,653	115,000	970,656	1.66%
1. Microbiology support	5.4	753,003	102,653	115,000	970,656	1.66%
3. Preparedness and response	14.4	1,891,276	274,853	620,000	2,786,129	4.77%
1. Country preparedness	5.1	705,512	96,699	460,000	1,262,211	2.16%
2. EU preparedness	1.0	126,064	18,578	128,000	272,641	0.47%
3. Management and administrative support	2.5	336,186	46,801	-	382,987	0.66%
4. Support to EU outbreaks	1.7	189,228	32,749	32,000	253,977	0.44%
5. Emergency operations	0.2	29,092	4,287	-	33,379	0.06%
6. Management and administrative support	4.0	505,195	75,739	-	580,935	1.00%
4. Training and capacity building	21.3	2,419,646	406,444	4,093,500	6,919,590	11.86%
Public Health Training	15.4	1,738,956	292,478	3,957,000	5,988,434	10.26%
1. Fellowships EUPHEM -EPIET	6.6	669,398	125,041	3,612,000	4,406,439	7.55%
2. Training networks	2.9	373,037	55,971	245,000	674,008	1.15%
3. MediPiet	0.8	91,077	14,648	-	105,725	0.18%
4. e-learning	2.7	293,261	50,969	100,000	444,230	0.76%
5. Management and Administrative support	2.4	312,184	45,849	-	358,032	0.61%
International relations	6.0	680,689	113,966	136,500	931,156	1.60%
1. Cooperation with the World Health Organisation (WHO)	0.1	12,888	1,191	-	14,079	0.02%
2. Working with non-EU Countries	5.9	667,802	112,775	136,500	917,077	1.57%
5. Communication	21.5	2,068,284	410,374	425,000	2,903,658	4.97%
Public Health Communication	15.5	1,433,142	294,383	335,000	2,062,525	3.53%
1. Press, media and Information services	3.0	293,029	56,685	160,000	509,715	0.87%
2. Editorial services	5.3	433,699	100,033	139,000	672,732	1.15%
3. Web portal and extranets	4.1	332,725	77,168	-	409,893	0.70%
4. Translations	0.1	7,769	1,905	36,000	45,675	0.08%
5. Management and Administrative support	3.1	365,919	58,591	-	424,509	0.73%
Eurosurveillance	6.1	635,143	115,991	90,000	841,133	1.44%
1. Eurosurveillance	5.7	557,816	108,846	90,000	756,661	1.30%
2. Management and administrative support	0.4	77,327	7,145	-	84,472	0.14%
6. Disease programmes	65.4	8,001,482	1,245,770	6,340,385	15,587,638	26.71%
1. Antimicrobial resistance and healthcare-associated infections - ARHAI	12.6	1,687,954	239,365	1,341,385	3,268,704	5.60%
2. Emerging and vector borne diseases - EVD	6.9	856,607	132,068	643,000	1,631,674	2.80%
3. Food- and Waterborne Diseases and Zoonoses - FWD	11.4	1,397,110	216,619	817,000	2,430,730	4.16%
4. HIV, Sexually Transmitted Infections and viral Hepatitis - HSH	9.6	1,187,277	183,394	1,020,000	2,390,671	4.10%
5. Influenza and other Respiratory Viruses - IRV	8.7	1,017,606	165,769	649,000	1,832,375	3.14%
6. Tuberculosis - TB	5.8	610,144	110,036	624,000	1,344,181	2.30%
7. Vaccine Preventable Diseases - VPD	10.4	1,244,784	198,518	1,246,000	2,689,303	4.61%
7. Management	123.3	12,976,923	4,049,727	4,777,500	21,804,150	37.36%
Management	11.8	1,354,993	434,598	-	1,789,591	3.07%
1. Strategic Advice	0.6	101,960	11,909	-	113,869	0.20%
2. Ensuring independence	1.1	153,149	21,436	-	174,585	0.30%
3. Organisation Governance meetings	3.3	307,240	272,283	-	579,523	0.99%
4. Management and administrative support	6.8	792,644	128,971	-	921,615	1.58%
Cooperation and collaboration	2.9	374,954	54,780	13,500	443,234	0.76%
1. ECDC in the 'family' of European Institutions and Bodies	0.8	150,195	14,767	-	164,962	0.28%
2. Working with the European Union Member States	2.1	224,759	40,013	13,500	278,272	0.48%

Row Labels	Total FTE	Budget Title 1	Budget Title 2	Budget Title 3	Total Budget	Total %
Resources Management	75.1	7,580,380	2,365,355	458,000	10,403,735	17.83%
1. Human Resources	15.2	1,486,732	288,905	-	1,775,637	3.04%
2. Finance and Accounting	16.1	1,383,646	498,245	-	1,881,891	3.22%
3. Legal and procurement	11.6	1,190,937	336,502	-	1,527,439	2.62%
4. Quality management, project management and planning	5.0	671,789	265,270	-	937,058	1.61%
5. Internal Control	1.0	206,205	36,054	-	242,259	0.42%
6. Internal Communication and Knowledge Services	8.3	786,340	540,981	458,000	1,785,321	3.06%
7. Corporate Services	11.4	1,044,449	227,929	-	1,272,379	2.18%
8. Management and administrative support	6.4	810,283	171,469	-	981,751	1.68%
ICT	33.59	3,666,596	1,194,993	4,306,000	9,167,590	15.71%
1. Business support	1.9	190,829	35,726	698,200	924,755	1.58%
2. Software services	17.9	1,964,450	666,323	2,375,000	5,005,773	8.58%
3. Hosting, operating, maintenance, administration and security of ap	5.0	491,677	95,270	1,059,000	1,645,947	2.82%
4. Hardware, software and services for the workstations and servers	4.8	493,675	91,459	173,800	758,934	1.30%
5. Management and Administrative support	4.0	525,965	306,216	-	832,180	1.43%
Not yet allocated	5.0	453,447	95,270	-	548,716	0.94%
Not Allocated	5.0	453,447	95,270	-	548,716	0.94%
Not yet allocated	5.0	453,447	95,270	-	548,716	0.94%
Grand Total	291.1	32,837,250	7,246,382	18,281,385	58,365,017	100.00%

* The five items not yet allocated correspond to the five seconded national experts whose recruitment and allocation has not finalised.

Annex VI. Final financial accounts

1. Final annual accounts – certification

The annual accounts of the European Centre for Disease Prevention and Control for the year 2016 have been prepared in accordance with the Financial Regulation applicable to the general budget of the European Union and the accounting rules adopted by the Commission's Accounting Officer, as are to be applied by all the institutions, agencies and joint undertakings.

I acknowledge my responsibility for the preparation and presentation of the annual accounts of the European Centre for Disease Prevention and Control in accordance with article 50 of ECDC's Financial Regulation.

I have obtained from the authorising officer, who certified its reliability, all the information necessary for the production of the accounts that show the assets and liabilities and the budgetary implementation of the European Centre for Disease Prevention and Control.

I hereby certify that based on this information, and on such checks as I deemed necessary to sign off the accounts, I have a reasonable assurance that the accounts present a true and fair view of the financial position of the European Centre for Disease Prevention and Control in all material aspects.

Stockholm, 23 May 2017



Anja Van Brabant
Accounting Officer of ECDC

2. Annual accounts – presentation

The annual accounts of the European Centre for Disease Prevention and Control include the financial statements and the report on implementation of the budget. They are accompanied by the report on budget and financial management during the year.

The financial statements comprise the balance sheet and the statement of financial performance at 31 December, the cash-flow table and the statement of changes in capital.

The objectives of financial statements are to provide information about the financial position, performance and cash flows of an entity that is useful to a wide range of users. For a public sector entity such as the European Centre for Disease Prevention and Control, the objectives are more specifically to provide information useful for decision making, and to demonstrate the accountability of the entity for the resources entrusted to it.

If they are to present a true and fair view, financial statements must not only supply relevant information to describe the nature and range of the activities, explain how it is financed and supply definitive information on its operations, but also do so in a clear and comprehensible manner, which allows comparisons between financial years. It is with these goals in mind that the present document has been drawn up.

The accounting system of the European Centre for Disease Prevention and Control comprises budget accounts and general accounts. These accounts are kept in euro on the basis of the calendar year. The budget accounts give a detailed picture of the implementation of the budget. They are based on the modified cash accounting principle.¹⁰ The general accounts allow for the preparation of the financial statements as they show all revenues and expenses for the financial year and are designed to establish the financial position in the form of a balance sheet at 31 December.

The annual accounts are drawn up in accordance with Article 92 of the Financial Regulation of the European Centre for Disease Prevention and Control adopted by the Management Board on 19th December 2013.

According to Article 98 of this Financial Regulation, the Centre's accounting officer shall send to the Commission's accounting officer by no later than 1 March of the following year its Provisional Annual Accounts, together with the report on budgetary and financial management during the year, referred to in Article 92 of this regulation.

The Accounting Officer shall send the final accounts, together with the opinion of the management board, to the accounting officer of the Commission, the Court of Auditors, the European Parliament and the Council, by 1 July of the following financial year.

The final accounts of ECDC will be published in the Official Journal of the European Communities together with the statement of assurance given by the Court of Auditors by 15th of November of the following year in accordance with Article 99 of ECDC's Financial Regulation.

¹⁰ This differs from cash-based accounting because of elements such as carryovers.

3. Financial statements

3.1 Balance sheet

Balance sheet	Notes	As of 31 Dec 2016	As of 31 Dec 2015 (All amounts in EUR)
Assets			
A. Non-current assets			
Intangible Assets	3.5.2	1.172.352,90	2.151.416,60
Intangible Assets under construction	3.5.2	321.830,22	237.557,82
Tangible Fixed Assets	3.5.3	1.727.382,97	2.254.236,37
Total Assets		3.221.566,09	4.643.210,79
Total non-current assets		3.221.566,09	4.643.210,79
B. Current assets			
Prefinancing	3.5.4	55.169,84	67.470,00
Stocks	3.5.5	18.589,45	20.138,74
Short Term Receivables	3.5.6	473.867,89	542.038,90
Deferred Charges	3.5.7	530.742,40	494.272,90
Cash and Cash equivalents	3.5.8	13.658.647,88	15.827.417,45
Total Current assets		14.737.017,46	16.951.337,99
Total assets		17.958.583,55	21.594.548,78
Liabilities			
A. Capital			
Accumulated surplus	3.4	9.808.341,75	10.734.224,85
Economic result of the year	3.4	(996.995,51)	(925.883,10)
Total capital		8.811.346,24	9.808.341,75
B. Non-current liabilities			
Long-term provisions	3.5.9	475.184,00	493.955,00
C. Current liabilities			
Short-term provisions	3.5.10	0,00	0,00
Accounts Payable	3.5.11	1.171.420,26	1.980.645,18
Pre-financing to be returned to the Commission	3.5.12	2.638.822,59	5.079.603,75
Open Pre-financing from Grants	3.5.12	208.029,32	573.622,12
Accrued charges	3.5.13	4.653.781,14	3.658.380,98
Deferred Income	3.5.13	0,00	0,00
		8.672.053,31	11.292.252,03
Total liabilities		17.958.583,55	21.594.548,78

3.2 Statement of financial performance

		2016	2015
			<i>(All amounts in EUR)</i>
Operating Revenue	3.5.14	56.078.018,63	53.654.478,33
Administrative Expenses - Total	3.5.15	(43.597.018,79)	(42.495.290,90)
<i>Staff related expenses</i>	3.5.15	<i>(26.727.857,68)</i>	<i>(26.722.958,90)</i>
<i>Depreciation/Amortisation/Write-off</i>	3.5.15	<i>(2.368.453,26)</i>	<i>(2.188.236,40)</i>
<i>Other Administrative Expenses</i>	3.5.15	<i>(14.500.707,85)</i>	<i>(13.584.095,60)</i>
Operational Expenses - Total	3.5.16	(13.633.212,38)	(12.337.911,01)
Surplus from Administrative & Operating Activities		(1.152.212,54)	(1.178.723,58)
Financial Revenues	3.5.17	0,00	0,00
Financial Expenses	3.5.17	(11.009,66)	(13.574,75)
Currency Exchange Gains/(Losses)	3.5.18	166.226,69	266.415,23
Economic Result for the Year		(996.995,51)	(925.883,10)

3.3 Cash flow statement

	2016	2015
Cash Flows from ordinary activities		
Surplus/(deficit) from ordinary activities	(996.995,51)	(925.883,10)
Operating activities		
<u>Adjustments</u>		
Amortization (intangible fixed assets)	1.277.970,82	1.258.810,24
Depreciation (tangible fixed assets)	991.659,44	927.686,16
Increase/(decrease) in Provisions for risks and liabilities	(18.771,00)	(12.564,11)
Increase/(decrease) in Value reduction for doubtful debts	0,00	0,00
(Increase)/decrease in Stock	1.549,29	14.378,71
(Increase)/decrease in Long term Pre-financing	0,00	0,00
(Increase)/decrease in Short term Pre-financing	12.300,16	(31.945,00)
(Increase)/decrease in Short term Receivables	31.701,51	33.930,48
(Increase)/decrease in Receivables related to consolidated EU entities	0,00	0,00
Increase/(decrease) in Accounts payable	163.480,00	(511.076,26)
Increase/(decrease) in Liabilities related to consolidated EU entities	(2.783.678,72)	1.937.820,30
Other non-cash movements	98.823,00	1.449,00
Net cash Flow from operating activities	(1.221.961,01)	2.692.606,42
Cash Flows from investing activities		
Increase of tangible and intangible fixed assets	(946.808,56)	(1.382.244,72)
Net cash flow from investing activities	(946.808,56)	(1.382.244,72)
Net increase/(decrease) in cash and cash equivalents	(2.168.769,57)	1.310.361,70
Cash and cash equivalents at the beginning of the period	15.827.417,45	14.517.055,75
Cash and cash equivalents at the end of the period	13.658.647,88	15.827.417,45

3.4 Statement of changes in capital

Capital (All amounts in EUR)	Reserves		Accumulated Surplus/Deficit	Economic result of the year	Total Capital
	Fair value reserve	Other reserves			
Balance as of 1 January 2016	0,00	0,00	10.734.224,85	(925.883,10)	9.808.341,75
Other revaluations	0,00	0,00	0,00	0,00	0,00
Reclassifications	0,00	0,00	0,00	0,00	0,00
Allocation of the Economic Result of Previous Year	0,00	0,00	(925.883,10)	925.883,10	0,00
Economic result of the year	0,00	0,00	0,00	(996.995,51)	(996.995,51)
Balance as of 31 December 2016	0,00	0,00	9.808.341,75	(996.995,51)	8.811.346,24

3.5 Notes to the financial statements

3.5.1 Accounting principles, rules and methods

The Annual Accounts of the Centre have been prepared according to Article 94 of the Financial Regulation, which stipulates that, the rules adopted by the Accounting Officer of the European Commission based on internationally accepted accounting standards for public sector, shall apply.

The financial statements referred to in Article 92 shall present information, including information on accounting policies, in a manner that ensures it is relevant, reliable, comparable and understandable.

3.5.1.1 Reporting currency

The Centre's reporting currency is the Euro.

3.5.1.2 Transactions and balances

Foreign currency transactions are converted into Euro using the exchange rates prevailing at the dates of the transactions.

Year-end balances of monetary assets and liabilities denominated in foreign currencies are converted into Euro on the basis of the exchange rates applying on 31 December.

Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of financial performance.

3.5.1.3 Payroll charges

All salary calculations giving the total staff expenses included in the Statement of financial performance of the Agency are externalized to the Office for administration and payment of individual entitlements (also known as the Paymaster's Office-PMO) which is a central office of the European Commission.

The PMO's mission is to manage the financial rights of permanent, temporary and contractual staff working at the Commission, to calculate and to pay their salaries and other financial entitlements. The PMO provides these services to other EU institutions and Agencies as well. The PMO is also responsible for managing the health insurance fund of the Institutions, together with processing and paying the claims of reimbursement from staff members. The PMO also manages the pension fund and pays the pensions of retired staff members. PMO is being audited by the European Court of Auditors.

The Agency is only responsible for the communication to the PMO of reliable information allowing the calculation of the staff costs. It is also responsible to check that this information has been correctly handled in the monthly payroll report used for accounting payroll costs. It is not responsible for the calculation of the payroll costs performed by PMO.

3.5.1.4 Intangible fixed assets & Internally Developed Intangible fixed assets

Intangible fixed assets are valued at their acquisition price converted into Euro at the rate applying when they were purchased, less depreciation and impairment. The exception is assets acquired free of charge that are valued at their market value. See amortisation rates below.

The Accounting Officer of the European Commission had granted a temporary exception with respect to the introduction of the International Public Sector Accounting Standards (IPSAS) based EC rules. One of these exceptions related to Accounting Rule n°6 and the non-capitalisation of internally developed intangible assets, normally software. From 2010 onwards, the exception has been lifted and, as a consequence, the annual accounts have to reflect the capitalization of internally developed intangible fixed assets in accordance with the rules laid down. From an accounting perspective, there are only three phases to an IT Project: a Research phase, a Development phase and an Operational phase. Under the accounting rule, only the development phase can be capitalized and recorded as 'Assets under construction'. Once the project goes live, the resulting asset (the development cost) will be amortised over its useful life which means the costs will be spread over several years.

The depreciation rates should range between 3 and 8 years. The depreciation follows the same principle as applied to the Centre's fixed assets i.e. if a project goes live in a particular month then the depreciation is applied from that same month.

The amount of research expenses incurred on IT projects and development costs not capitalized, are disclosed in these annual accounts 2016 as well as the yearly amortization of capitalised intangible assets. In addition to the criteria, which an intangible asset should meet, a threshold had to be set for capitalization of the total estimated development cost of an IT project. The threshold at ECDC was set at EUR 150.000.

The application of accounting rule n° 6 in the annual accounts of 2016 increases the transparency regarding the Centre's internally developed intangible fixed assets in particular its internally developed IT projects (for example EWRS, GIS, EPIS, VECTORNET, E3, Tessy, CRM, DMS and others).

The internally developed ICT project, called VECTORNET, which was previously booked as an asset under construction, has gone live in February 2016. Therefore, the development cost, which reached the threshold of 150.000 EUR for the project, has been capitalised and is being depreciated accordingly.

In 2016, the development cost of Eurosurveillance 2.0 and Webportal 2.0 project has been booked as asset under construction.

3.5.1.5 Tangible fixed assets

Tangible fixed assets are stated at historical cost. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Centre and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the statement of financial performance during the financial period in which they are incurred.

Depreciation is calculated using the straight-line method to allocate depreciation cost to the assets' residual values over their estimated useful lives, as follows:

Type of Asset	Depreciation Rate
Intangible assets	25%
Plant, machinery and equipment	10% to 25%
Furniture & Vehicles	10% to 25%
Fixtures and fittings	10% to 33%
Computer hardware	25%

The fixed asset's depreciation commences in the month in which the asset is delivered.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, on a regular basis. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount. Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in the statement of financial performance.

In addition, improvements to the building are capitalized and depreciated over the lease period which runs until 31/05/2018.

3.5.1.6 Impairment of assets

Assets that have an indefinite useful life are not subject to amortization and are tested regularly for impairment. Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized as the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use.

3.5.1.7 Inventories

The inventories shown in the accounts reflect the stock of publications of the Centre at year-end. These inventories are assets held for distribution in the ordinary course of its operations. The Centre's inventories are goods purchased which are for distribution to other parties free of charge. These parties are mainly our stakeholders: Management Board, Advisory Forum, Member States, and Competent Bodies etc. These publications are also distributed at conferences and events.

As the Centre controls the rights to create and issue various assets, these publications are recognized as inventories and reported at their printing cost. The cost of these inventories is assigned by using the first-in, first-out method (FIFO). Publications which are, at year-end, older than N-1, are written down as these hold no longer a service potential expected to be realized from their distribution.

3.5.1.8 Receivables

Receivables are carried at original amount less write-down for impairment. A write-down for impairment of receivables is established when there is objective evidence that the Centre will not be able to collect all amounts due according to the original terms of receivables. The amount of write-down is the difference between the asset's carrying amount and the recoverable amount, being the present value of the expected future cash flows.

3.5.1.9 Cash & cash equivalents

Cash and cash equivalents include the Centre's bank accounts.

3.5.1.10 Use of estimates

In accordance with generally accepted accounting principles, the financial statements necessarily include amounts based on estimates and assumptions by management. Significant estimates include, but are not limited to, accrued income and charges, contingent assets and liabilities, and degree of impairment of fixed assets. Actual results could differ from those estimates. Changes in estimates are reflected in the period in which they become known.

3.5.1.11 Provisions

Provisions are recognised when ECDC has a present legal or constructive obligation towards third parties as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. The amount of the provision is the best estimate of the expenditures, expected to be required, to settle the present obligation at the reporting date.

3.5.2 Intangible assets

All amounts in EUR

	Internally generated Computer Software	Other Computer Software	Total Computer Software	Other Intangible assets	Intangible fixed assets under construction	Total
Gross carrying amounts 01.01.2016	4.525.194,30	1.978.061,23	6.503.255,53	00,0	237.557,82	6.740.813,35
Additions		148.621,30	148.621,30		345.265,22	493.886,52
Disposals	(665.456,35)	(13.952,00)	(679.408,35)			(679.408,35)
Transfer between headings	260.992,82		260.992,82		(260.992,82)	0,00
Other changes						0,00
Gross carrying amounts 31 Dec 2016	4.120.730,77	2.112.730,53	6.233.461,30	0,00	321.830,22	6.555.291,52
Accumulated amortization and impairment 01.01.2016	(2.606.917,70)	(1.744.921,23)	(4.351.838,93)			(4.351.838,93)
Amortization	(1.159.214,08)	(118.756,74)	(1.277.970,82)			(1.277.970,82)
Write-back of amortization						0,00
Disposals	568.410,35	291,00	568.701,35			568.701,35
Accumulated amortization 31 Dec 2016	(3.197.721,43)	(1.863.386,97)	(5.061.108,40)			(5.061.108,40)
Net carrying amounts 31 Dec 2016	923.009,34	249.343,56	1.172.352,90	0,00	321.830,22	1.494.183,12

Not capitalised cost	Research cost	Not capitalised development cost
Cost of the year 2016	969.061,85	57.605,00

3.5.3 Fixed assets

All amounts in EUR

	Buildings	Plant and Equipment	Computer hardware	Furniture and vehicles	Other fixtures and fittings	Total
Gross carrying amounts 01.01.2016	2.251.163,34	17.128,00	4.558.664,21	876.758,12	1.503.085,39	9.206.799,06
Additions	10.068,28		357.942,74	11.950,55	86.912,47	466.874,04
Disposals			(523.949,83)	(1.264,88)	(404.875,46)	(930.090,17)
Transfer between headings						0,00
Other changes					3.097,35	3.097,35
Gross carrying amounts 31 Dec 2016	2.261.231,62	17.128,00	4.392.657,12	887.443,79	1.188.219,75	8.746.680,28
Accumulated depreciation 01.01.2016	(1.522.948,97)	(16.771,00)	(3.587.523,21)	(675.612,12)	(1.149.707,39)	(6.952.562,69)
Depreciation	(304.113,68)	(357,00)	(472.366,74)	(70.746,55)	(144.075,47)	(991.659,44)
Write-back of depreciation						
Disposals			521.992,83	1.153,88	404.875,46	928.022,17
Impairment						0,00
Write-back of impairment						0,00
Transfer between headings						0,00
Other changes					(3.097,35)	(3.097,35)
Accumulated depreciation 31 Dec 2016	(1.827.062,65)	(17.128,00)	(3.537.897,12)	(745.204,79)	(892.004,75)	(7.019.297,31)
Net carrying amounts 31 Dec 2016	434.168,97	0,00	854.760,00	142.239,00	296.215,00	1.727.382,97

3.5.4 Pre-financing

The Centre has signed grant agreements with several Health Institutions and Universities of EU Member States in relation to its activities. Pre-financing payments in relation to those grants are reported as receivables and cleared after the agreed deliverables and corresponding costs statements are submitted by the beneficiaries to ECDC. The total amounts of Pre-financing paid (but not cleared), accrued and remaining open as, at 31 Dec 2016 are reported below:

All amounts in EUR

Non cleared pre-financing at 31 Dec 2016	2.152.276,82
Accrued Charges on Pre-financing	(2.097.106,98)
Open pre-financing at 31 Dec 2016	55.169,84

3.5.5 Stocks

All amounts in EUR

	1 Jan 2016	Additions	Disposals	Write down at year end	31 Dec 2016
ECDC Publications	20.138,74	18.573,00	(20.122,29)	0,00	18.589,45
Other	0,00	0,00	0,00	0,00	0,00
Total	20.138,74	18.573,00	(20.122,29)	0,00	18.589,45

The additions reflect the amount of publications purchased at printing cost in 2016. The amount disposed shows the amount of publications distributed free of charge in 2016. The amount written down equals the value of publications in stock, which are older than N-1, as these hold no longer a service potential, expected to be realized from their distribution.

3.5.6 Short-term receivables

Short-term receivables relate to the following:

All amounts in EUR

	31 Dec 2016	31 Dec 2015
VAT Receivable from Member States	408.560,03	488.360,85
Receivable from other EU institutions and public bodies	17.772,31	19.219,72
Receivable regarding Staff	26.348,71	24.418,02
Other	21.186,84	10.040,31
Total	473.867,89	542.038,90

Short-term receivables comprise mainly of VAT Receivable from the Swedish Authorities. According to the Memorandum of Understanding signed between the Government of Sweden and the Centre, the latter has to file an application of Reimbursement of VAT paid on purchases greater than SEK 1.500 (approx. 157 EUR at EC year-end rate 2016). The VAT receivable appearing in the accounts relates to invoices paid in the last quarter of 2016. Previous claims regarding 2016 were already paid back in full.

The receivable regarding staff includes amounts to be received through deduction from the salary but also advances given to staff regarding missions.

An amount of EUR 20.908,91 is included under 'Other receivables' and reflects the amount due to ECDC following several Court rulings.

3.5.7 Deferred charges & accrued income

Deferred Charges relate mainly to warranties and maintenance costs in relation to ICT equipment that are paid in advance upon reception of goods but are valid for a period longer than 12 months (usually 3 years). The amount, not related to 2016, is reported here.

3.5.8 Cash in bank

The Centre keeps its accounts at SEB bank in Euro and in SEK.

The balances as of December 31, 2016 are as follows:

All amounts in EUR

	31 Dec 2016	31 Dec 2015
Acc No 59368289476 (EUR)	13.089.024,22	14.833.559,30
Acc No 59308246266 (EUR)	148.603,88	325.457,94
Acc No 54238209257 (EUR)	96.686,96	72.382,21
Acc No 54238218396 (EUR)	71.324,02	247.368,15
Acc No 52011096375 (SEK)	238.963,25	341.588,03
Acc No 52011170974 (SEK)	9.481,59	0,00
Acc No 52031003712 (SEK)	959,04	2.417,52
Acc No 52031009052 (SEK)	3.604,92	4.644,30
Total	13.658.647,88	15.827.417,45

The Centre mainly uses the account No 52011096375 to execute its local transactions in SEK while the Euro account No 59368289476 is used for cross border payments and the reception of the EU subsidy. All other accounts stated above, are used to receive funds and execute payments related to the grants and other contracts implemented by ECDC and received from the European Commission and Joint Undertaking IMI.

No cash has been handled by the Centre in 2016.

3.5.9 Long-term provisions

In accordance with the lease contract with the landlord, the Centre has the obligation to restore the building in its original state when vacating the premises at the end of the lease, this obligation is still reflected in the accounts. Based on a study carried out in 2012, the dilapidation cost of this obligation has been estimated at 4.539.200 SEK, which equals 475.184 EUR (converted at the official EC 2016 year-end exchange rate applicable for SEK).

3.5.10 Short-term provisions

There are no short-term provisions booked in the 2016 annual accounts.

3.5.11 Accounts payable

The breakdown of accounts payable at the end of the year is as follows:

All amounts in EUR

	31 Dec 2016	31 Dec 2015
Vendors	926.448,61	1.892.877,42
Other payables to the Commission	2.580,11	7.338,57
Payables to other EU agencies	32.810,64	5.356,94
Other payables to Member States	116.041,50	0,00
Sundry Payables	93.539,40	75.072,25
Total	1.171.420,26	1.980.645,18

3.5.12 Pre-financing

3.5.12.1 Pre-financing to be returned to the EC

In general, the amount represents the positive outturn of the budgetary accounts, which, according to the financial regulation, has to be paid back to the Commission.

In 2016, ECDC has a positive budget outturn (see also 5.1). As a result, 2.638.822,59 EUR has to be paid back to the Commission in 2017. There are two main sources, from a budgetary perspective, for the return of funds: EUR 1.231 thousand has to be returned regarding carried forward funds from 2015 and EUR 1.407 thousand regarding the Centre's 2016 budget.

3.5.12.2 Open pre-financing

An amount of EUR 208 thousand of pre-financing, received from the European Commission by ECDC, remains open at year-end and will cover expenditure related to the further implementation of a grant agreement for actions with the candidate and potential candidate countries (IPA) and a grant agreement from the European Neighbourhood and Partnership Instrument (ENPI)

3.5.13. Accrued expenses & deferred income

Accrued expenses are estimates provided by the authorising officers on the cost of services and deliveries of goods incurred during 2016 but not yet invoiced or processed. In addition, the cost of the untaken leave of staff during 2016 is reported here

All amounts in EUR

	31 Dec 2016	31 Dec 2015
Untaken annual leave	405.475,53	379.001,44
Accrued charges	4.248.305,61	3.279.379,54
Total	4.653.781,14	3.658.380,98

3.5.14. Operating revenue

The Centre is almost exclusively financed by the EU Budget together with the EFTA Member States contributing to its 2016 budget by 2,76%. In 2016, the Centre booked 55.608.827,41 EUR as revenue from the 58.247.650 EUR cashed from the European Commission.

An amount of EUR 100 thousand has been booked as miscellaneous income. This income consists of recovery of taxes, recovery of costs from staff regarding current and previous year, the cut-off on the IMI grant which is not consolidated, the reversal of a 2015 cut-off posting and the recovery of funds regarding an ex-post audit on a grant given by ECDC in previous years.

The Centre is also reporting as revenue an amount of EUR 368 thousand, which is the result of the year-end cut-off made regarding three grants which have been further implemented throughout 2016 by ECDC. Here, the posting versus open pre-financing is equal to the expenditures made under the grants during 2016.

Below is the breakdown of the revenue for the year:

All amounts in EUR

	2016	2015
Community Subsidy (including EEA contribution)	55.608.827,41	53.372.346,25
Reversal of provisions	0,00	10.962,25
Revenue from Grant implementation	368.462,56	139.175,79
Fixed assets	0,00	291,00
Other revenue	100.728,66	131.703,04
Total	56.078.018,63	53.654.478,33

3.5.15. Administrative expenses

Administrative expenses relate mainly to costs incurred by the daily operations of the Centre and include Staff related costs. The breakdown of the main areas is provided below:

All amounts in EUR

	2016	2015
Staff-related expenses	26 410 562.29	26 275 270.51
Staff-related expenses with other consolidated entities	0.00	42 611.00
Training Cost - Staff	317 295.39	405 077.39
Costs related to Seconded National Experts & Trainees	292 095.92	204 227.14
Mission Expenses	615 144.17	568 882.06
Management Board, Advisory Forum & Administrative Meetings	163 827.17	200 532.96
Rent and Building Costs	4 473 753.44	4 294 227.75
Depreciation/Amortisation/Write-off	2 368 453.26	2 188 236.40
Recruitment Related Costs	22 104.64	139 801.56
IT costs Research	969 061.85	668 643.05
IT costs Development	57 605.00	21 955.93
IT costs Operational	4 600 759.79	4 279 477.15
Expenses with other consolidated entities	906 766.11	695 285.67
Other	2 399 589.76	2 511 062.33
Administrative Expenses – Total	43 597 018.79	42 495 290.90

3.5.16. Operational expenses

Operational Expenses relate to the activities of the Operational Units and the Director's cabinet and also include the developments in the area of information and communication technology in relation to the operations.

All amounts in EUR

	2016	2015
Operational Expenses – Total	13.633.212,38	12.337.911,01

3.5.17. Finance income/expense

This heading covers the expenses relating to bank fees and interest on late payment of charges.

In 2016, the Centre has earned no interest income on the EU subsidy received.

3.5.18. Exchange rate gains/losses

The Seat of the Centre is outside the Euro-zone. As a result, a substantial part of its activities is carried out in Swedish Crowns while the Centre's income as well as its reporting Currency is Euro. The exchange rate differences encountered in 2016 consist of the revaluation of the Swedish Crown in relation to EUR at year-end, together with the adjustment of the weighting factor applied to the remuneration of staff employed in Sweden and differences related to the payments made in Swedish Crown as the exchange rate used in our financial system differs from the daily rate used by the bank when the payments are actually made. These three components resulted in exchange rate gains of EUR 166 thousand (versus gains of EUR 266 thousand in 2015).

3.5.19. Contingent assets & liabilities

As of 31 December 2016, the Centre had agreements with several contractors and suppliers for the amount of EUR 6.063 thousand. These agreements relate mainly to operational projects and are covered by budgetary commitments against the 2016 appropriations.

In accordance with the lease contract, the Centre has the obligation to restore the building in its original state when vacating the premises at the end of the lease. This obligation is reflected in the accounts. Based on a study which was carried out in 2012, the cost of this obligation has been estimated at 475.184 EUR (converted at the official EC 2016 year-end exchange rate applicable for SEK)

3.5.20. Operational leases

The Centre has a lease agreement with Akademiska Hus AB in order to cover its housing needs. The Centre's lease agreement runs till 31/05/2018 and the rental costs for the remaining period amount to 2.550.000 EUR.

In July 2016, ECDC signed a new lease agreement regarding new premises for the Centre to which it will move in the first half of 2018. The duration of the new lease agreement is for 15 years.

The payment schedule for the following years is presented below:

All amounts in EUR

	Charges paid during the year	Charges still to be paid			Total charges to be paid
		<1yr	1–5 yrs	>5 yrs	
Printers/Copiers	32 925.74	0.00	0.00	0.00	0.00
Buildings	1 760 354.42	1 800 000.00	12 000 000.00	28 000 000.00	41 800 000.00
Total	1 793 280.16	1 800 000.00	12 000 000.00	28 000 000.00	41 800 000.00

3.5.21. Financial instruments

Financial instruments comprise cash, current receivables and recoverables, current payables, amounts due to and from consolidated entities including accruals and deferrals.

Disclosure requirements

Financial instruments give rise to liquidity, credit, interest rate and foreign currency risks. The information on how those risks are managed is set out below.

The carrying amounts of financial instruments are as follows:

Carrying amounts	31 Dec 2016	31 Dec 2015
Financial assets		
Current receivables	409 931.91	492 540.18
Other receivables (including accruals and deferrals)	594 678.38	543 771.62
Cash and deposits	13 658 647.88	15 827 417.45
Total financial assets	14 663 258.17	16 863 729.25
Financial liabilities		
Current payables	2 849 432.02	5 660 564.44
Other payables	152 210.41	131 575.41
Accrued charges and deferred income	5 670 410.88	5 500 112.18
Total financial liabilities	8 672 053.31	11 292 252.03
Total net financial instruments	5 991 204.86	5 571 477.22

Liquidity risk

Liquidity risk is the risk that arises from the difficulty of selling an asset; for example, the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss or meet an obligation. Liquidity risk arises from the ongoing financial obligations, including settlement of payables.

The Agency manages its liquidity risk by continually monitoring its actual cash positions and by launching its funding request based on forecast of its expected outflows.

Therefore, the table below provides detail on the contractual maturity of financial and other liabilities.

Liquidity risk on these items is not managed on the basis of contractual maturity because they are not held for settlement according to such maturity and will be settled before contractual maturity at fair value.

Remaining contractual maturities	<1 year	1-5 years	>5 years	Total
As of 31 December 2016				
Payables with third parties	152 210.41	0 00	0 00	152 210.41
Payable with consolidated entities	2 849 432.02	0 00	0 00	2 849 432.02
Total Financial liabilities	3 001 642.43	0 00	0 00	3 001 642.43
As of 31 December 2015				
Payables with third parties	131 575.41	0 00	0 00	131 575.41
Payable with consolidated entities	5 660 564.44	0 00	0 00	5 660 564.44
Total Financial liabilities	5 792 139.85	0 00	0 00	5 792 139.85

The following measures are in place to manage liquidity risk:

- Bank accounts opened in the name of ECDC may not be overdrawn.

- The treasury and payment operations are highly automated and rely on modern information systems. Specific procedures are applied to guarantee system security and to ensure segregation of duties in line with the Financial Regulation, the internal control standards, and audit principles.
- EU budget principles ensure that overall cash resources for a given year are always sufficient for the execution of all payments.
- Credit risk

Credit risk is the risk of loss due to a debtor/borrower non-payment of a loan or other line of credit (either the principal or interest or both) or other failure to meet a contractual obligation. The default events include a delay in repayments, restructuring of borrower repayments and bankruptcy. Treasury resources are kept with commercial banks. The EU contribution is requested four times a year based on cash forecasts. Minimum cash levels, proportional to the average amount of quarterly payments executed from it, are kept on each account.

The maximum exposure to credit risk is:

Credit quality disclosures	31 Dec 2016	31 Dec 2015
Counterparties with external credit rating	14 067 207.91	16 315 778.30
Prime and higher rate	14 067 207.91	16 315 778.30
Upper medium grade	0.00	0.00
Lower medium grade	0.00	0.00
Non-investment grade	0.00	0.00
Counterparties without external credit rating	596 050.26	547 950.95
European Commission and consolidated entities	1 371.88	4 179.33
Other debtors who did not default	594 678.38	543 771.62
Total	14 663 258.17	16 863 729.95

- The maximum exposure to credit risk for amounts due from consolidated entities and other receivables is equal to the carrying amount.
- The current (customer) receivables/open recoveries disclosed above are non-impaired as they are either not past due or there are reasons to believe that the full recoverability of the debt isn't doubtful.
- Interest rate risk

As the Centre is not allowed to borrow any money, the interest rate risk could arise only in relation with the cash held at bank and therefore there is limited interest rate risk.

It could, however, earn interest on balances it holds on its bank accounts.

It is recognised that interest rates fluctuate and ECDC accepts the risk and does not consider it to be material.

- Foreign currency risk

Currency risk is the risk that the EU's operations or its investments' value will be affected by changes in exchange rates. This risk arises from the change in price of one currency against another.

The Centre is exposed to exchange rate fluctuations since it undertakes certain transactions in foreign currencies and has some of its bank accounts in Swedish Krona (SEK).

The Centre's revenue is primarily in EUR whilst some expenditure is made in local currency.

The largest expenditure made in Swedish Krona is the salaries of the staff. According to the Staff Regulations, up till 2014, the remuneration had to be paid in the currency of the country in which the staff member performs his or her duties. Since 2014, the remuneration can also be paid in EUR but in the Centre, all staff members but a few, in 2016, are paid in Swedish Krona, for an equivalent of 25.5 million EUR. In addition, the following costs are paid in Swedish Krona: the rent, telecommunication services, mission reimbursements to staff and office supplies.

It is recognised that exchange rates fluctuate and the Centre has to accept this risk, although this puts constraint on the budget which is not adapted accordingly.

The following table is a summary of the Centre's net foreign currency-denominated monetary assets (cash, debts) at year-end:

31 December 2016	SEK EUR equivalent	EUR	TOTAL EUR
Monetary assets	688 195.47	13 975 062.70	14 663 258.17
Receivables with Member States	408 560.03	0.00	408 560.03
All receivables with third parties (including accruals and deferrals)	26 626.64	568 051.74	594 678.38
Receivables with consolidated entities	0.00	1 371.88	1 371.88
Cash and cash equivalents	253 008.80	13 405 639.08	13 658 647.88
Monetary liabilities	0.00	3 001 642.43	3 001 642.43
Payables with third parties	0.00	152 210.41	152 210.41
Payables with consolidated entities	0.00	2 849 432.02	2 849 432.02
Net position	688 195.47	10 973 420.27	11 661 615.74

- Interest rate sensitivity analysis

Considering the limited impact that ECDC could experience from Interest rate risk, this interest rate sensitivity analysis is not relevant.

3.5.22. Related party disclosures

The Centre is managed by the Senior Management Team (SMT) consisting of the Director (Authorising Officer) and the heads of Unit (Authorising Officers by Delegation).

As from, 1 May 2015, the Acting Director replaced the Director. All members of the SMT are temporary agents of the European Communities in the following grades as of 31 Dec 2016:

Grade	Number of staff in the grade
AD13	1
AD12	3
AD11	1
AD10	1
Total	6

As such, their remuneration, allowances and other entitlements are covered by the Conditions of Employment of Other Servants of the European Communities

3.5.23. Pension obligations

ECDC staff are members of the European Communities Pension Scheme, which is a defined benefit pension plan.

A defined benefit plan is a pension plan that generally defines an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age and years of service.

In 2016, from July onwards, the contribution of staff to the pension scheme amounts to 10,04% of their basic salary.

The cost undertaken by the European Commission, is not presented in the ECDC's accounts.

Future benefits payable to ECDC staff under the EC Pension Scheme, are accounted for in the accounts of the European Commission and no such provisions are entered in the Centre's accounts.

4. Budgetary statements

4.1 Budget outturn account

The budgetary outturn account was prepared in accordance with the requirements of Commission Regulation (Article 143, Regulation (EU, Euratom) No 966/2012: Rules governing the annual account

All amounts in EUR

	2016	2015
REVENUE		
EU subsidy	58 247 650.00	58.451.950,00
Grant funds from Commission	0.00	543.134,52
Other revenue	191 501.60	187.219,05
TOTAL REVENUE (a)	58 439 151.60	59.182.303,57
EXPENDITURE		
<i>Title I: Staff</i>		
Payments	29 461 772.34	29.116.916,34
Appropriations carried over	1 297 778.34	1.255.268,83
<i>Title II: Administrative Expenses</i>		
Payments	5 179 794.97	5.289.545,03
Appropriations carried over	1 772 180.83	1.612.384,80
<i>Title III: Operating Expenditure</i>		
Payments	11 950 188.46	10.596.250,96
Appropriations carried over	8 258 413.20	8.249.105,49
TOTAL EXPENDITURE (b)	57 920 128.14	56.119.471,45
OUTTURN FOR THE FINANCIAL YEAR (a-b)	519 023.46	3.062.832,12
Cancellation of unused payment appropriations carried over from previous year	1 231 031.11	1 254 165.65
Adjustment for carry-over from the previous year of appropriations available at 31 Dec 2015 arising from assigned revenue	721 888.37	495 922.41
Exchange differences for the year (gain+/-loss-)	166 879.65	266 683.57
BALANCE OF THE OUTTURN ACCOUNT FOR THE FINANCIAL YEAR	2 638 822.59	5.079.603,75
Balance 2015	5 079 603.75	3.083.925,95
Positive balance from 2015 reimbursed in year 2016 to the Commission	-5 079 603.75	-3 083 925.95
Result used for determining amounts in general accounting	2 638 822.59	5 079 603.75
EU subsidy (2016 Revenue)	55 608 827.41	
Pre-financing remaining open to be reimbursed to EC in 2017	2 638 822.59	

4.2 Reconciliation between the Budget Outturn Account (see 4.1) and the statement of financial performance (see 3.2)

All amounts in EUR

Statement of financial performance 2016	(996.995,51)
Adjustment for accrual items (items not in the budgetary result but included in the economic result)	
Adjustments for Accrual Cut-off (reversal 31 Dec 2015)	(5.415.510,64)
Adjustments for Accrual Cut-off (cut-off 31 Dec 2016)	5.359.614,38

Unpaid invoices at year end but booked in charges	0,00
Depreciation of intangible and tangible fixed assets	2.368.453,26
Provisions	0,00
Recovery orders issued in 2016 in class 7 and not yet cashed	(13.000,00)
Pre-financing given in previous year and cleared in the year	58.922,63
Pre-financing received in previous year and cleared in the year	(347.268,48)
Payments made from carry-forward of payment appropriations	9.163.839,64
Other (reversal of deferred charges, stock decrease)	492.430,67
Adjustment for budgetary items (item included in the budgetary result but not in the economic result)	
Asset acquisitions (less unpaid amounts)	(720.613,31)
New pre-financing paid in the year 2016 and remaining open as of 31 Dec 2016	(55.169,84)
New pre-financing received in the year 2016 and remaining open as of 31 Dec 2016	2.638.822,59
Budgetary recovery orders issued before 2016 and cashed in the year	244,53
Budgetary recovery orders issued in 2016 on balance sheet accounts (not 7 or 6 accounts) and cashed	7.187,33
Payment appropriations carried over to 2017	(11.328.372,37)
Cancellation of unused carried over payment appropriations from previous year	1.231.031,11
Adjustment for carry-over from the previous year of appropriations available at 31.12 arising from assigned revenue	721.888,37
Other (deferred charges paid in 2016)	(526.681,77)
Budget Outturn Account 2016	2.638.822,59

5. Budget execution

Budget execution/fund source C1 – current year appropriations

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	RAL	Cancelled
A-1100	Basic salaries	11,709,400.00	11,667,430.39	99.64%	11,709,400.00	11,667,430.39	99.64%	0.00	41,969.61
A-1101	Family Allowances	1,750,000.00	1,726,201.61	98.64%	1,750,000.00	1,726,201.61	98.64%	0.00	23,798.39
A-1102	Expatriation Allowances	1,730,000.00	1,712,449.83	98.99%	1,730,000.00	1,712,449.83	98.99%	0.00	17,550.17
	Total Article 110	15,189,400.00	15,106,081.83	99.45%	15,189,400.00	15,106,081.83	99.45%	0.00	83,318.17
A-1111	Contract Agents - Basic Salaries	3,790,000.00	3,738,366.98	98.64%	3,790,000.00	3,738,366.98	98.64%	0.00	51,633.02
A-1112	Contract Agents - Allowances	1,182,000.00	1,168,960.95	98.90%	1,182,000.00	1,168,960.95	98.90%	0.00	13,039.05
	Total Article 111	4,972,000.00	4,907,327.93	98.70%	4,972,000.00	4,907,327.93	98.70%	0.00	64,672.07
A-1140	Birth & Death grants	5,000.00	2,181.41	43.63%	5,000.00	2,181.41	43.63%	0.00	2,818.59
A-1141	Travel expenses from place of employment to place of origin	520,000.00	503,132.55	96.76%	520,000.00	503,132.55	96.76%	0.00	16,867.45
A-1142	Overtime	105,000.00	88,890.72	84.66%	105,000.00	88,890.72	84.66%	0.00	16,109.28
A-1149	Learning & Development	400,000.00	399,228.35	99.81%	400,000.00	218,905.38	54.73%	180,322.97	771.65
	Total Article 114	1,030,000.00	993,433.03	96.45%	1,030,000.00	813,110.06	78.94%	180,322.97	36,566.97
A-1170	Freelance and joint interpreting and conference service interpreters	60,720.00	60,520.00	99.67%	60,720.00	42,720.00	70.36%	17,800.00	200.00
A-1173	Translations	265,000.00	249,606.54	94.19%	265,000.00	179,794.54	67.85%	69,812.00	15,393.46
A-1174	Payment for administrative assistance from the Community institutions	180,000.00	176,990.72	98.33%	180,000.00	173,490.72	96.38%	3,500.00	3,009.28
A-1175	Interim services	2,033,500.00	2,030,600.48	99.86%	2,033,500.00	1,267,803.28	62.35%	762,797.20	2,899.52
A-1176	Relocation Services	10,000.00	5,667.37	56.67%	10,000.00	2,832.37	0.00%	2,835.00	4,332.63
	Total Article 117	2,549,220.00	2,523,385.11	98.99%	2,549,220.00	1,666,640.91	65.38%	856,744.20	25,834.89
A-1180	Miscellaneous expenditure on recruitment	85,000.00	67,897.68	79.88%	85,000.00	37,055.14	43.59%	30,842.54	17,102.32
A-1181	Travel expenses	22,000.00	14,882.20	67.65%	22,000.00	14,882.20	67.65%	0.00	7,117.87
A-1182	Installation, resettlement & transfer allowances	140,000.00	82,248.60	58.75%	140,000.00	82,248.60	58.75%	0.00	57,751.40
A-1183	Removal Expenses	90,000.00	79,426.55	88.25%	90,000.00	55,220.06	61.36%	24,206.49	10,573.45
A-1184	Temporary daily subsistence allowance	80,000.00	52,430.19	65.54%	80,000.00	52,430.19	65.54%	0.00	27,569.81
	Total Article 118	417,000.00	296,885.22	71.20%	417,000.00	241,836.19	57.99%	55,049.03	120,114.78

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	RAL	Cancelled
A-1190	Weightings applied to remunerations	4,994,265.00	4,930,624.89	98.73%	4,994,265.00	4,930,624.89	98.73%	0.00	63,640.11
A-1191	Provisional Appropriation (rappel)	0.00	0.00	0.00%	0.00	0.00	0.00%	0.00	0.00
	Total Article 119	4,994,265.00	4,930,624.89	98.73%	4,994,265.00	4,930,624.89	98.73%	0.00	63,640.11
	Total Chapter 11	29,151,885.00	28,757,738.01	98.65%	29,151,885.00	27,665,621.81	94.90%	1,092,116.20	394,146.99
A-1300	Mission expenses, travel expenses and incidental expenditure	674,280.00	667,597.33	99.01%	674,280.00	543,830.09	80.65%	123,767.24	6,682.67
	Total Article 130	674,280.00	667,597.33	99.01%	674,280.00	543,830.09	80.65%	123,767.24	6,682.67
	Total Chapter 13	674,280.00	667,597.33	99.01%	674,280.00	543,830.09	80.65%	123,767.24	6,682.67
A-1410	Medical Service	170,000.00	157,975.75	92.93%	170,000.00	102,051.65	60.03%	55,924.10	12,024.25
	Total Article 141	170,000.00	157,975.75	92.93%	170,000.00	102,051.65	60.03%	55,924.10	12,024.25
	Total Chapter 14	170,000.00	157,975.75	92.93%	170,000.00	102,051.65	60.03%	55,924.10	12,024.25
A-1520	Staff Exchanges	301,500.00	294,520.09	97.68%	301,500.00	294,105.29	97.55%	414.80	6,979.91
	Total Article 152	301,500.00	294,520.09	97.68%	301,500.00	294,105.29	97.55%	414.80	6,979.91
	Total Chapter 15	301,500.00	294,520.09	97.68%	301,500.00	294,105.29	97.55%	414.80	6,979.91
A-1700	Entertainment & Representation Expenses	15,000.00	8,713.93	58.09%	15,000.00	4,061.93	27.08%	4,652.00	6,286.07
	Total Article 170	15,000.00	8,713.93	58.09%	15,000.00	4,061.93	27.08%	4,652.00	6,286.07
	Total Chapter 17	15,000.00	8,713.93	58.09%	15,000.00	4,061.93	27.08%	4,652.00	6,286.07
A-1801	Social Contact Between Staff	38,000.00	35,763.74	94.12%	38,000.00	14,859.74	39.10%	20,904.00	2,236.26
A-1802	Sickness Insurance	570,000.00	552,973.99	97.01%	570,000.00	552,973.99	97.01%	0.00	17,026.01

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	RAL	Cancelled
A-1803	Accident and Occupational Diseases	85,000.00	81,099.62	95.41%	85,000.00	81,099.62	95.41%	0.00	3,900.38
A-1804	Unemployment for temporary staff	205,000.00	203,168.22	99.11%	205,000.00	203,168.22	99.11%	0.00	1,831.78
	Total Article 180	898,000.00	873,005.57	97.22%	898,000.00	852,101.57	94.89%	20,904.00	24,994.43
	Total Chapter 18	898,000.00	873,005.57	97.22%	898,000.00	852,101.57	94.89%	20,904.00	24,994.43
	Total Title 1	31,210,665.00	30,759,550.68	98.55%	31,210,665.00	29,461,772.34	94.40%	1,297,778.34	451,114.32

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	RAL	Cancelled
A-2000	Rent & Related expenditure	1,760,354.43	1,760,354.43	100.00%	1,760,354.43	1,760,354.43	100.00%	0.00	0.00
A-2001	Insurance	9,000.00	8,955.98	99.51%	9,000.00	8,955.98	99.51%	0.00	44.02
A-2002	Water, Gas, Electricity etc	160,000.00	160,000.00	100.00%	160,000.00	121,558.86	75.97%	38,441.14	0.00
A-2003	Maintenance, cleaning	263,000.00	234,186.16	89.04%	263,000.00	181,663.74	69.07%	52,522.42	28,813.84
A-2004	Fitting-out	80,000.00	79,832.19	99.79%	80,000.00	42,759.92	53.45%	37,072.27	167.81
A-2005	Security of Building	699,645.57	666,732.56	95.30%	699,645.57	538,815.09	77.01%	127,917.47	32,913.01
A-2006	Restauration & Canteen costs	95,000.00	91,000.00	95.79%	95,000.00	77,000.00	81.05%	14,000.00	4,000.00
A-2009	Other expenditure on buildings	336,946.40	249,482.13	74.04%	336,946.40	138,565.86	41.12%	110,916.27	87,464.27
	Total Article 200	3,403,946.40	3,250,543.45	95.49%	3,403,946.40	2,869,673.88	84.30%	380,869.57	153,402.95
	Total Chapter 20	3,403,946.40	3,250,543.45	95.49%	3,403,946.40	2,869,673.88	84.30%	380,869.57	153,402.95
A-2110	Purchases of new hardware for operation the centre	800,500.00	799,727.93	99.90%	800,500.00	588,986.56	73.58%	210,741.37	772.07
A-2111	Purchase of new software for the operation at the centre	912,273.60	908,676.79	99.61%	912,273.60	690,302.17	75.67%	218,374.62	3,596.81
A-2112	Purchase and Maintenance of printing and reproduction equipment	30,000.00	29,779.78	99.27%	30,000.00	9,319.95	31.07%	20,459.83	220.22
A-2114	Developments to support administrative and management applications	1,209,500.00	1,190,807.88	98.45%	1,209,500.00	667,555.10	55.19%	523,252.78	18,692.12
	Total Article 211	2,952,273.60	2,928,992.38	99.21%	2,952,273.60	1,956,163.78	66.26%	972,828.60	23,281.22
	Total Chapter 21	2,952,273.60	2,928,992.38	99.21%	2,952,273.60	1,956,163.78	66.26%	972,828.60	23,281.22
A-2200	Technical equipment and AV installations	87,000.00	83,200.00	95.63%	87,000.00	40,640.00	46.71%	42,560.00	3,800.00
A-2201	Furniture	30,000.00	29,976.28	99.92%	30,000.00	17,229.00	57.43%	12,747.28	23.72
A-2202	Purchase and maintenance of vehicles	67,500.00	49,625.30	73.52%	67,500.00	4,009.30	5.94%	45,616.00	17,874.70
	Total Article 220	184,500.00	162,801.58	88.24%	184,500.00	61,878.30	33.54%	100,923.28	21,698.42
	Total Chapter 22	184,500.00	162,801.58	88.24%	184,500.00	61,878.30	33.54%	100,923.28	21,698.42

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	RAL	Cancelled
A-2300	Stationery and office supplies	60,000.00	58,848.18	98.08%	60,000.00	31,085.03	51.81%	27,763.15	1,151.82
A-2301	Financial and other charges, exchange losses	12,000.00	10,372.30	86.44%	12,000.00	9,872.30	82.27%	500.00	1,627.70
A-2302	Library expenses, purchase of books and info subscriptions	15,000.00	14,997.54	99.98%	15,000.00	12,389.44	82.60%	2,608.10	2.46
A-2306	Miscellaneous insurance	8,000.00	8,000.00	100.00%	8,000.00	7,239.79	90.50%	760.21	0.00
A-2307	Legal Expenses	63,280.00	60,300.00	95.29%	63,280.00	18,800.00	29.71%	41,500.00	2,980.00
A-2308	Business Continuity	30,000.00	30,000.00	100.00%	30,000.00		0.00%	30,000.00	0.00
A-2309	Other operating expenditure	14,000.00	13,970.52	99.79%	14,000.00	11,521.02	82.29%	2,449.50	29.48
	Total Article 230	202,280.00	196,488.54	97.14%	202,280.00	90,907.58	44.94%	105,580.96	5,791.46
	Total Chapter 23	202,280.00	196,488.54	97.14%	202,280.00	90,907.58	44.94%	105,580.96	5,791.46
A-2400	Postal and delivery charges	26,500.00	21,987.91	82.97%	26,500.00	21,956.91	82.86%	31.00	4,512.09
	Total Article 240	26,500.00	21,987.91	82.97%	26,500.00	21,956.91	82.86%	31.00	4,512.09
A-2410	Telecommunication and internet charges	156,000.00	153,355.32	98.30%	156,000.00	93,442.27	59.90%	59,913.05	2,644.68
	Total Article 241	156,000.00	153,355.32	98.30%	156,000.00	93,442.27	59.90%	59,913.05	2,644.68

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	RAL	Cancelled
	Total Chapter 24	182,500.00	175,343.23	96.08%	182,500.00	115,399.18	63.23%	59,944.05	7,156.77
A-2500	Governance and administrative meetings	196,500.00	128,300.84	65.29%	196,500.00	85,772.25	43.65%	42,528.59	68,199.16
A-2501	Evaluation and Strategic Management Consulting	124,000.00	109,505.78	88.31%	124,000.00	0.00	0.00%	109,505.78	14,494.22
	Total Article 250	320,500.00	237,806.62	74.20%	320,500.00	85,772.25	26.76%	152,034.37	82,693.38
	Total Chapter 25	320,500.00	237,806.62	74.20%	320,500.00	85,772.25	26.76%	152,034.37	82,693.38
	Total Title 2	7,246,000.00	6,951,975.80	95.94%	7,246,000.00	5,179,794.97	71.48%	1,772,180.83	294,024.20

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	RAL	Cancelled
B3-000	Surveillance	2,841,838.00	2,773,576.84	97.60%	2,841,838.00	1,445,639.26	50.87%	1,327,937.58	68,261.16
B3-001	Epidemic intelligence and response	326,730.00	306,498.10	93.81%	326,730.00	155,808.63	47.69%	150,689.47	20,231.90
B3-002	Scientific advice (including microbiology support)	6,368,219.00	6,210,894.00	97.53%	6,368,219.00	3,829,569.06	60.14%	2,381,324.94	157,325.00
B3-003	Public Health Training	4,070,210.00	4,009,499.32	98.51%	4,070,210.00	2,597,430.66	63.82%	1,412,068.66	60,710.68
B3-004	Health Communication	411,151.00	405,896.09	98.72%	411,151.00	279,275.01	67.93%	126,621.08	5,254.91
B3-005	Public Health Informatics	4,974,837.00	4,926,310.80	99.02%	4,974,837.00	2,840,083.57	57.09%	2,086,227.23	48,526.20
B3-006	Preparedness/Capacity support	530,000.00	505,487.24	95.37%	530,000.00	268,007.47	50.57%	237,479.77	24,512.76
B3-007	Eurosurveillance	90,000.00	89,890.39	99.88%	90,000.00	24,817.92	27.58%	65,072.47	109.61
B3-009	Collaboration and (country) cooperation	178,000.00	155,144.96	87.16%	178,000.00	86,340.07	48.51%	68,804.89	22,855.04
	Total Chapter 30	19,790,985.00	19,383,197.74	97.94%	19,790,985.00	11,526,971.65	58.24%	7,856,226.09	407,787.26
	Total Title 3	19,790,985.00	19,383,197.74	97.94%	19,790,985.00	11,526,971.65	58.24%	7,856,226.09	407,787.26
	GRAND TOTAL	58,247,650.00	57,094,724.22	98.02%	58,247,650.00	46,168,538.96	79.26%	10,926,185.26	1,152,925.78

Budget execution/fund source C4 – current year appropriations

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	RAL
B3-002	Scientific advice (including microbiology support)	75,147.00	0.00	0.00%	75,147.00	0.00	0.00%	75,147.00
	Total Chapter 30	75,147.00	0.00	0.00%	75,147.00	0.00	0.00%	75,147.00
	Total Title 3	75,147.00	0.00	0.00%	75,147.00	0.00	0.00%	75,147.00
	GRAND TOTAL	75,147.00	0.00	0.00%	75,147.00	0.00	0.00%	75,147.00

Budget execution/fund source C5 – current year appropriations

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	RAL
B3-002	Scientific advice (including microbiology support)	73,194.00	73,194.00	100.00%	73,194.00	73,194.00	100.00	0.00
	Total Chapter 30	73,194.00	73,194.00	100.00%	73,194.00	73,194.00	100.00	0.00
	Total Title 3	73,194.00	73,194.00	100.00%	73,194.00	73,194.00	100.00	0.00
	GRAND TOTAL	73,194.00	73,194.00	100.00%	73,194.00	73,194.00	100.00	0.00

Budget execution/fund source C8 – appropriations carried over

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	Cancelled
A-1149	Learning & Development	199,458.11	161,177.83	80.81%	199,458.11	161,177.83	80.81%	38,280.28
	Total Article 114	199,458.11	161,177.83	80.81%	199,458.11	161,177.83	80.81%	38,280.28
A-1170	Freelance and joint interpreting and conference service interpreters	15,610.00	15,610.00	100.00%	15,610.00	15,610.00	100.00%	0.00
A-1173	Translations	10,374.46	7,328.75	70.64%	10,374.46	7,328.75	70.64%	3,045.71
A-1174	Payment for Administrative Assistance	3,316.99	3,113.17	93.86%	3,316.99	3,113.17	93.86%	203.82
A-1175	Interim services	731,633.50	593,230.24	81.08%	731,633.50	593,230.24	81.08%	138,403.26
	Total Article 117	760,934.95	619,282.16	81.38%	760,934.95	619,282.16	81.38%	141,652.79
A-1180	Miscellaneous expenditure on recruitment	83,663.73	38,372.24	45.86%	83,663.73	38,372.24	45.86%	45,291.49
A-1183	Removal Expenses	33,383.01	30,995.55	92.85%	33,383.01	30,995.55	92.85%	2,387.46
	Total Article 118	117,046.74	69,367.79	59.27%	117,046.74	69,367.79	59.27%	47,678.95
	Total Chapter 11	1,077,439.80	849,827.78	78.87%	1,077,439.80	849,827.78	78.87%	227,612.02
A-1300	Mission expenses, travel expenses and incidental expenditure	151,028.02	98,574.86	65.27%	151,028.02	98,574.86	65.27%	52,453.16
	Total Article 130	151,028.02	98,574.86	65.27%	151,028.02	98,574.86	65.27%	52,453.16
	Total Chapter 13	151,028.02	98,574.86	65.27%	151,028.02	98,574.86	65.27%	52,453.16
A-1410	Medical Service	17,863.93	12,057.62	67.50%	17,863.93	12,057.62	67.50%	5,806.31
	Total Article 141	17,863.93	12,057.62	67.50%	17,863.93	12,057.62	67.50%	5,806.31
	Total Chapter 14	17,863.93	12,057.62	67.50%	17,863.93	12,057.62	67.50%	5,806.31
A-1520	Staff Exchanges	2,368.19	313.58	13.24%	2,368.19	313.58	13.24%	2,054.61
	Total Article 152	2,368.19	313.58	13.24%	2,368.19	313.58	13.24%	2,054.61
	Total Chapter 15	2,368.19	313.58	13.24%	2,368.19	313.58	13.24%	2,054.61
A-1700	Entertainment & Representation Expenses	633.89	555.59	87.65%	633.89	555.59	87.65%	78.30
	Total Article 170	633.89	555.59	87.65%	633.89	555.59	87.65%	78.30
	Total Chapter 17	633.89	555.59	87.65%	633.89	555.59	87.65%	78.30
A-1801	Social Contact Between Staff	5,935.00	5,456.75	91.94%	5,935.00	5,456.75	91.94%	478.25
	Total Article 180	5,935.00	5,456.75	91.94%	5,935.00	5,456.75	91.94%	478.25
	Total Chapter 18	5,935.00	5,456.75	91.94%	5,935.00	5,456.75	91.94%	478.25
	Total Title 1	1,255,268.83	966,786.18	77.02%	1,255,268.83	966,786.18	77.02%	288,482.65

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Com-mitted	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	Cancelled
A-2002	Water, Gas, Electricity Expenses	42,349.90	26,889.88	63.49%	42,349.90	26,889.88	63.49	15,460.02
A-2003	Maintenance, cleaning	17,112.09	16,857.37	98.51%	17,112.09	16,857.37	98.51	254.72
A-2004	Fitting-out	9,383.04	9,128.53	97.29%	9,383.04	9,128.53	97.29	254.51
A-2005	Security of Building	89,436.40	85,762.11	95.89%	89,436.40	85,762.11	95.89	3,674.29
A-2006	Restauration & Canteen costs	7,700.00	7,700.00	100.00%	7,700.00	7,700.00	100.00	0.00
A-2009	Other expenditure on buildings	275,836.09	232,575.42	84.32%	275,836.09	232,575.42	84.32	43,260.67
	Total Article 200	441,817.52	378,913.31	85.76%	441,817.52	378,913.31	85.76	62,904.21
	Total Chapter 20	441,817.52	378,913.31	85.76%	441,817.52	378,913.31	85.76	62,904.21
A-2110	Purchases of new hardware for operation the centre	196,037.34	196,037.34	100.00%	196,037.34	196,037.34	100.00	0.00
A-2111	Purchase of new software for the operation at the centre	166,028.37	164,153.47	98.87%	166,028.37	164,153.47	98.87	1,874.90
A-2112	Purchase and Maintenance of printing and reproduction equipment	52,965.58	44,901.58	84.78%	52,965.58	44,901.58	84.78	8,064.00
A-2114	Developments to support administrative and management applications	423,367.59	390,089.07	92.14%	423,367.59	390,089.07	92.14	33,278.52
	Total Article 211	838,398.88	795,181.46	94.85%	838,398.88	795,181.46	94.85	43,217.42
	Total Chapter 21	838,398.88	795,181.46	94.85%	838,398.88	795,181.46	94.85	43,217.42
A-2200	Technical equipment and AV installations	26,000.00	19,760.00	76.00%	26,000.00	19,760.00	76.00	6,240.00
A-2202	Purchase and maintenance of vehicles	305.00	189.64	62.18%	305.00	189.64	62.18	115.36
	Total Article 220	26,305.00	19,949.64	75.84%	26,305.00	19,949.64	75.84	6,355.36
	Total Chapter 22	26,305.00	19,949.64	75.84%	26,305.00	19,949.64	75.84	6,355.36

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	Cancelled
A-2300	Stationery and office supplies	45,232.65	45,114.50	99.74%	45,232.65	45,114.50	99.74%	118.15
A-2301	Financial and other charges, exchange losses	818.84	321.71	39.29%	818.84	321.71	39.29%	497.13
A-2302	Library expenses, purchase of books and info subscriptions	7,154.03	4,703.82	65.75%	7,154.03	4,703.82	65.75%	2,450.21
A-2306	Miscellaneous Insurance	423.00	327.12	77.33%	423.00	327.12	77.33%	95.88
A-2307	Legal Expenses	36,500.00	35,500.00	97.26%	36,500.00	35,500.00	97.26%	1,000.00
A-2309	Other operating expenditure	759.00	759.00	100.00%	759.00	759.00	100.00%	0.00
	Total Article 23	90,887.52	86,726.15	95.42%	90,887.52	86,726.15	95.42%	4,161.37
	Total Chapter 23	90,887.52	86,726.15	95.42%	90,887.52	86,726.15	95.42%	4,161.37
A-2400	Postal and delivery charges	3,289.84	2,174.41	66.09%	3,289.84	2,174.41	66.09%	1,115.43
	Total Article 240	3,289.84	2,174.41	66.09%	3,289.84	2,174.41	66.09%	1,115.43
A-2410	Telecommunication and internet charges	49,015.76	29,146.68	59.46%	49,015.76	29,146.68	59.46%	19,869.08
	Total Article 241	49,015.76	29,146.68	59.46%	49,015.76	29,146.68	59.46%	19,869.08
	Total Chapter 24	52,305.60	31,321.09	59.88%	52,305.60	31,321.09	59.88%	20,984.51
A-2500	Governance and administrative meetings	98,701.43	73,194.78	74.16%	98,701.43	73,194.78	74.16%	25,506.65
A-2501	Evaluation and Strategic Management Consulting	63,968.85	61,806.35	96.62%	63,968.85	61,806.35	96.62%	2,162.50
	Total Article 250	162,670.28	135,001.13	82.99%	162,670.28	135,001.13	82.99%	27,669.15
	Total Chapter 25	162,670.28	135,001.13	82.99%	162,670.28	135,001.13	82.99%	27,669.15
	Total Title 2	1,612,384.80	1,447,092.78	89.75%	1,612,384.80	1,447,092.78	89.75%	165,292.02

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	Cancelled
B3-000	Surveillance	1,191,643.45	1,104,875.89	92.72%	1,191,643.45	1,104,875.89	92.72%	86,767.56
B3-001	Epidemic intelligence and response	212,972.21	192,317.79	90.30%	212,972.21	192,317.79	90.30%	20,654.42
B3-002	Scientific advice (including microbiology support)	2,271,361.88	2,020,821.13	88.97%	2,271,361.88	2,020,821.13	88.97%	250,540.75
B3-003	Public Health Training	1,527,293.02	1,230,198.30	80.55%	1,527,293.02	1,230,198.30	80.55%	297,094.72
B3-004	Health Communication	147,846.30	135,965.54	91.96%	147,846.30	135,965.54	91.96%	11,880.76
B3-005	Public Health Informatics	1,735,915.39	1,667,409.23	96.05%	1,735,915.39	1,667,409.23	96.05%	68,506.16
B3-006	Preparedness/Capacity support	394,415.44	361,107.39	91.56%	394,415.44	361,107.39	91.56%	33,308.05
B3-007	Eurosurveillance	24,677.75	20,513.99	83.13%	24,677.75	20,513.99	83.13%	4,163.76
B3-009	Collaboration and (country) cooperation	21,091.68	16,751.42	79.42%	21,091.68	16,751.42	79.42%	4,340.26
	Total Chapter 30	7,527,217.12	6,749,960.68	89.67%	7,527,217.12	6,749,960.68	89.67%	777,256.44
	Total Title 3	7,527,217.12	6,749,960.68	89.67%	7,527,217.12	6,749,960.68	89.67%	777,256.44
	GRAND TOTAL	10,394,870.75	9,163,839.64	88.16%	10,394,870.75	9,163,839.64	88.16%	1,231,031.11

Budget execution/fund source R0 – external assigned revenue

Budget Line Position	Budget Line Description	Commitment Appropriation Transaction Amount	Executed Commitment Amount	% Committed	Payment Appropriation Transaction Amount	Executed Payment Amount	% Paid	RAL
B3-012	DG ELARG GRANT 3 - ACTIONS WITH CANDIDATE AND POTE	323,980.03	222,442.58	68.66%	323,980.03	166,645.48	51.44%	157,334.55
B3-013	ADVANCE PROJECT - IMI	103,440.80	44,240.97	42.77%	103,440.80	6,889.48	6.66%	96,551.32
B3-014	DG DEVCO - ENPI GRANT	249,642.09	204,770.39	82.03%	249,642.09	176,487.85	70.70%	73,154.24
	Total Article 301	677,062.92	471,453.94	69.63%	677,062.92	350,022.81	51.70%	327,040.11
	Total Chapter 30	677,062.92	471,453.94	69.63%	677,062.92	350,022.81	51.70%	327,040.11

6. Report on budget and financial management 2016 of the European Centre for Disease Prevention and Control

Developments in the Organisation during the year

Since it was set up in 2005, ECDC had initially grown to around 300 staff, with 200 Temporary Agents and another 100 Contract Agents foreseen to be employed. Due to the requested 5% staff cuts (on head counts) over 5 years and the additional request for 5% staff reduction for the agency re-deployment pool, the final number of Temporary Agents will be reduced to 180 in 2018.

2016 was the third year of the implementation of its new Strategic Multi Annual work Programme (SMAP) for the period 2014–2020. The SMAP contains details of agreed deliverables, and milestones towards those deliverables during 2014-2020, as well as indicators for assessing progress.

In 2016, ECDC further increased its output, consolidated its structures and developed its partnerships to address the need for a strengthened response to the threat of communicable diseases in Europe.

ECDC is organised into five Units and the Director's Office. The Heads of Units are responsible for the activities in their Units, which are divided in sections. There is also a level of middle management, where a number of Heads of Sections are responsible for the activities. ECDC has a Senior Management Team (SMT), consisting of the Acting Director and the Heads of Unit, which play an important role in the management of ECDC.

The Annual Work Programme 2016, prepared along the lines of the strategic multi-annual Work Programme 2014-2020, was approved by the Management Board in June 2015. The programme includes specific objectives. The implementation was followed up on a regular basis through the Management Information System (MIS), which had been implemented in 2009 with the view to be a central point of reference for the management and monitoring of the activities in the work programme. The monthly reporting to the SMT of key data, such as commitments, payments and budget transfers was continued in 2016 and intensified towards the end of the year with the issue of weekly overviews in order to show the budget implementation and facilitate the decision making.

In 2016, the Acting Director of ECDC, as Authorising Officer (AO), delegated financial responsibility to the five Heads of Unit (Authorising Officers by Delegation (AOD)). The Heads of Unit in turn delegated, but only in their absence, to the Deputy Heads of Unit, if applicable. Should the Deputy Head of Unit be unavailable, the authority returns to the Acting Director. Thereby, a very limited number of persons act as AO/AOD in ECDC. The AODs can enter into budgetary and legal commitments and authorise payments. However, all budgetary and legal commitments over 250.000 EUR need to be signed by the Acting Director.

For the expenditure of 2016, the AODs signed a Declaration of Assurance to the AO, similar to the one signed by the AO himself, for the area for which they have been delegated responsibility.

In July 2016, the ECDC signed a new lease agreement, therefore the Centre will be moving to new premises in the first half of 2018.

Budgetary principles

The establishment and implementation of the budget of the European Centre for Disease Prevention and Control are governed by the following basic principles:

- unity and budget accuracy:

all expenditure and revenue must be incorporated in a single budget document, must be booked on a budget line and expenditure must not exceed authorised appropriations;

- universality:

this principle comprises two rules:

- the rule of non-assignment, meaning that budget revenue must not be earmarked for specific items of expenditure (total revenue must cover total expenditure);
- the gross budget rule, meaning that revenue and expenditure are entered in full in the budget without any adjustment against each other;
- annuality:

the appropriations entered are authorised for a single year and must therefore be used during that year;

- equilibrium:

the revenue and expenditure shown in the budget must be in balance (estimated revenue must equal payment appropriations);

- specification:

each appropriation is assigned to a specific purpose and a specific objective;

- unit of account:

the budget is drawn up and implemented in Euro and the accounts are presented in Euro;

- sound financial management:

budget appropriations are used in accordance with the principle of sound financial management, namely in accordance with the principles of economy, efficiency and effectiveness;

- transparency:

the budget is established and implemented and the accounts presented in compliance with the principle of transparency - the budget and amending budgets are published in the Official Journal of the European Union.

Budget implementation

ABAC WF (the EC integrated budgetary and accounting system) has reinforced compliance with the accrual accounting rules and ensured that ECDC financial systems are updated with all changes in the financial regulation.

The core budget of the Centre remained approximately at the same level as in the previous year, namely 58.2 million EUR in 2016 compared to 58.3 million EUR in 2015.

	Budget Line	Initial Available Budget	Adjustments	Final Available Budget
2000 IC1	EU Budget - Current Year Appropriations	53 683 000.00	0.00	53 683 000.00
2001 IC4	EU Budget - Earmarked funds (Reuse previous years)	3 083 000.00	0.00	3 083 000.00
200	EU Budget contribution	56 766 000.00	0.00	56 766 000.00
3000 IC1	Subsidy from EEA/EFTA Member States (% of EU contribution)	1 481 650.00	0.00	1 481 650.00
300	Subsidy from the EEA/EFTA	1 481 650.00	0.00	1 481 650.00
	Total Revenue 2016	58 247 650.00	0.00	58 247 650.00
R0 – External assigned revenue	EU Budget - Earmarked funds	677 062.92	0.00	677 062.92

At year-end, the budget execution in terms of commitment appropriations reached 98.02%, equivalent to 57.1 million EUR. This is an increase of 4.2% compared to 2015, achieved by successful efforts to further strengthen the budget execution at ECDC.

A total of 1.9% of the 2016 budget or 1.1 million EUR remained unused in 2016, of which 0.4 million EUR in Title I, 0.3 million EUR in Title II and 0.4 million in Title III.

The budget execution in terms of payments increased by 3.9% compared to 2015 and reached 79.26% of the total budget. The payment execution for administrative expenses slightly decreased by 0.9% compared to 2015 and reached 71%. The payment execution for operational expenses in Title III reached 58% and therefore increased by 3.2% compared to 2015.

An overview comparing 2016 vs. 2015 - Current Year C1 credits - % committed and % paid:

Title Description	Commitments %			Payments %		
	2016	2015	difference	2016	2015	difference
TITLE 1 <i>Staff expenses</i>	98.55%	93.00%	+5.55%	94.40%	89.16%	+5.24%
TITLE 2 <i>Administrative expenses</i>	95.94%	94.45%	+1.49%	71.48%	72.38%	-0.90%
TITLE 3 <i>Operational expenses</i>	97.94%	95.75%	+2.19%	58.24%	55.03%	+3.21%
TOTAL TITLE 1 + 2 + 3	98.02%	94.05%	+3.97%	79.26%	76.27%	+2.99%

The total number of commitments slightly increased, while the number of payments processed in 2016 decreased. 1109 commitments and 3838 payment orders have been initiated, verified and subsequently authorised by the Acting Director and the Authorising Officers by delegation during 2016, compared to 1059 commitments and 5126 payments in 2015.

In 2016, the Centre continued to implement the fourth IPA grant agreement, on gradual integration of the Candidate and Potential Candidate Countries for EU accession to ECDC programs, which started mid-2015. The further implementation of the ENPI (till 31 Dec 2016) and IMI grant agreements were also carried out throughout the year.

The 2016 implementation of the above mentioned grants is also shown in the table below.

Overview of the budget implementation (execution on commitments and payments) by fund source:

Fund Source	Commitment/Payment Appropriations 2016	Executed Commitment 2016	% Committed	Executed Payment in 2016	% Paid	Carried Over to 2017	Cancelled
C1 - Current year appropriations	58 247 650.00	57 094 724.22	98.02%	46 168 538.96	79.26%	10 926 185.26	1 152 925.78
C4 – Internal assigned revenue appropriations	75 147.00	0.00	0%	0.00	0%	75 147.00	0.00
C5 – Internal assigned revenue appropriations (carried over)	73 194.00	73 194.00	100%	73 194.00	100%	0.00	0.00
C8 – Carry-forward of 2015 appropriations	10 394 870.75			9 163 839.64	88.16%	0.00	1 231 031.11
R0 – External assigned revenue DG NEAR IPA Grant 4	323 980.03	222.442 58	68 66%	166.645 48	51 44%	157.334 55	0.00
R0 - External assigned revenue Advance Project - IMI Grant	103 440.80	44 240.97	42.77%	6 889.48	6.66%	96 551.32	0.00
R0 - External assigned revenue DG NEAR - ENPI GRANT	249 642.09	204 770.39	82 03%	176 487.85	70.70%	73 154.24	0.00

During the year, in order to improve the efficiency of the funds allocated to ECDC, the Acting Director exercised her right to amend the budget within the limitations of Article 27.1 of ECDC's Financial Regulation. Budget transfers between different BLs of the same and between Titles have been executed for a total amount of 1 511 600 EUR (Title 1: -1 511 600 EUR, Title 2: 2 000 EUR, Title 3: 1 509 600 EUR).

An overview of the impact of the budget transfers in fund source 'C1 –Current Year Appropriations' is provided below:

Budget 2016, Fund Source C1 Current Year Appropriations	Initial Budget	MB Amendments	Director Adjustments	EFTA Adjustments	FINAL BUDGET
Title 1 – Staff related Expenditure	32 722 265.00	0.00	-1 511 600.00	0.00	31 210 665.00
Title 2 –Administrative Expenditure	7 244 000.00	0.00	+2 000.00	0.00	7 246 000.00
Title 3 - Operations	18 281 385.00	0.00	+1 509 600.00	0.00	19 790 985.00
Total budget	58 247 650.00	0.00	0.00	0.00	58 247 650.00

At year-end, ECDC carried forward to 2017, EUR 10.9 million, which is equivalent to 18% of the total budget and is an increase by 1% compared to the previous year.

The Procurement section dealt with a significant number of procedures. 27 open calls for tenders were finalised along with 1 call for proposals, as well as 92 negotiated procedures. 23 reopening procedures within ICT framework contracts were completed and regular Committee on Procurement, Contracts and Grants (CPCG) meetings were held, resulting in the issuance of 31 CPCG Opinions.

Audit issues and internal control

Internal control standards

Since 2006, ECDC has internal control standards (ICS) in place. These standards specify the necessary requirements, actions and expectations needed to build an effective system of internal control which allows to gauge the achievement of ECDC's objectives. These control standards were developed along the lines of the European Commission's Internal Control Standards, which are based on the International Committee of Sponsoring Organizations of the Treadway Commission (COSO) standards.

The ICS cover the areas of mission and values, human resources, planning and risk management processes, operations and control activities, information and financial reporting, and evaluation and audit.

Each ICS is made up of a number of requirements to be met. For each such requirement, ECDC has identified what is in place already, actions to be taken, the person responsible, and the deadline for entry into force.

A review of the implementation of the ICS was performed as part of the work for the Annual Report 2016. The results were validated by ECDC's management and discussed in the ECDC Audit Committee. ECDC has implemented all the ICS.

Internal audit service

ECDC is audited by its Internal Auditor, the Internal Audit Service of the European Commission (IAS). The audit work to be performed is defined in the risk-based IAS strategic internal audit plan. The latest plan was approved in November 2013 and covers the period 2014–2016. All observations and recommendations are taken into account and appropriate action plans are developed. The implementation of these actions is being followed up regularly.

In 2016, the IAS performed an audit on the Procurement Process in the ECDC. The audit was performed in May 2016, and the final report was received in October 2016. The report included three very important observations and two important observations. The action plan prepared by ECDC was accepted by the IAS in December 2016. The action plan will be implemented throughout 2017.

European Court of Auditors

ECDC is audited every year by the European Court of Auditors (ECA). The audit provides a Statement of Assurance as to the reliability of the accounts of the Centre and the legality and regularity of the underlying transactions.

ECDC received an unqualified opinion¹¹ for 2015, indicating that the accounts are reliable and the transactions underlying the accounts are legal and regular.

Four comments were received in the final report from the ECA for 2015 (which do not call the Court's opinion into question). One related to various weaknesses affecting the transparency of the audited procurement procedures and the other three to comments on the budgetary management. ECDC has taken the appropriate actions.

The ECA audit of the 2016 annual accounts is ongoing. The first part of the audit was performed in October 2016. The audit will be finalised during spring 2017 and the draft report will be available by June 2017 at the latest.

In April 2016, ECDC also received the ECA's final special report (no 12/2016) on the Agencies' use of grants: not always appropriate or demonstrably effective. An action plan was prepared and is being implemented. Three actions have been fully implemented and the other five are to be completed in 2017.

Follow-up of recommendations and action plans for audits

At the end of 2016, apart from the five new observations received from the audit on the procurement process in October 2016, five very important observations and eight important observations were officially open (from the 2014 internal audit of Public Health Training in ECDC and the 2015 internal audit on Data Management in ECDC). However, seven (one very important and six important) of those observations are implemented by ECDC and ready for review by the Internal Audit Service (IAS). The implementation of the remaining eleven observations is ongoing and they should be closed during 2017.

In addition, there are the five remaining actions to be implemented from the ECA's special report mentioned above. Also those are planned to be fully implemented in 2017.

Human Resources and Staffing

The Human Resources section is supporting the Centre's management and staff in this consolidation phase by continuous HR services in areas such as recruitment, working conditions, pay and entitlements, learning and development as well as staff wellbeing. The objective of the Centre's learning and development activities is to offer professional growth for the individual as well as to maintain and further strengthen the Centre's organisational performance.

The total number of temporary agents in place at the Centre as of 31 Dec 2016 was 162.

Moreover, a total of 95 contract agents were in place by the end of 2016.

The turnover rate for temporary agents and contract agents was 7 % in 2016¹².

Table 1: Number of staff and selection procedures

	2014	2015	2016
Total staff (TA, CA, SNE) on 31 December	277	260	260
Selection procedures ¹³	19	15	27

¹¹ Unqualified audit opinion = the auditor's report contains a clear written expression of opinion on the financial statements or the legality and regularity of underlying transactions as a whole. An unqualified opinion is expressed when the auditor concludes that, on the whole, the underlying transactions are legal and regular and the supervisory and control systems are adequate to manage the risk.

¹² Excluding post cuts as per instruction by the Commission.

¹³ The number of recruitment procedures includes those that led to an actual start of employment in the specified year, i.e. it includes procedures already launched in the previous year, but finalised in the specified year and not those procedures still ongoing at the end of that year. It also includes unsuccessful/cancelled selection procedures that did not lead to an appointment.

Table 2: Staff (TA, CA, SNE's) by Unit

Number of temporary agents (TA), contract agents (CA) and seconded national experts (SNE) per unit (as of 31 December 2016)

	TA	CA	SNE	Total
	8	7	0	15
	21	10	0	31
	52	14	0	66
	22	19	3	44
	37	36	0	73
	22	9	0	31
Total	162	95	3	260

Table 3: Breakdown by nationality (temporary agents, contract agents and SNEs)

On 31 December 2016, ECDC employed staff from 26 Member States:

Nationality	AST	AD	TA Total	CA	SNE	ECDC total
Austria	0	1	1	1		2
Belgium	0	7	7	3		10
Bulgaria	2	5	7	3		10
Croatia	0	0	0	0		0
Cyprus	1	0	1	0		1
Czech Republic	0	1	1	1		2
Denmark	2	1	3	1		4
Estonia	0	0	0	3		3
Finland	1	7	8	2		10
France	5	15	20	10		30
Germany	6	14	20	4		24
Greece	0	3	3	3	1	7
Hungary	0	3	3	1	1	5
Ireland	1	0	1	0		1
Italy	4	10	14	5	1	20
Latvia	2	2	4	1		5
Lithuania	1	0	1	3		4
Luxembourg	0	0	0	0		0
Malta	0	2	2	0		2
Netherlands	2	2	4	2		6
Poland	3	1	4	6		10
Portugal	1	4	5	4		9
Romania	7	3	10	7		17
Slovakia	0	1	1	2		3
Slovenia	0	1	1	0		1
Spain	2	2	4	2		6
Sweden	10	15	25	26		51
United Kingdom	4	8	12	5		17
	54	108	162	95	3	260

Annex VII. ECDC MB/AF/Coordinating Competent Bodies

Members and Alternates of the ECDC Management Board

Austria	Dr Pamela Rendi-Wagner Dr Bernhard Benka ¹⁴	Member Alternate
Belgium	Dr Daniel Reynders (<i>Chair</i>) Dr Carole Schirvel ¹⁵	Member Alternate
Bulgaria	Dr Angel Kunchev Dr Galin Kamenov ¹⁶	Member Alternate
Croatia	Dr Bernard Kaić ¹⁷ Assistant Professor Krunoslav Capak ¹⁸	Member Alternate
Cyprus	Dr Irene Cotter ¹⁹ Ms Eleni Zannetou ²⁰	Member Alternate
Czech Republic	Professor Dr Roman Prymula ²¹ Dr Jozef Dlhý	Member Alternate
Denmark	Ms Lisbeth Høeg-Jensen Ms Bolette Søborg ²²	Member Alternate
Estonia	Dr Tiiu Aro Mr Martin Kadai	Member Alternate
Finland	Dr Anni-Riitta Virolainen-Julkunen Dr Taneli Puumalainen	Member Alternate
France	Dr François Bourdillon Ms Anne-Catherine Viso	Member Alternate
Germany	Ms Susanne Wald Dr Gesa Lücking	Member Alternate
Greece	Professor Georgios Saroglou ²³ Professor Panagiotis Panagiotopoulos ²⁴	Member Alternate
Hungary	Dr Hanna Páva Dr Beatrix Oroszi	Member Alternate
Ireland	Dr Colette Bonner ²⁵ Mr Michael Smith ²⁶	Member Alternate
Italy	Dr Raniero Guerra Dr Maria Grazia Pompa	Member Alternate
Latvia	Ms Jana Feldmane ²⁷ Professor Dzintars Mozgis	Member Alternate
Lithuania	Dr Audrius Ščeponavičius Professor Saulius Caplinskas	Member Alternate
Luxembourg	Dr Jean-Claude Schmit ²⁸ Dr Pierre Weicherding	Member Alternate
Malta	Dr Anthony Gatt Dr Mariella Borg Buontempo	Member Alternate
Netherlands	Professor Marianne Donker Ms Judith Elsinghorst ²⁹	Member Alternate
Poland	Dr Pawel Gorynski ³⁰ Mr Michał Ilnicki	Member Alternate
Portugal	Dr Maria da Graça Gregorio de Freitas	Member

¹⁴ Appointed Alternate in replacement of Mag Martina Brix as of August 2016

¹⁵ Appointed Alternate in replacement of Mr Loic Ledent as of August 2016

¹⁶ Appointed Alternate as of August 2016

¹⁷ Appointed Member in replacement of Dr Marijan Erceg as of August 2016

¹⁸ Appointed Alternate in replacement of Assistant Professor Ranko Stevanovic as of August 2016

¹⁹ Appointed Member in replacement of Mr Costas Stiggas as of October 2016

²⁰ Appointed Alternate in replacement of Dr Irene Cotter as of October 2016

²¹ Member from January to September 2016, pending nomination

²² Appointed Alternate in replacement of Dr Dorte Hansen Thrige as of October 2016

²³ Appointed Member in replacement of Dr Antonis P Vasiliogiannakopoulos as of September 2016

²⁴ Appointed Alternate in replacement of Ms Maria Pirounaki as of September 2016

²⁵ Member from January to September 2016, pending nomination

²⁶ Alternate from January to September 2016, pending nomination

²⁷ Appointed Member in replacement of Dr Inga Šmate as of August 2016

²⁸ Appointed Member in replacement of Dr Robert Goerens as of February 2016

²⁹ Appointed Alternate in replacement of Mr Herbert Barnard as of September 2016

³⁰ Member from January to September 2016, pending nomination

Romania	Dr Paula Vasconcelos	Alternate
	Dr Amalia Serban	Member
Slovak Republic	Dr Adriana Pistol	Alternate
	Dr Ján Mikas	Member
Slovenia	Ing Dagmar Nemethova ³¹	Alternate
	Dr Mojca Gobec	Member
	Ms Marija Magajne ³²	Alternate
Spain	Mr José Javier Castrodeza Sanz	Member
	Dr Elena Andradas Aragonés	Alternate
Sweden	Dr Johan Carlson	Member
	Dr Mårten Kivi ³³	Alternate
United Kingdom	Ms Helen Shirley-Quirk	Member
	Dr Ailsa Wight	Alternate

³¹ Appointed Alternate in replacement of Professor Ivan Rovný as of September 2016

³² Appointed Alternate in replacement of Dr Ivan Eržen as of September 2016

³³ Appointed Alternate in replacement of Ms Anita Janelm as of June 2016

European Parliament	Ms Zofija Mazej Kukovič ³⁴ Ms Maria Eleni Koppa ³⁵ Mr Antonio Fernando Correia de Campos ³⁶	Member Member Alternate
European Commission	Mr Martin Seychell Mr John F Ryan Ms Isabel de la Mata Barranco Mr Michael Huebel ³⁷ Ms Line Matthiessen-Guyader Ms Barbara Kerstiens ³⁸	Member Member Alternate Alternate Member Alternate
Iceland (EEA/EFTA)	Dr Sveinn Magnússon Ms Margrét Björnsdóttir ³⁹	Member Alternate
Liechtenstein (EEA/EFTA)	Dr Marina Jamnicki Abegg ⁴⁰	Member
Norway (EEA/EFTA)	Dr Karl-Olaf Wathne Mr Torstein Lindstad	Member Alternate

Members and Alternates of the ECDC Advisory Forum

Austria	Professor Dr Petra Apfalter Professor Dr Franz Allerberger	Member Alternate
Belgium	Professor Dr Herman Van Oyen Dr Sophie Quoilin	Member Alternate
Bulgaria	Professor Mira Kojouharova ⁴¹ Dr Radosveta Filipova	Member Alternate
Croatia	Dr Sanja Kurečić Filipović Dr Aleksandar Šimunović	Member Alternate
Cyprus	Dr Niki Paphitou Dr Ioanna Gregoriou	Member Alternate
Czech Republic	Dr Jan Kynčl Dr Kateřina Fabiánová	Member Alternate
Denmark	Dr Kåre Mølbak Dr Tyra Grove Krause	Member Alternate
Estonia	Dr Kuulo Kutsar Dr Natalia Kerbo	Member Alternate
Finland	Dr Mika Salminen Dr Outi Lyytikäinen	Member Alternate
France	Dr Jean-Claude Desenclos Dr Bruno Coignard	Member Alternate
Germany	Dr Osamah Hamouda Dr Andreas Gilsdorf	Member Alternate
Greece	Dr Sotirios Tsiodras Dr Agoritsa Baka	Member Alternate
Hungary	Dr Ágnes Csohán Ms Emese Szilágyi	Member Alternate
Ireland	Dr Darina O'Flanagan ⁴² Dr Derval Igoe	Member Alternate
Italy	Dr Silvia Declich Dr Giuseppe Ippolito	Member Alternate
Latvia	Dr Jurijs Perevoščikovs Dr Irina Lucenko	Member Alternate
Lithuania	Dr Loreta Ašoklienė	Member

³⁴ Appointed Member in replacement of Professor Minerva-Melpomeni Malliori as of September 2016

³⁵ Appointed Member in replacement of Professor Dr Jacques Scheres as of September 2016

³⁶ Appointed Alternate as of September 2016

³⁷ Appointed Alternate in replacement Ms Herta Adam as of September 2016

³⁸ Appointed Alternate in replacement of Mr Cornelius Schmaltz as of September 2016

³⁹ Appointed Alternate in replacement of Ms Áslaug Einarsdóttir as of November 2016

⁴⁰ Appointed Member in replacement of Dr Sabine Erne as of November 2016

⁴¹ Retired in March 2016, pending nomination

⁴² Retired in May 2016, pending nomination

Luxembourg	Ms Nerija Kuprevičienė	Alternate
	Dr Isabel De La Fuente Garcia ⁴³	Member
	<i>Pending nomination</i>	Alternate
Malta	Dr Charmaine Gauci	Member
	Dr Tanya Melillo Fenech	Alternate
Netherlands	Prof Dr Jaap van Dissel	Member
	Dr Marianne van der Sande	Alternate
Poland	Dr Malgorzata Sadkowska-Todys	Member
	Dr Magdalena Rosińska	Alternate
Portugal	Mr Carlos Matias Dias ⁴⁴	Member
	Dr Ana Maria Correia	Alternate
Romania	Dr Florin Popovici	Member
	Dr Cristian Gheorghe Cristian Gheorghe	Alternate
Slovak Republic	Dr Mária Avdičová	Member
	Professor Henrieta Hudečková	Alternate
Slovenia	Dr Irena Klavs	Member
	Dr Marta Grgič-Vitek	Alternate
Spain	Dr Fernando Simón	Member
	Dr Isabel Noguer	Alternate
Sweden	Dr Anders Tegnell	Member
	Dr Birgitta Lesko	Alternate
United Kingdom	Dr Paul Cosford	Member
	<i>Pending nomination</i>	Alternate
Observers		
Albania (Candidate Country)	<i>Pending nomination</i>	
Iceland (EEA/EFTA)	Dr Thorolfur Gudnason	Member
	Dr Gudrun Sigmundsdottir	Alternate
Liechtenstein (EEA/EFTA)	Dr Marina Jamnicki Abegg ⁴⁵	Member
Montenegro (candidate country)	Dr Zoran Vratnica	Observer
Norway (EEA/EFTA)	Dr Hanne Nøkleby	Member
	Dr Frode Forland ⁴⁶	Alternate
Serbia (candidate country)	<i>Pending nomination</i>	
The former Yugoslav Republic of Macedonia (candidate country)	<i>Pending nomination</i>	
Turkey (candidate country)	Dr Canan Yilmaz ⁴⁷	Observer
European Commission	Dr Frank Van Loock	Observer
World Health Organization (Regional Office for Europe)	Dr Guénaél Rodier	Observer
	Mr Thomas Hofmann	Alternate
Non-governmental organisations		
Standing Committee of European Doctors	Professor Dr Reinhard Marre	Member
Pharmaceutical Group of European Union	Professor José Antonio Aranda da Silva	Alternate
European Public Health Association	Dr Aura Timen	Member
European Society of Clinical Microbiology and Infectious Diseases	<i>Pending nomination</i>	Alternate
European Patients' Forum	Ms Jana Petrenko	Member
European Federation of Allergy and Airways Diseases Patients' Associations	Professor Anna Doboszyńska	Alternate

⁴³ Appointed Member in replacement of Dr Robert Hemmer as of October 2016

⁴⁴ Appointed Member as of February 2016

⁴⁵ Appointed Member in replacement of Dr Sabine Erne as of November 2016

⁴⁶ Appointed Alternate in replacement of Mr John-Arne Røttingen as of June 2016

⁴⁷ Appointed Member in replacement of Dr Elif Bor Ekmekçi as of April 2016

ECDC Coordinating Competent Bodies

In 2010, ECDC decided to strengthen and simplify its way of working with the Member States. A new process has been introduced in 2011 with the nomination of one national Coordinating Competent Body (CCB) in each of the Member States.

Austria	Federal Ministry of Health Radetzkystrasse 2 1031 Vienna http://www.bmg.gv.at +431711004637
Belgium	Scientific Institute of Public Health Rue Juliette Wytsman 14 1050 Brussels http://www.wiv-isp.be +3226425111
Bulgaria	National Center of Infectious and Parasitic Diseases Yanko Sakazov Blvd. 26 1504 Sofia http://www.ncjpd.org + 35929442875
Croatia	Croatian Institute of Public Health Rockefellerova 7 10000 Zagreb http://www.hziz.hr +38514683010
Cyprus	Ministry of Health Directorate Medical and Public Health Services 1 Prodomou 1449 Nicosia http://www.moh.gov.cy +35722605650
Czech Republic	National Institute of Public Health Šrobárova 48 10042 Prague 10 http://www.szu.cz +420267082295
Denmark	Danish Health and Medicines Authority Axel Heides Gade 1 2300 Copenhagen http://sundhedsstyrelsen.dk +4572227400
Estonia	Health Board Tartu road 85 10115 Tallinn http://www.terviseamet.ee +3726943500
Finland	National Institute for Health and Welfare Mannerheimintie 166 00271 Helsinki http://www.thl.fi +358295246000
France	French Public Health Agency 12 rue du Val d'Osne 94415 Saint-Maurice http://www.santepubliquefrance.fr +33141796700
Germany	Robert Koch Institute Nordufer 20 13353 Berlin http://www.rki.de +4930187540
Greece	Hellenic Center for Disease Control and Prevention Agrafon Street 3-5 15123 Marousi http://www.keelpno.gr +302105212870
Hungary	National Centre for Epidemiology Albert Flórián út 2-6 1097 Budapest http://www.oek.hu +3614761194
Iceland	Centre of Health Security and Communicable Disease Prevention Austurströnd 5 170 Seltjarnarnes http://www.landlaeknir.is +3545101900

Ireland	Health Protection Surveillance Centre 25-27 Middle Gardiner Street Dublin http://www.hpsc.ie +35318765300
Italy	Ministry of Health Via Giorgio Ribotta 5 00144 Rome http://www.salute.gov.it +390659946115
Latvia	Centre for Disease Prevention and Control Dunties 22 1005 Riga http://spkc.gov.lv +37167501590
Liechtenstein	Principality of Liechtenstein Aulestrasse 51 9490 Vaduz http://www.aq.llv.li +4232367334
Lithuania	Ministry of Health Vilniaus 33 01506 Vilnius http://www.sam.lt +37052661466
Luxembourg	Health Directorate Ministry of Health 20, Rue De Bitbourg 1273 Luxembourg http://www.ms.public.lu +35224785550
Malta	Superintendence of Public Health Ministry for Energy and Health The Emporium 5B C. Debrockdorff Street MSD1421 Msida https://ehealth.gov.mt +35623266109
Netherlands	National Institute for Public Health and the Environment Antonie van Leeuwenhoeklaan 9 3720 BA Bilthoven http://www.rivm.nl +31302742767
Norway	Norwegian Institute of Public Health PO BOX 4404 Nydalen 0403 Oslo http://www.fhi.no +4721077000
Poland	National Institute of Public Health – National Institute of Hygiene 24 Chocimska Street 00791 Warsaw http://www.pzh.gov.pl +48228497612
Portugal	Directorate General of Health Ministry of Health Alameda D. Afonso Henriques 45 1049-005 Lisbon www.dgs.pt +351218430500
Romania	National Institute of Public Health Dr Leonte Anastasievici 1-3, Sector 5 050463 Bucharest http://www.insp.gov.ro/ +40213183612
Slovak Republic	Public Health Authority of the Slovak Republic Trnavská cesta 52 82645 Bratislava http://www.uvzsr.sk +421244372906
Slovenia	National Institute of Public Health Trubarjeva cesta 2 1000 Ljubljana http://www.ivz.si +38612441400
Spain	Ministry of Health, Social Services and Equality Paseo del Prado 18-20, 7 planta 28071 Madrid http://www.msssi.es +34915962062

Sweden	Public Health Agency of Sweden Nobels väg 18 17182 Solna http://folkhalsomyndigheten.se/ +46102052000
United Kingdom	Public Health England Colindale Avenue 61 NW95EQ London https://www.gov.uk/government/organisations/public-health-england +442082004400

Annex VIII. ECDC outputs published in 2016

Risk assessments

January

[Zika virus disease epidemic: potential association with microcephaly and Guillain-Barré syndrome – First update](#)

February

[Zika virus disease epidemic: potential association with microcephaly and Guillain-Barré syndrome – Second update](#)

[Zika virus disease epidemic: potential association with microcephaly and Guillain-Barré syndrome – Third update](#)

[Shortage of acellular pertussis-containing vaccines and impact on immunisation programmes in the EU/EEA – First update](#)

[Seasonal influenza 2015–2016 in the EU/EEA countries](#)

March

[A fatal case of diphtheria in Belgium](#)

[Outbreak of yellow fever in Angola](#)

[Lassa fever in Nigeria, Benin, Togo, Germany and USA](#)

[Zika virus disease epidemic: potential association with microcephaly and Guillain-Barré syndrome – Fourth update](#)

April

[Rapid risk assessment: Carbapenem-resistant Enterobacteriaceae](#)

[Rapid risk assessment: Zika virus disease epidemic: potential association with microcephaly and Guillain-Barré syndrome – Fifth update](#)

[Rapid Outbreak Assessment: multi-country foodborne outbreak of Shiga toxin-producing Escherichia coli infections associated with haemolytic uraemic syndrome](#)

May

[Outbreaks of yellow fever in Angola, Democratic Republic of Congo and Uganda](#)

[Zika virus disease epidemic: potential association with microcephaly and Guillain-Barré syndrome – Sixth update](#)

[Potential risks to public health related to communicable diseases at the Olympics and Paralympics Games in Rio de Janeiro, Brazil 2016](#)

June

[Outbreak of enterovirus A71 with severe neurological symptoms among children in Catalonia, Spain](#)

[Plasmid-mediated colistin resistance in Enterobacteriaceae](#)

[Public health risks related to communicable diseases at the Rio de Janeiro Olympic and Paralympic Games, Brazil 2016](#)

July

[Zika virus disease epidemic – Seventh update](#)

[Outbreaks of yellow fever in Angola, Democratic Republic of Congo and Uganda](#)

August

[Enterovirus detections associated with severe neurological symptoms in children and adults in European countries](#)

September

[Crimean-Congo haemorrhagic fever in Spain](#)

[Multi-country outbreak of Salmonella Enteritidis phage type 8, MLVA type 2-9-7-3-2 infections](#)

October

[Zika virus disease epidemic](#)

[Joint Rapid Outbreak Assessment: Multi-country outbreak of Salmonella Enteritidis phage type 8, MLVA type 2-9-7-3-2 and 2-9-6-3-2 infections](#)

[Extensively drug-resistant tuberculosis – Multi-country cluster, Romania](#)

[Outbreak of Rift Valley fever in Niger - Risk for the European Union](#)

November

[Invasive cardiovascular infection by Mycobacterium chimaera associated with the 3T heater-cooler system used during open-heart surgery](#)

[Outbreaks of highly pathogenic avian influenza A\(H5N8\) in Europe](#)

December

[Risk assessment of seasonal influenza, EU/EEA, 2016/2017](#)

[Increase of cases of Legionnaires' disease in EU travellers returning from Dubai](#)

[Type E botulism associated with fish product consumption – Germany and Spain](#)

[Candida auris in healthcare settings](#)

[Hepatitis A outbreaks in the EU/EEA mostly affecting men who have sex with men](#)

[Increase in Salmonella Stourbridge infections in Germany during 2016](#)

[Multidrug-resistant tuberculosis in migrants, multi-country cluster](#)

[Carbapenem-resistant Acinetobacter baumannii in healthcare settings](#)

[Multi-country outbreak of Salmonella Enteritidis PT8 infection, MLVA type 2-10-8-5-2, associated with handling of feeder mice](#)

Technical reports

February

[EU Laboratory Capability Monitoring System \(EULabCap\) - Report on 2013 survey of EU/EEA country capabilities and capacities](#)

March

[Antenatal screening for HIV, hepatitis B, syphilis and rubella susceptibility in the EU/EEA](#)

April

[External quality assessment scheme for Neisseria meningitides – 2014](#)

[External quality assessment scheme for Streptococcus pneumoniae – 2014](#)

June

[Fourth external quality assessment scheme for Listeria monocytogenes typing](#)

July

[Seasonal influenza vaccination and antiviral use in Europe](#)

[Public consultation: Proposals for draft EU guidelines on the prudent use of antimicrobials in human medicine](#)

[Epidemiological assessment of hepatitis B and C among migrants in the EU/EEA](#)

[Hepatitis A virus in the EU/EEA, 1975–2014](#)

August

[EU Laboratory Capability Monitoring System \(EULabCap\): Report on 2014 survey of EU/EEA country capabilities and capacities](#)

[Seventh external quality assessment for Salmonella typing](#)

[ECDC roadmap for integration of molecular typing and genomic typing into European-level surveillance and epidemic preparedness – Version 2.1, 2016-19](#)

[ECDC roadmap for integration of molecular typing into European-level surveillance and epidemic preparedness – Version 1.2, 2013](#)

October

[External quality assessment scheme for influenza antiviral susceptibility for the European Reference Laboratory Network for Human Influenza – 2015](#)

[External quality assessment scheme for detection, isolation and characterisation of influenza viruses for the European Reference Laboratory Network for Human Influenza – 2015](#)

November

[HIV testing in Europe](#)

December

[Seventh external quality assessment scheme for typing of verocytotoxin-producing *Escherichia coli*](#)

[Case studies on preparedness planning for polio in Poland and Cyprus](#)

Technical documents

January

[Laboratory standard operating procedure for multiple-locus variable-number tandem repeat analysis of *Salmonella enterica* serotype Enteritidis](#)

February

[Assessing communicable disease control and prevention in EU enlargement countries](#)

March

[Handbook on TB laboratory diagnostic methods for the European Union](#)

April

[Zika virus disease epidemic: Preparedness planning guide for diseases transmitted by *Aedes aegypti* and *Aedes albopictus*](#)

May

[Social media strategy development – A guide to using social media for public health communication](#)

[HelicsWin.Net 2.3 user manual](#)

[Protocol for point prevalence surveys of healthcare-associated infections and antimicrobial use in European long-term care facilities](#)

[Protocol for validation of point prevalence surveys of healthcare-associated infections and antimicrobial use in European long-term care facilities](#)

June

[EU protocol for harmonised monitoring of antimicrobial resistance in human *Salmonella* and *Campylobacter* isolates](#)

October

[Handbook on using the ECDC preparedness checklist tool to strengthen preparedness against communicable disease outbreaks at migrant reception/detention centres](#)

[Handbook on implementing syndromic surveillance in migrant reception/detention centres and other refugee settings](#)

[Communication strategies for the prevention of HIV, STI and hepatitis among MSM in Europe](#)

[Point prevalence survey of healthcare-associated infections and antimicrobial use in European acute care hospitals – protocol version 5.3](#)

Surveillance reports

January

[Legionnaires' disease in Europe, 2014](#)

February

[The European Union summary report on antimicrobial resistance in zoonotic and indicator bacteria from humans, animals and food in 2014](#)

March

[Molecular typing for surveillance of multidrug-resistant tuberculosis in the EU/EEA](#)

[Tuberculosis surveillance and monitoring in Europe 2016](#)

August

[Gonococcal antimicrobial susceptibility surveillance in Europe, 2014](#)

November

[HIV/AIDS surveillance in Europe 2015](#)

December

[The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2015](#)

Throughout the year

[Annual Epidemiological Report](#) series on all diseases with an ECDC surveillance mandate

Guidance reports

March

[Guidance on tuberculosis control in vulnerable and hard-to-reach populations](#)

[Guidance on chlamydia control in Europe](#)

April

[Interim guidance for healthcare providers and Zika virus laboratory diagnosis](#)

Expert opinion

February

[Public Consultation: Expert Opinion on neuraminidase inhibitors for prevention and treatment of influenza](#)

July

[Zika virus and safety of substances of human origin – A guide for preparedness activities in Europe](#)

August

[Expert opinion on whole genome sequencing for public health surveillance](#)

October

[Public consultation: Expert opinion on rotavirus vaccination in infancy](#)

Evidence briefs

October

[Pre-exposure prophylaxis for HIV prevention in Europe](#)

Mission reports

July

[Assessing the yellow fever outbreak in Angola](#)

Corporate publications

June

[Annual Report of the Director – 2015](#)

August

[Achievements, challenges and major outputs 2015: Highlights from the Annual Report of the Director](#)

Scientific advice

April

[A systematic literature review on the diagnostic accuracy of serological tests for Lyme borreliosis](#)

June

[Systematic review on the incubation and infectiousness/shedding period of communicable diseases in children](#)

November

[Systematic review on hepatitis B and C prevalence in the EU/EEA](#)

Policy briefing

March

[Interventions in vulnerable groups are the key to eliminating tuberculosis in Europe](#)

June

[Preparing for Zika in the EU](#)

November

[Last-line antibiotics are failing: options to address this urgent threat to patients and healthcare systems](#)

Regular publications

[Influenza virus characterisation, summary Europe](#) (8 issues in 2016)

[Measles and rubella monitoring](#) (3 issues in 2016)

[Communicable disease threats report](#) (52 issues in 2016)

Communication guides

April

[Let's talk about hesitancy: enhancing confidence in vaccination and uptake](#)

[Let's talk about protection: enhancing childhood vaccination uptake](#)

[Translation is not enough: cultural adaptation of health communication materials](#)

Annex IX. Negotiated procedures conducted in 2016 with a value above EUR 135 000

In accordance with its Financial Regulation, ECDC must publish a list of negotiated, exceptional procedures for contracts of a value above EUR 135 000.

Contract authorities may use the negotiated procedure without prior publication of a contract notice, whatever the estimated value of the contract, in the cases mentioned in Article 134(1) (a) to (g) of the Rules of Application of the Financial Regulation.

There were four negotiated procedures based on this Article in 2016.

Reference			Title	Type of procedure RAP art. 134(1)	Amount	Contractor	Contract reference
ECDC/NP/2015/04			Office space for ECDC headquarters	(g)	SEK 593 195 760	Klövern	7482-0023-03
NP/2016/	OCS	/5869	Virus characterisation support and guidance for reporting of human influenza strains in Europe, 2016–2020	(b)	EUR 640 000	Francis Crick Institute	ECDC/2017/001
NP/2016/	OCS	/9179	Support of surveillance activities of human influenza in Europe, 2017–2021 – training	(a)	EUR 600 000	Aristotle University of Thessaloniki	ECDC/2017/005
NP/2016/	OCS	/9180	Support of surveillance activities of human influenza in Europe, 2017–2021 – EQA	(a)	EUR 800 000	National Institute for Public Health and the Environment, RIVM	ECDC/2017/002

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