



ECDC CORPORATE

Annual Report of the Director

2017

ECDC CORPORATE

Annual report of the Director

2017



Suggested citation: European Centre for Disease Prevention and Control. Annual report of the Director -2017. Stockholm: ECDC; 2018.

Stockholm, June 2018

ISBN 978-92-9498-185-1 ISSN 1977-0081 doi: 10.2900/048159 Catalogue number TQ-AB-18-001-EN-N

© European Centre for Disease Prevention and Control, 2018 Reproduction is authorised, provided the source is acknowledged

Contents

Abbreviations	4
Foreword by the Chair of the Management Board	7
Executive summary	
Part I. Policy achievements	
Surveillance and epidemic intelligence Scientific support	
3. Preparedness and response	
4. Training and capacity building	24
5. Communication	
6. Disease Programmes	
7. Management	
Part II (a). Management	52
1 Management Board	
2 Major events	
3 Budgetary and financial management	
4 Human resources management	
6 Budget implementation tasks entrusted to other services and entities	
7 Assessment of audit results during the reporting year	
8 Follow-up of recommendations and action plans for audits	
9 Follow-up of observations from the discharge authority	
Part II (b). External evaluations	
External evaluation	
Internal evaluations	
Part III. Assessment of the effectiveness of the internal control systems	
1 Risk management	63 66
Part IV. Management assurance	67
1 Review of the elements supporting assurance	
2 Reservations	67
3 Overall conclusions on assurance	67
Part V. Declaration of assurance	
Annexes	70
Annex 1. Implementation of the Work Programme 2017	
Annex 2. Statistics on financial management	
Annex 3. Organisational chart	
Annex 4. Establishment plan	
Annex 5. Human and financial resources by activity	82 ∞
Annex 7. ECDC MB/AF/Coordinating Competent Bodies	۰۰۰۰۵ 11 <i>۵</i>
Annex 8. ECDC outputs published in 2017	120
Annex 9. Exceptional negotiated procedures conducted in 2017	

Abbreviations

1082/2013/EU Decision No 1082/2013/EU of the European Parliament and of the Council of 22 October 2013

on serious cross-border threats to health

ABAC Accrual-Based Accounting, the EU integrated budgetary and accounting system

AMR Antimicrobial resistance

ARHAI Antimicrobial resistance and healthcare-associated infections
ASPHER Association of Schools of Public Health in the European Region

CAF Common Assessment Framework
CCB Coordinating Competent Body

CDC Centers for Disease Control and Prevention, USA
CHAFEA Executive agency of the European Commission
CPCG Committee on procurement, contracts and grants

CPDP ECDC Continuous Professional Development Programme

CRM Customer Relationship Management

DPO Data protection officer

CONT Committee for Budgetary Control of the European Parliament

EEA European Environment Agency
EAAD European Antibiotic Awareness Day

EARS-Net European Antimicrobial Resistance Surveillance Network
EEA/EFTA European Economic Area/European Free Trade Association

EHFG European Health Forum Gastein
ELITE European Listeria Typing Exercise

ELDSNet European Legionnaires' Disease Surveillance Network

EFSA European Food Safety Authority
EMA European Medicines Agency

EMCDDA European Monitoring Centre for Drugs and Drug Addiction

ENP European Neighbourhood Policy

ENPI European Neighbourhood and Partnerships Instrument (or ENI – European Neighbourhood

Instrument)

ENVI Committee on the Environment, Public Health and Food Safety of the European Parliament

EOC Emergency Operations Centre

EPIET Epidemiology Path of the ECDC Fellowship programme

EPIS Epidemic Intelligence Information System

EPM Epidemiological methods section

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 Public Health Microbiology Path of the ECDC Fellowship Programme

EuroCJD European and allied countries collaborative study group of Creutzfeldt-Jakob disease

EuSCAPE European survey on carbapenemase-producing Enterobacteriaceae

EVAP WHO European Vaccine Action Plan 2015–2020

EVD Emerging and vector-borne diseases

EWRS Early Warning and Response System

FRA European Union Agency for Fundamental Rights 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
MCS Microbiology coordination section

MediPIET Mediterranean Programme for Intervention Epidemiology Training

MERS-CoV Middle East respiratory syndrome coronavirus

MMR Measles, mumps and rubella

MRSA Meticillin-resistant Staphylococcus aureus

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
SMT Senior management team

SRS Surveillance and Response Support unit STEC Shiga toxin-producing *Escherichia coli*

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 Verocytotoxin-producing Escherichia coli

WHO World Health Organization

WHO/EURO World Health Organization, Regional Office for Europe

Foreword by the Chair of the Management Board

First of all, I would like to congratulate Andrea Ammon, who was elected Director of ECDC in spring 2017. I also want to thank her for the excellent work she did and the many things she accomplished during the last two years when she was ECDC's acting director. Her election will provide ECDC with the stability and leadership needed to further consolidate the Centre's work and prepare for the future challenges. ECDC's contributions to public health are highly appreciated by the Member States and the European Commission.

In 2017, the Management Board started to prepare the third external evaluation of ECDC, which will be carried out in 2018-2019. The evaluation will cover the period 2013–2017. It will map ECDC's current strengths and show ways to make ECDC even better. The Management Board has approved the proposed timeline for the evaluation and appointed several members of the Management Board to serve on the External Evaluation Steering Committee (MEES); the MEES held its first meetings in 2017 and also drafted the terms of reference for the external evaluation. The external evaluation will draw on ongoing evaluations in other areas such as surveillance systems, public health training or disease programmes.

Preparedness remain an area of high priority for ECDC, particularly with regard to the implementation of Decision 1082/2013/EU on serious cross-border health threats. ECDC provided the Member States and the Commission with a number of tools to support their work in this area. Antimicrobial resistance and vaccine-preventable diseases were also high priorities due to the threat of increasing antimicrobial resistance and the rise of vaccine hesitancy in the EU.

In 2017, ECDC continued to provide support to the European Commission and the Member States in preventing and controlling infectious diseases. This annual report highlights the diversity and importance of the Centre's work, for example:

- ECDC published 38 rapid risk assessments which addressed new disease threats in Europe.
- ECDC approved the roadmap for the reengineering of its disease surveillance systems which will integrate
 and optimise ECDC's surveillance platforms and processes and reduce the reporting burden for the Member
 States.
- ECDC continued to support the monitoring of microbiology laboratories capabilities in Europe; the Centre
 measured laboratory capacity over the last four years and coordinated a series of external quality
 assessments for laboratories across Europe to ensure new disease clusters can be detected quickly and
 accurately. The reports show that laboratory capacity in the Member States has been steadily improving
 over the last few years.

In my capacity as Chair of the Management Board of ECDC and Board Member since the Centre's early days, I am in a good position to judge the work carried out by the Centre, to clearly see the progress that has been made, and to appreciate the added value ECDC has brought to the Member States and the European Commission.

ECDC's vigilance, preparedness and commitment, combined with the Centre's joint actions with the Member States, the Commission and our partners (for example the WHO) ensure that Europe's defences against communicable diseases remain at a constantly high level. ECDC has again proved its importance for European public health in 2017, and it will continue do so in the coming years.

Daniel Reynders
Chair of the ECDC Management Board
24 February 2018

Introduction by the Director

2017 was not a year marked by excessive outbreaks, but two serious threats to public health kept us busy all year round:

- For many years, ECDC has been addressing antimicrobial resistance and promoting the prudent use of
 antibiotics, especially in healthcare settings. ECDC strongly supports the European Commission's 'One
 Health' approach, seen as a collaborative effort to attain optimal health for people, animals and the
 environment.
- Vaccine hesitancy in Europe. There is overwhelming evidence that vaccines work yet many parents are not having their children immunised, ignoring that not vaccinating children is by far the greater risk.

Data collected by ECDC were at the heart of two public health campaigns: European Antibiotic Awareness Day and European Immunisation Week. Both campaigns could offer compelling toolkits because ECDC delivered the scientific data behind the campaign messages ('Vaccines work!', 'Keep antibiotics working!').

Equally important was ECDC's work in the area of disease surveillance: public health risks in 2017 included pneumonic plague in Madagascar, several measles outbreaks in Europe, and a particularly severe influenza season that lasted well into 2018.

In 2017, the Centre responded to 59 scientific requests from the European Commission, the European Parliament and the Member States; more than 200 documents were published on our newly designed website, roughly two-thirds of them were scientific reports, studies or quidance documents.

After many months of preparatory work, the roadmap for reengineering our surveillance system was finalised. The new system will improve the user experience and reduce the burden placed on Member States. We also stepped up our support for whole genome sequencing, mostly with an eye on cross-border threats to health: sequencing the genes of a pathogen makes it much easier to identify cross-border outbreaks.

Collaboration with our partners in the public health community was intensified. I am pleased to report that our strategic collaboration with the WHO Regional Office for Europe was further strengthened. The new design of our co-branded reports is but one sign of our excellent working relationship with WHO.

2017 marked the last full year in our old headquarters, a converted school building from 1888. Our new building in the Solna-Frösunda neighbourhood will feature all the technical and facilitative amenities of a modern office building. We are convinced that both our staff and our visitors will enjoy what the new ECDC building has to offer and that our new home will foster an atmosphere of cooperation and productivity.

Andrea Ammon Director of ECDC

29 March 2018

Executive summary

Overview: 2017 at a glance

ECDC delivered 90% of the outputs promised in its 2017 work programme (Single Programing Document 2017–2020)

ECDC core functions: main achievements

Surveillance. The interactive online Surveillance Atlas of Infectious Diseases is now more user-friendly and covers more areas: 47 diseases plus antimicrobial resistance data are now included. A dashboard showing determinants was added to the ECDC geoportal. A common vision and roadmap for the implementation of the Surveillance System Reengineering project was launched in 2015; once implemented, it will improve the user experience of ECDC's surveillance tools and reduce the reporting burden for Member States. The implementation of the EPHESUS project started; EPHESUS is a four-year project to strengthen efficiency and public health usefulness of surveillance systems at the EU level. A joint meeting of the ECDC National Focal Points for Surveillance (NFPS) and Microbiology took place in October 2017; the participants agreed on a European model for handling whole genome sequencing (WGS) data.

Epidemic intelligence and response. In 2017, a total of 411 events was detected through epidemic intelligence, applying criteria set by the EU Early Warning and Response System on Public Health Threats (EWRS). The Centre produced 41 rapid risk assessments (RRA), 38 of which were published, while three were only distributed to the European Commission and the National Focal Points for Response. ECDC also published 55 epidemiological updates, 22 which covered the ongoing measles outbreaks in Europe and 15 were about the yellow fever outbreak in Brazil. ECDC reviewed its methodology and procedures for rapid risk assessments in order to ensure better consistency and improve the involvement of Member States and international agencies. ECDC participated in a joint effort – with WHO and the Joint Research Centre (JRC) of the Epidemic Intelligence for Open Sources (EIOS) – to develop a joint platform to support the screening of global threats.

Scientific advice. ECDC began implementing its new scientific strategy, which included a new policy for open access publications and authorship. In 2017, ECDC published 122 scientific outputs on its website, including 38 rapid risk assessments, 78 surveillance reports and six scientific advice outputs (three expert opinions, two systematic reviews, and one public health guidance document), as well as 81 scientific papers in peer-reviewed journals. In addition, ECDC responded to 59 scientific requests from the European Commission, the European Parliament and the Member States. ECDC further streamlined its procedures to produce scientific outputs and monitor their quality and timeliness. An action plan to improve complementarity between the management Board and the Advisory Forum was agreed. ESCAIDE, ECDC's flagship scientific conference, attracted almost 600 participants from 49 countries.

Microbiology. ECDC completed the fourth pan-EU/EEA monitoring survey of microbiology laboratory capabilities for the national and 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 7.5/10 in 2016 and showed a reduction in the capacity gaps between countries. The results show that Member States are moving fast toward the 2020 objectives. ECDC provided individual country profile feedback to Member States and published the data of the first EULabCap years (2013–2016) as online maps, supported by tweets. ECDC coordinated nine external quality assessments among the EU networks of laboratories. A peer-review publication produced and published in 2017 showed a very rapid expansion of the public health use of whole genome sequencing (WGS) in the EU, with half of the Member States performing WGS surveillance for at least one of the priority pathogens listed in the ECDC roadmap.

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, produced several practical tools to support health experts and managers in the Member States in the area of preparedness assessment and planning, notably a handbook and tool for the prioritisation of infectious diseases threats. ECDC and EUROPOL conducted a cross-sectoral bio-risk awareness and mitigation training. In November 2017, ECDC coordinated an avian influenza event in Vienna, a regional cross-sectoral simulation exercise based on the 'One Health' approach (human and animal sectors) with eight south-eastern Member States.

Response. ECDC worked on its Preparedness and Response Support strategy 2018–2022, expected for adoption in 2018. ECDC, the European Commission and the health security working group for EWRS agreed on the vision, scope and requirements for a new version of the Early Warning Response System (EWRS), expected by the end of 2018. Response support was provided through missions in Egypt (dengue fever), Libya (malaria), Nigeria (cholera), and Uganda (viral haemorrhagic fever).

Public health training. In 2017, 37 fellows graduated from the ECDC Fellowship Programme. ECDC started the implementation of its integrated Continuous Professional Development Programme (CPDP). In total, 397 external

participants were trained. Training approaches included three online courses (ECDC Virtual Academy, EVA), and 12 senior exchange visits. ECDC further provided support to the MediPIET consortium, which saw 16 fellows graduate. ECDC continued to reinforce the network of Public Health Schools in Europe in view of the first meeting of the network in February 2018.

International relations. In 2017, the Management Board approved the ECDC international relations policy 2020, following a mid-term review of the implementation of the ECDC international relations policy (2014). Collaboration with WHO was further enhanced: both organisations released their first co-branded surveillance report, implemented the joint action plan, and prepared new collaboration guidelines. ECDC continued to provide technical pre-accession support to EU enlargement countries. Fourteen technical cooperation events were held, with a total of 126 participating experts. ECDC assessed communicable disease prevention, surveillance, and disease control systems in Albania. ECDC continued its technical cooperation with the ENP (European Neighbourhood Partnership) partner countries through a project funded under the European Neighbourhood Partnership Instrument: six meetings with a total of 66 experts were held.

Health communication. In 2017, ECDC started implementing its new communication strategy. An important aspect of this strategy is the integration of risk communication and national preparedness planning. ECDC launched its redesigned web portal which now has an improved search function for ECDC outputs. ECDC published a total of 210 reports in 2017, including 78 surveillance reports. The Centre's presence in social media grew substantially.

Eurosurveillance. In 2017, Eurosurveillance switched to a new publication platform with improved workflows and an associated new website. New features include article level metrics, customised alerts and searches, and citation tracking. The journal has an impact factor of 7.2 (its highest since 2012) and is a top ten infectious disease journals. In 2017, the journal received over 900 submissions; 230 items were published. Eurosurveillance revved up its social media activities via Twitter and expanded its LinkedIn presence; journal editors gave presentations at scientific conferences and met with their contributors.

ECDC Disease Programmes: major achievements

Antimicrobial resistance and healthcare-associated infections. ECDC continued to support the European networks for AMR and HAI surveillance. In addition to AMR surveillance data, surveillance data on surgical site infections can now be accessed through ECDC's online atlas. ECDC dedicated a substantial amount of time to three requests from the European Commission. ECDC expanded the directory of online resources for the prevention and control of AMR and HAIs. ECDC issued a guidance on 'infection prevention and control measures and tools for the prevention of entry of carbapenem-resistant Enterobacteriaceae into healthcare settings' and launched its molecular typing surveillance for carbapenem-resistant and/or colistin-resistant Enterobacteriaceae. Five country visits were organised to discuss antimicrobial resistance issues. Over 40 countries across Europe participated in the tenth European Antibiotic Awareness Day. Throughout the EU/EEA, national events and campaigns on prudent antibiotic use were launched. ECDC also continued to act as a key contributor to the Transatlantic Taskforce on Antimicrobial Resistance (TATFAR).

Emerging and vector-borne diseases. For most part of the year, ECDC followed up on the Zika virus outbreak which began at the end of 2015. ECDC prepared, or contributed to, rapid risk assessments on significant EVD outbreaks. The new modelling tool to appraise and compare vector control strategies for West Nile fever in Europe was pilot tested in the field between March and October 2017. Surveillance of West Nile disease was strengthened by including animal cases ('One Health' approach) to better identify affected areas. Real-time data and maps are available on the ECDC Atlas for West Nile fever cases in Europe. ECDC and EFSA continued to collect data on arthropod vectors (insects) for both human and animal diseases. ECDC submitted the case definition for Lyme neuroborreliosis to the European Commission, for possible integration in the list of the communicable diseases notifiable at EU level.

Food- and waterborne diseases and zoonoses. ECDC organised successfully with EFSA the third joint networks meeting in Parma in October 2017, on the theme 'One Health approach to collaborative response to foodborne diseases outbreaks in the EU/EEA'. Fifty-four urgent inquiries were reported through EPIS. ECDC further developed the ELiTE project, which now ensures the sequencing of over 2 700 human *Listeria* isolates from 27 EU/EEA countries for a retrospective validation of signal detection. The project is essential for understanding the molecular epidemiology of listeriosis. ECDC, the US CDC and Public Health Canada published an important joint vision paper on the integration of whole genome sequencing (WGS) in global foodborne diseases surveillance. The aim is to ensure that data from WGS-supported surveillance are comparable globally. ECDC and EFSA published the annual zoonoses and AMR reports. The ECDC FWD expert exchange programme (FWDEEP) continued with three experts visits.

HIV, **sexually transmitted infections and viral hepatitis.** In 2017, ECDC played a key role in supporting the Maltese and Estonian EU Presidencies to organise successful conferences and keep HIV high on the EU political agenda. The Malta conference resulted in a document with a number of actions which could have a significant impact on ending the AIDS epidemic by 2030. ECDC disease experts published several articles in scientific journals. An extensive evaluation of HIV surveillance systems for Europe confirmed their efficiency, usefulness and public health fit for purpose. For the first time, ECDC and EMCDDA organised a joint network meeting during World

Hepatitis Week. Topics included approaches on how Europe can improve the surveillance and response to hepatitis among people who inject drugs, and how progress towards the WHO targets for elimination can be monitored.

Influenza and other respiratory viruses. In 2017, ECDC published an expert opinion on antivirals (neuraminidase inhibitors) for the prevention and treatment of influenza. ECDC and the WHO Regional Office for Europe continued their joint influenza surveillance; during influenza season, surveillance results are published weekly. In September 2017, EFSA and ECDC started publishing a quarterly joint situation assessment report on avian influenza, which is available on the ECDC website. An e-learning module was launched for vaccination campaign managers in charge of healthcare workers. ECDC continued funding the I-MOVE network which provides estimates of seasonal influenza vaccine effectiveness; an overview report for eight influenza seasons from 2007–2008 to 2014–2015 was published. The report covers national recommendations for vaccination and coverage rates in the EU Member States.

Tuberculosis. During World TB Day on 24 March 2017, ECDC and the WHO presented the joint annual report on tuberculosis surveillance and monitoring in Europe. ECDC supported national campaigns on the theme 'United to end TB'. ECDC continued supporting five WHO high-priority countries: Bulgaria, Estonia, Latvia, Lithuania, and Romania through exchange visits and training courses. ECDC updated the European Union Standards for Tuberculosis Care (ESTC) in collaboration with the European Respiratory Society. ECDC continued to organise and support the TB surveillance network and the network of TB reference laboratories and coordinated external quality assessments for TB laboratories. ECDC contributed to the first WHO ministerial conference on 'Ending TB in the sustainable development era' in Moscow. Sixteen peer-reviewed articles on TB were published in scientific journals.

Vaccine-preventable diseases. In 2017, ECDC's work targeted the issue of vaccine hesitancy in Europe: ECDC published a catalogue of interventions to address vaccine hesitancy; a social media toolkit to support national campaigns during European Immunisation Week was developed in close collaboration with the WHO Regional Office for Europe; a technical advisory group with communications and immunisation experts was set up to develop communications strategies that could increase vaccination coverage rates in Europe. ECDC also organised a workshop during the 2017 European Health Forum in Gastein, Austria, on 'Addressing vaccine hesitancy in the post-factual era'. ECDC published a rapid risk assessment and provided monthly epidemiological updates on measles and participated in the regional verification committee meeting hosted by WHO. ECDC improved the sentinel surveillance systems for pertussis and invasive pneumococcal disease.

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, up on request from that authority.'

Key tasks of ECDC include:

- 1. Operating dedicated surveillance networks
- 2. Providing scientific opinions and promoting and initiating studies
- 3. Operating the Early Warning and Response System
- 4. Providing scientific and technical assistance and training
- 5. Identifying emerging health threats
- 6. Collecting and analysing data
- 7. Communicating on its activities to key audiences.

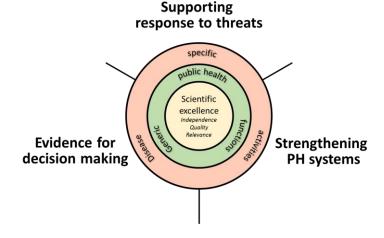
ECDC operates in accordance with its core values: service orientation, quality, and 'one team'.

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.

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 of ECDC in its Founding Regulation, reiterated in Decision 1082/2013/EU on serious cross-border threats to health. ECDC's overarching priorities for surveillance are to add more value to the data it collects by making them available in user-friendly formats; to decrease the burden of data provision by the Member States; and to take advantage of emerging technologies, in particular molecular typing for surveillance and information technology.

Results achieved in 2017

The <u>Surveillance Atlas of Infectious Diseases</u>, which is available on the ECDC website, lets users access surveillance data on all EU-reportable diseases. ECDC coordinates the disease data collection for these diseases so that the Member States can fulfil their legal obligation to report these data. In 2017, the Atlas received a more user-friendly layout and now covers 47 diseases (44 in 2016) and indicators of data quality. ECDC added surveillance for new pathogens in the area of anti-microbial resistance. Depending on the disease, data updates are available weekly, monthly or yearly.

In 2017, several disease determinants (including average maximum temperatures, movements of air passengers, and vector presence) were added to the Atlas to support the assessment of emerging vector-borne diseases. A new version of the ECDC geoportal (formerly E3), will be available in 2018, giving the public access to data on disease determinants, which will be presented in a dashboard format.

The surveillance system-reengineering project (SSR) was finalised in 2017, and the new surveillance system is now under construction. The full implementation will require four years according to the roadmap developed in 2017, with several milestones to be achieved in 2018 and 2019. The new surveillance system will be accessible to the Member State stakeholders through a modern and customisable interface that will integrate the functionalities of TESSy and EPIS; it will provide data access, data exploration and visualisation tools. This comprehensive approach will ensure a better data flow across the systems, a reduced burden, and efficiency gains. A new approach to data validation will improve data quality and ensure accountability for the data by the Member States.

The implementation of the EPHESUS project started in 2017. EPHESUS is a four-year project (2017–2020) aimed at evaluating all infectious disease surveillance systems in the EU/EEA public health sector. Expected improvements are better, faster, and more complete data that are collected more efficiently. In 2017, a common protocol for the evaluation of surveillance systems was agreed upon, with HIV/AIDS the first surveillance systems that were evaluated (summer 2017). In December 2017, systems for antimicrobial resistance and healthcare-associated infections followed.

A joint meeting of the ECDC National Focal Points for Surveillance (NFPS) and for Microbiology took place in October 2017 and agreed on a European model for handling whole genome sequencing (WGS) data. Using the experience gained in the COMPARE projects funded by the EU HORIZON 2020 programme², a pilot project in eight Member States on food- and waterborne pathogens was agreed upon; if successful, the model could be extended to all countries and cover more pathogens. ECDC has been using WGS data for outbreak detection and investigation since 2016. This proved effective in better delimiting outbreaks and in identifying and controlling sources. ECDC offers WGS services to Member States that cannot afford it themselves at no cost; these WGS services are limited to multinational outbreaks of selected food- and waterborne diseases and are only subsidised until the Member State has developed its own internal capacity in this area.

ECDC drafted the first implementing act on surveillance to Decision 1082/2013/EU on serious cross-border health threats for the European Commission; the draft included an updated list of reportable diseases and case definitions. Four new case definitions³ were proposed. The Decision is awaiting Member States approval.

² EU Framework Programme for Research and Innovation 2014–2020, with a budget of EUR 80 billion

³ Lyme neuroborreliosis, dengue, chikungunya, and Zika virus infections

Indicators for surveillance

No.	Objective	Indicator	Target 2017	Verification	Result 2017
1	Complete the optimisation of technical surveillance platforms and processes identified as part of the SSR project in 2015 and 2016.	roadmap (developed in 2016) for upgrading the surveillance informatics tools.	Roadmap priority actions have been fully implemented and ready for being tested with surveillance stakeholders.	Monitoring of SSR roadmap milestones. Feedback collected from users on reengineered surveillance tools during the testing phase.	Roadmap completed in July 2017. Implementation started soon after and completion expected in 2021. The first milestones of the roadmap are in 2018.
2	Develop a protocol for epidemiological EU/EEA-level surveillance system evaluation and apply it to a first batch of enhanced disease surveillance systems.		Protocol and evaluation reports received on time and meeting predefined quality criteria for HIV/AIDS, antimicrobial resistance and healthcareassociated infections.	Monitoring of milestones and quality indicators as reported in the evaluation reports.	Common protocol for evaluation delivered in time. Pilot evaluations of surveillance systems for HIV/AIDS (report in summer 2017) and for antimicrobial resistance and healthcare associated infections (report in December 2017).
3	Publish in-depth surveillance data analyses in peer- reviewed scientific journals.	for publication in peer-reviewed scientific journals.	At least five manuscripts accepted for publication in peer-reviewed scientific journals.	Acceptance letters from journals received by first authors.	Done: 10 peer reviewed scientific articles produced.
4	Consolidate and further develop molecular surveillance at EU/EEA level.	milestones as per	All milestones completed as per roadmap.	Monitoring of milestones against roadmap as reported to AF.	All milestones completed as per roadmap 2017: -CPE producing enterobacteriae - Gonococcal antimicrobial resistance - Meningococcal meningitis - Listeria

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 2017

In 2017, epidemic intelligence detected 411 events, in accordance with the criteria set in the EU Early Warning and Response System on Public Health Threats (EWRS). ECDC opened and monitored 69 new threat assessments, in addition to 18 threat assessments that were carried over from previous years; 83 EWRS messages and 91 comments were posted. 52 of the EWRS messages were classified as alert notifications, and 31 as other information; 12 resulted in opening a new threat assessment in the Threat Tracking Tool (TTT).

The Centre produced 41 rapid risk assessments (RRA), 38 of which were published (Annex 8), while three were only distributed to the European Commission and the National Focal Points for Response. The threats included topics such as: salmonella (7), chikungunya in Italy and France (3), avian influenza A(H7N9) (3), hepatitis A in men having sex with men (3), yellow fever in Brazil (3), Legionnaires' disease in the EU (2), multi-resistant tuberculosis (2), mass gatherings in Spain and Saudi Arabia (2), multidrug-resistant TB (2), plague in Madagascar (1), cholera in the Horn of Africa and Gulf of Aiden (1), CRISPR (1), Cyclospora (1), Ebola in Congo (1), listeria (1), locally acquired malaria infections in the EU (1), and the Zika virus outbreak (1).

ECDC also published 55 epidemiological updates, 22 of which related to the ongoing measles outbreaks in Europe and 15 dealt with the yellow fever outbreak in Brazil.

ECDC reviewed its methodology and procedures for rapid risk assessments in order to ensure consistency and improve collaboration with the Member States and international agencies. The new methodology will be in full operation in 2018.

More than 2 700 users installed the Threat Report app for mobile devices and downloaded 17 000 ECDC documents.

ECDC participated with WHO and the Joint Research Centre (JRC) in the development of the Epidemic Intelligence for Open Sources (EIOS) platform which supports the screening of global threats. ECDC also cooperated with the Global Health Security Action Group (GHSAG) to contribute to the Early Alerting and Reporting (EAR), a weekly screening of global threats, based on data from the EIOS platform.

In 2017, Zika virus outbreaks remained a concern. ECDC regularly updated its maps of Zika transmission in the affected areas, based on a categorisation of Zika epidemiological profiles that the Centre developed with WHO and the US CDC. ECDC also developed a database for the different strands of influenza.

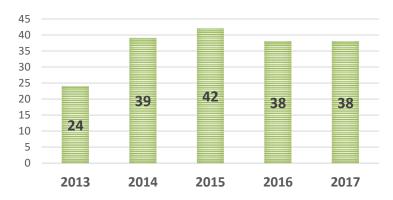
ECDC monitored the yellow fever situation in Brazil and assessed the risk for travellers.

ECDC developed training activities for risk assessments and outbreak investigations (see also 4.1 Public health training).

Indicators for epidemic intelligence

No.	Objective	Indicator	Target 2017	Verification	Result 2017
5	Provision of relevant, timely and quality rapid risk assessment to support the risk management carried out by the Member States and the	Number of timely rapid risk assessments Proportion of rapid risk assessment assessed positively by Member States	(1) 80% of rapid risk assessments produced within the set deadline for each RRA (2) 100% within 4 weeks	Timeliness: RRA	(1) 100% (2) To be completed (3) Not available in 2017 (no stakeholder survey or ad
	·	,	(3) 80% yearly satisfaction of respondents	ODTD	hoc survey)
6	Provision of relevant, and timely updates on threats to the Member States and the European Commission	Provision of regular epidemiological updates for threats under specific monitoring	· ·	CDTR, epidemiological updates available on ECDC website CDTR publications	 (1) 55 epidemiological updates, 22 of which related to the ongoing measles outbreaks in Europe and 15 regarding the yellow fever outbreak in Brazil. (2) 52 weekly CDTR published in 2017
		Provision of weekly communicable	2017 100% requests	List of requests from Member States	(3) 100% requests for response support from Member
		disease threat reports Provision of support teams upon request			States honoured
		from Member States	nonoured		

Figure 1. Number of rapid risk assessments published by year



2. Scientific support

2.1 Scientific advice

Context

Highly valued by our stakeholders, the provision of independent scientific advice is one of ECDC's main functions. As a technical, publicly funded EU agency, ECDC is committed to scientific excellence and independence, and to transparency in its methods and processes. ECDC plays a crucial role as a trustworthy evidence filter and independent information source in all areas within its remit. Producing reliable evidence syntheses at the EU level has the potential to save resources and avoid the duplication of efforts. ECDC is committed to enhance the consistency of its scientific advice outputs, improve analytical methods and processes as part of an overarching scientific strategy. The ability to produce evidence-based advice that is scientifically sound, useful and timely is one of the Centre's foremost tasks.

Prioritising work in the right areas at the right time can only be achieved through close exchange with stakeholders at the EU and Member State levels. ECDC uses structured mechanisms to engage relevant stakeholders and make the decision-making process as transparent as possible. ECDC works closely with its established public health and disease networks to identify priority areas, and exchange expertise and information. At the EU level, ECDC developed robust relationships with EU institutions, EU agencies responsible for risk assessment (e.g. through the EU-ANSA network of scientific advice in EU agencies established in 2013), and contributes to EU networks such as SHIPSAN ACT, AIRSAN and EMERGE.

This collaborative and networking approach expands beyond the borders of the European Union, and includes international partners as well as research bodies working in the areas of infectious diseases epidemiology and prevention and control (e.g. Global Research Collaboration for Infectious Disease Preparedness). To be able to fulfil its core functions, ECDC needs to follow research and methodology developments on a global scale to ensure that its work stays relevant and scientifically sound. Continued mutual learning and capacity building in collaboration with stakeholders are essential means to keep scientifically and technically up-to-date.

Results achieved in 2017

In 2017, ECDC implemented a new scientific strategy which had already been approved in 2016. ECDC published six major scientific advice outputs in 2017: three expert opinions, two systematic reviews, and one public health guidance document (see Annex 8). In addition, ECDC published 81 scientific papers in peer-reviewed journals.

As part of its scientific strategy, ECDC finalised its policies on open access publications, authorship and acknowledgment of contributions. As a public funded agency, ECDC wants to ensure that all its scientific outputs are freely available, both on its website and on scientific journal websites as 'gold-standard' open access. The authorship policy is directed at increased transparency and fair recognition of contribution to the Centre's work.

ECDC streamlined its systems and procedures to produce scientific outputs and improved the monitoring of quality and timeliness of these outputs. A new version of the ECDC Scientific Advice Repository and Management System (SARMS) was released to support this objective.

In 2017, ECDC responded to 59 formal scientific requests: 52 were received from the European Commission (34 of which were forwarded from Members of the European Parliament), one came directly from the European Parliament, four were from Member States and two were sent by other stakeholders.

ECDC's Advisory Forum (AF) continued to play a vital role: the AF provided scientific feedback, supported scientific advice, helped with guidance prioritisation, and provided peer reviews. In 2017, ECDC agreed with its Management Board (MB) on an action plan to improve the complementarity of AF and MB, including the production of an annual report by the Chief Scientist, the development of an induction package for new Board Members, and a clarification of the role of the Advisory Forum and its scientific independence.

In 2017, ECDC continued to deliver training courses on evidence-based practices and decision-making: 59 ECDC staff members and 98 experts from Member States participated in nine four-day training workshops. The feedback received from participants was consistently positive. Every workshop was evaluated, and the course content and training materials are regularly updated, based on the results of the evaluation.

The 2017 ESCAIDE conference attracted almost 600 delegates from 49 countries; 381 abstracts were submitted, 67 of which were late breakers. The feedback received from participants after the conference showed a positive appreciation of the plenary and parallel sessions, and a high overall satisfaction level.

Indicators for scientific advice

No.	Objective	Indicator	Target 2017	Verification	Result 2017
7	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. Average 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: 7.91 (Source: PubMed and Scopus) (The impact factor is calculated for peer-reviewed publications. It is based on the last 5 years, which provides a broader range of citation activity for a more informative picture over time). Average number of citations for each article: 26.31 (covering period 2005-2015)
8	High level of timely and adequate response to requests for scientific opinions by providing authoritative and reliable evidence-based scientific opinions and guidance to Member States, Commission and Parliament	Proportion of prioritised scientific topics executed. Proportion of requested items for scientific advice (ad hoc and planned) timely delivered Use of evidence-based opinions and guidance produced by ECDC	work programme	Comparison between IRIS (tool for scoring scientific priorities by the Advisory Forum) and the approved Work Programme Source SARMS (internal database on external scientific advice requests) Annual stakeholder survey	(1) Around 70% of the actions prioritised in 2015 were included in the 2017 work plan. (2) 100% of the 59 formal external requests answered within the agreed deadline. (3) The annual stakeholder survey did

Figures 2 and 3. Impact factor of scientific publications and average number of citation per article

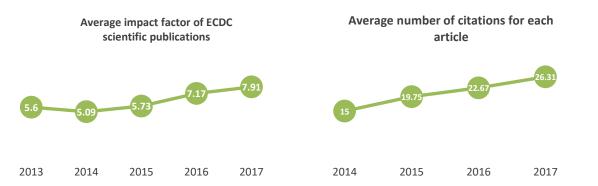
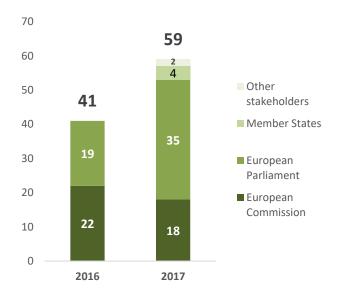


Figure 4. Number of formal external requests answered (from the European Commission, Member States and European Parliament)



2.2 Microbiology

Context

According to 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 being 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 collective capacity in the EU. ECDC and several laboratory networks linked to the Centre's Disease Programmes organise EQA schemes to evaluate the proficiency of laboratories to test for key pathogens and drug resistance traits. In the area of microbiology, ECDC and its networks agreed on a roadmap for the gradual, coordinated and cost-efficient introduction of data generated by molecular typing technologies to EU-level surveillance and outbreak investigations.

Results achieved in 2017

In 2017, ECDC carried out technical support activities for an estimated amount of EUR 2.2 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 1), conducted through the seven ECDC Disease Programmes' surveillance networks.

In 2017, ECDC and the National Focal Points for Microbiology completed the fourth (2016) round of pan-EU/EEA monitoring of microbiology laboratory capabilities for the national and EU-wide surveillance of communicable diseases and epidemic preparedness based on a set of agreed indicators (EULabCap). All EU/EEA countries participated. ECDC published the results as online maps; the fourth report will be published in April 2018. The EULabCap index, which expresses the microbiology capacity of Member States in the area of public health, reached 7.5/10 in 2016, indicating a fair to high capacity level. It also showed a reduction in the capacity gaps between countries. The results show that Member States are moving fast toward the 2020 objectives.

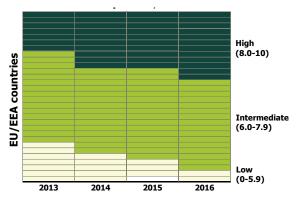


Figure 5. Level of country microbiology system capacity and capabilities (EULabCap 2013-2016)

Nine external quality assessments (EQA) were performed among the EU networks of laboratories in 2017. ECDC started implementing its EQA strategy 2017–2020 with the application of standard criteria for topic prioritisation. Also introduced were performance indicators to evaluate the usefulness, service quality, cost efficiency, and public health added value of each EQA.

ECDC conducted a third survey on the Member States' capacity for whole genome sequencing (WGS) in disease surveillance. The survey was conducted with the National Focal Points for Microbiology. The open access peer-reviewed publication published in 2017 showed a very rapid expansion over the period 2013–16. In 2016, half of the Member States performed WGS surveillance for at least one of the priority pathogens listed in the ECDC roadmap. In addition, ECDC developed ad-hoc capacity to support Member States that did not have the capacity to use WGS for cross-border clusters of listeriosis, salmonellosis and tuberculosis.

A memorandum of understanding was signed with the EMERGE Joint Action project ('Efficient response to highly dangerous and emerging pathogens at the EU level'), a project funded by the EU Public Health programme to ensure seamless cooperation with ECDC and the laboratory networks it supports.

In 2017, ECDC and EFSA received a mandate from the European Commission (as part of the EU's One Health approach) to upgrade the joint molecular typing database, in development since 2015 by both agencies for the laboratory-based surveillance of foodborne pathogens. ECDC and EFSA were asked to assess the technical options for adding WGS data and develop recommendations on how to upgrade the current database system.

An exchange of practices between Member States took place during the joint meeting of National Focal Points for Surveillance and Microbiology in the area of e-health. On aspect was the direct electronic reporting from laboratories. Half of the Member States are already using automated systems for at least one disease under surveillance at the national level.

Table 1. Summary of microbiology support activities 2017, by ECDC Disease Programme, section and technical area

		r Pathogens covered	Areas covered by microbiology activities (2017)								
ECDC Disease Programme or section	Network or project		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	Streptococcus pneumoniae, Staphylococcus aureus, Enterococcus faecalis, Escherichia coli, Klebsiella pneumoniae, Pseudomonas aeruginosa	•								
	EUCAST	Antimicrobial-resistant bacteria and fungi		•					•	•	•
	HAI-Net CDI	Clostridium difficile			•				•		
EVD	EVD-LabNet	Emerging viral pathogens	•	•					•		
FWD	FWD-Net	Salmonella enterica, Shiga toxin-producing E. coli, Listeria monocytogenes, Campylobacter jejuni/coli	•				•	•	•		
	EuroCJD	Variant Creutzfeldt– Jakob disease (vCJD)		•		•			•		
IRV	ERLI-Net	Influenza virus	•	•				•	•		
HSH	Euro-GASP	Neisseria gonorrhoeae	•		•			•		•	
VPD	EDSN	Corynebacterium diphteriae				•			•	•	
	EUpert-LabNet	Bordetella pertussis	•	•							
	IBD-LabNet	Neisseria menigitidis Streptococcus pneumoniae	•								
ТВ	ERLTB-Net	Mycobacterium tuberculosis complex	•	•	•	•	•	•	•		•
EPM	Routine molecular typing operations	Salmonella enterica, Shiga toxin-producing E. coli, Mycobacterium tuberculosis					•	•			
MCS	WGS capacity NMFP survey	Pathogens in the roadmap version 2.1, 2016–2019						•		•	

Indicators for microbiology support

No.	Objective	Indicator	Target 2017	Verification	Result 2017
9	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	Third 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	Verification by country visits and peer review of Member States and other components (results of laboratory External Quality Assessments –EQA_exercises)	Third survey report and fourth survey maps published; final report on four annual surveys to be published in April 2018
			Joint assessment with competent bodies of lessons learned from comparison 2015, 2014 and 2013 EULabCap indicators	202aboap topolit	Lessons learned from EULabCap 2015 assessed with NMFPs in May 2017 and presented as rationale for the ECDC Public Health Microbiology Strategy 2018-22, presented for the Advisory Forum advice in December 2017.
			Compare the laboratory EQA performance levels and EULabCap capability levels for surveillance of communicable diseases and antimicrobial resistance		Piloted indicators for EQA performance to assess the utility, relevance and quality of EQASs Piloted projects WGS-based surveillance for priority diseases, in line with the roadmap's milestones and third annual mapping of MS WGS-based surveillance
			Pilot implementation of strategic roadmap for whole genome sequencing-based surveillance		capacities performed and reported. Templates and procurement manual developed to ensure a common approach, harmonisation for the launch of EQAs and increased cost effectiveness
			Strengthened ECDC procurement process for external quality assessment schemes		

3. Preparedness and response

3.1 EU and country preparedness support

Context

Preparedness planning is a top priority for ECDC. 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.

Results achieved in 2017

In 2017, 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. ECDC assisted in reviewing the template and online survey tool to collect Member State input on the implementation of Art. 4 of Decision 1082 and developed the analytical framework for the Commission.

In 2017, ECDC made several practical tools available to support public health personnel in the Member States who work in the area of preparedness assessment and planning:

- Health Emergency Preparedness Self-Assessment tool (HEPSA), which aims to support EU countries to selfassess their preparedness infrastructures and functions and identify possible gaps to foster their improvement³
- Handbook on strategic planning for public health emergencies (PHE) preparedness⁴, with a stepwise approach for PHE planning in Member States
- Handbook and tool for the prioritisation of infectious diseases threats, to rank threats in a transparent, comparable and reproducible way
- Report on core competencies for EU Member States in public health emergency Preparedness, to identify strengths and areas for improvement in countries
- Literature review on community preparedness synergies, enablers and barriers in community/institutional preparedness
- Guide to the revision of national pandemic influenza preparedness plans, based on good practices and lessons learnt from the 2009 pandemic.

ECDC and EUROPOL held a cross-sectoral biorisk awareness and mitigation training in June 2017, in Budapest, Hungary. The course, delivered with a regional span to establish partnerships between neighbouring countries and support capacity building in the countries, gathered 44 attendees from three different sectors (law enforcement, public health/health emergency services and civil protection).

A regional cross-sectoral simulation exercise was conducted together with the ECDC Influenza and Respiratory Disease Programme (IRV) in November 2017, in Vienna, Austria. Participants came from eight southeast European countries. The exercises' focus was on avian and human influenza (One Health approach).

ECDC invited the National Focal Points for Preparedness and Response and the National Focal Points for Threat detection to strengthen synergies.

ECDC organised country visits to Spain and the Netherlands to review recent epidemic events, with a focus on community preparedness.

-

⁴ Published in 2018

Indicators for EU and country preparedness support

No.	Objective	Indicator	Target 2017	Verification	Result 2017
10	Support the European Commission in monitoring the implementation of Decision 1082/2013/EU (in particular Art. 4 – preparedness) with scientific evidence base, gap analysis on PH preparedness of individual MS and identification of areas for enhanced support.	Proportion of ECDC products in the area of PH Emergency Preparedness submitted to the Commission and included in the agenda of the Preparedness working group of the Health Security Committee	- 50% by end of 2018 - Progress report on Art. 4 used by European Commission	- Publication of technical reports following country visits distributed to relevant stakeholders within the set timeframe Endorsement of progress report on Art.4 by the HSC as presented by the European Commission.	6 products prepared by ECDC in 2017 No meeting of the preparedness group of the HSC in 2017. According to the Legal Act, the deadline for Member States to send their reports was 7 November; the European Commission extended the deadline to January 2018. ECDC is finalising the progress report in February 2018for presentation to the HSC in June 2018.
11	Strengthen preparedness in countries by providing methodological advice on effective preparedness planning, evaluation of response plans and their interoperability, while maintaining resilience to cooperate with HSC and its dedicated subgroups, as well as WHO IHR working groups.	Proportion of ECDC activities (guidance, seminars, workshops, exercises, country visits) undertaken to reach the planned objectives	- 90% of the key output of the SPD achieved by end of 2017	Meeting report of NFP annual meeting. Review of National preparedness plans ECDC Annual report	100% of the key output in the Single Programming Document achieved
12		Proportion of trained countries which will integrate tools and methods referenced to ECDC products for evaluation into national planning cycle	- 50% of countries actively involved have integrated the outcomes in their national plan by end of 2018	Technical reports on training workshops Workshop evaluation reports	Trained countries: 14 + 4 enlargement countries on biorisk; 12 on animal health Regarding the integration by countries in their national plan, the data analysis is not available at this stage.

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.

In addition to this, ECDC operates an Emergency Operations Centre (EOC). ECDC's public health emergency plan enables the Director to mobilise resources to support the EU-level response to serious cross-border threats to European public health. ECDC constantly reviews and updates the plan based on 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 2017

ECDC worked on its Preparedness and Response Support strategy 2018–2022, expected to be adopted by the Management Board in 2018.

ECDC, the European Commission and the health security working-group for EWRS agreed on the vision, scope and requirements for a new version of the Early Warning Response System (EWRS). An update of the system is expected by the end of 2018.

ECDC also supported WHO and the Global Outbreak Alert and Response Network (GOARN) with the deployment of epidemiologists to Madagascar in October/November 2017 (response to the plague outbreak). The Director of ECDC activated a level-1 public health emergency at ECDC in October 2017 for two weeks to ensure adequate support to the crisis and prepare relevant guidance in case of imported cases.

Following the evaluation report of the public health emergencies for Zika and Ebola in 2015 and 2016, ECDC updated its public health emergency plan.

ECDC provided response support through missions in Egypt (dengue), Libya (malaria), Nigeria (cholera), Uganda (viral haemorrhagic fever), South Sudan (surveillance), Madagascar (plague), Dubai (legionellosis) and Brazil (Zika).

In the area of substances of human origin, ECDC continued to support the European Commission by updating the guide for preparedness on Zika virus safety of substance of human origin. ECDC performed a risk assessment of the Danish protocols for testing of non-partner sperm donors, and provided advice on the need for syphilis screening for quarantined allogeneic tissues and cells. In addition, threat assessments for substances of human origin were performed, and three articles were published in peer review journals.

ECDC participated in two training courses and two simulation exercises within the framework of the EU Medical Corps (EU framework to facilitate the mobilisation of medical and public health teams for response and preparedness operations inside or outside the EU).

Indicators for response and emergency operations

No.	Objective	Indicator	Target 2017	Verification	Result 2017
13	Mobilisation mechanisms for public health response teams developed		100% requests for response support from Member States honoured	List of requests from Member States	100% requests for response support from Member States honoured
14	ECDC emergency operation centre strengthened	Number of field missions supported from the EOC		Missions reports	100% satisfaction: 1 mission to Dubai supported from the EOC in 2017.

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:

- 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.
- 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 MediPIET5, a field-epidemiology training programme in the Mediterranean region established by the Centre in 2013-2014 with funding of the European Commission and currently managed by a Spanish consortium.
- 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 2017

In 2017, 37 fellows graduated from the ECDC Fellowship Programme (cohort 2015) (with 17 graduates from EPIET, nine from EUPHEM and nine from the EPIET-associated programmes). At year's end, 80 fellows were enrolled (39 from cohort 2016 and 41 from cohort 2017). The Programme operates in public health institutes and laboratories located in EU/EEA countries. It includes an introductory course, training modules, and field investigations in and outside the EU/EEA. Scientific coordinators and supervisors conduct site visits to ensure the sufficient capacity of the training sites.

ECDC started the implementation of its integrated Continuous Professional Development Programme (CPDP) in 2017. The Programme consists of the ECDC Summer School, a Senior Exchange Initiative, short courses, e-learning opportunities, and training courses developed in collaboration with ECDC's Disease Programmes. It also covers ECDC public health functions and external partners. In 2017, ECDC organised the first winter workshop and published a complete catalogue of CPDP courses (Table 2).

In 2017, the ECDC Virtual Academy (EVA), a platform for online learning, provided three online courses with a total number of 147 participants, on 'Writing and reviewing scientific abstracts', 'Influenza vaccination among healthcare workers' and one pilot on 'Introduction to outbreak investigation'.

ECDC provided support to the MediPIET consortium, a programme whose sustainability depends on continued financial support from the European Commission. ECDC continues to ensure the scientific leadership of the programme. The second cohort of 15 MediPIET fellows, together with one fellow from cohort 1, graduated in December 2017.

In 2017, ECDC worked on the establishment of a network of public health schools in Europe, in collaboration with ASPHER. After mapping curricula in the field of communicable diseases in 2017, the first meeting of the network was scheduled for February 2018 to explore the further exchange of experiences and other joint activities.

The collaboration continued with TEPHINET, EFSA and WHO.

Table 2. Modules and participants in Continuous Development Programme

Course	Topic	Participants	Total	
Short courses	Summer school	64		
	Winter workshop: Cross-border health threats: assessment, decision making and communication	28	238	
	Control of multidrug-resistant microorganisms (MDRO	36		

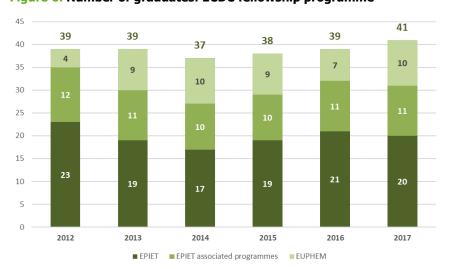
⁵ http://medipiet.eu/training/intro/

Course	Торіс	Participants	Total
	Training on simulation exercise (SE) design and development	27	
	Cross-sectoral biorisk awareness and mitigation training (ECDC-EUROPOL)	48	
	Methods and tools for evidence-based practice and decision-making	35	
Senior exchange programme	Senior exchange visits	12	12
Online courses	Writing and Reviewing Scientific Abstracts: a field epidemiology focus -3rd edition	60	
(ECDC Virtual Academy - EVA)	Influenza vaccination among health care workers - Assess and communicate to improve uptake; 2nd edition	32	147
	Introduction to Outbreak Investigation: pilot course (pilot)	55	
Total		397	397

Indicators for public health training

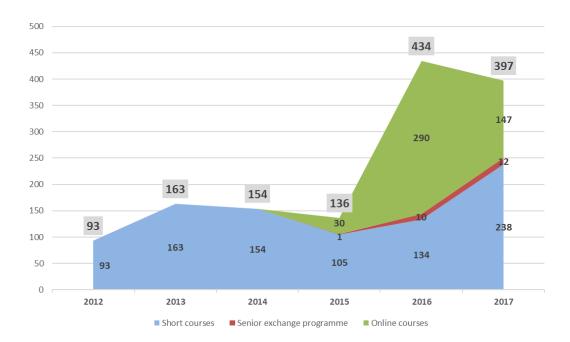
No.	Objective	Indicator	Target 2017	Verification	Result 2017
15	To strengthen and maintain the workforce in the Member States and at the Community level through relevant training of key national experts, in order to ensure adequate performance of functions for communicable disease	Number of people trained, per Member State, per core function* B. Participant satisfaction with ECDC training activities. C. Number of scientific articles of public health relevance by EPIET/EUPHEM	A. 40 fellows included in ECDC fellowship, 300 Member State Experts participated to CPDP courses	Verification A. From ECDC training database : number of trained people B. Course evaluation C. Database + ECDC VirtualAcademy (EVA) platform, Bibliometrics (PubMED, Scopus) D. ECDC Virtual Academy (EVA) : follow up of graduates (profile updates), Linkedin, Pubmed, CCB	A. 37 fellows graduated in 2017: 28 EPIET (12 EU track, 7 Member
16	To strengthen and maintain a network of European and global training partners, supporting capacities to provide training to the workforce in the EU at local, subnational, national and Community levels.	Perceived added value of ECDC Public Health Training activities by training stakeholders. B. Number of joint trainings provided to EU workforce together with ECDC training partners	A. > 75% B. At least 2 trainings	A. Dedicated survey	A. Perceived added value: no dedicated survey in 2017 B. Number of joint trainings with ECDC training partners: 1 ECDC-EUROPOL cross-sectoral biorisk awareness and mitigation training in June, Budapest, Hungary
17	To support the cascading of training within the Member States by providing a common virtual training infrastructure with access to training material, e-learning and platforms for communities of practice	A. Increase of number of views of FEMWIKI B. Number of cascaded courses in EU Member States	A. + 20% views Coverage of views in all 28 MS B. 6 Member States having used EVA in cascaded courses	A. Google analytics and FemWiki Platform database B. ECDC Virtual Academy (EVA) platform	A. FEMWIKI views: 100% increase in the EU compared to 2016 (mainly related to UK users) B. Cascaded courses in Member States: not available in 2017

Figure 6. Number of graduates: ECDC fellowship programme



practice.

Figure 7. Number of participants in trainings that are now part of the continuous professional development programme (CPDP)



4.2 International relations

Context

Emerging pathogens and epidemics 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 public health organisations, such as the US CDC. Developing technical cooperation and exchange of information with the EU enlargement countries and the European Neighbourhood Policy partner countries (ENP) is also essential. ECDC works with health authorities in these countries to bring them into the fold of the EU's infectious disease surveillance and rapid alert systems and help them align with the EU acquis in the area of communicable disease prevention and control. The 2017 mid-term review of ECDC's international relations policy and the planning of future have brought about major changes, e.g. the mobilisation of ECDC experts outside of the EU and the establishment of the EU Medical Corps.

Results achieved in 2017

In 2017, ECDC finalised its mid-term review of the implementation of the ECC international relations policy adopted in 2014. The review served as the basis for the new <u>International relations policy 2020</u>, approved by the Management Board in November 2017.

ECDC further strengthened its relation with the WHO Regional Office for Europe. The annual ECDC–WHO coordination meeting included a review of the respective work programmes. The two organisations reviewed and agreed on the principles of collaboration and developed a joint agreement on data protection.

ECDC continued to provide technical pre-accession support to EU enlargement countries⁶ by inviting national experts to ECDC meetings. In 2017, ECDC organised 14 technical cooperation events for EU enlargement countries with 126 experts. The Regional Seminar on Communicable Disease Surveillance took place in Ohrid, former Yugoslav Republic of Macedonia. It was instrumental in giving feedback to the Western Balkan countries and Turkey on how their disease data submissions to ECDC's TESSy system meet the EU/EEA standards as per *EU acquis*. The European Commission will ensure further financial support through a new grant under the Instrument of Pre-Accession Assistance (IPA 5).

Upon request from the European Commission, ECDC assessed the system for communicable disease prevention, disease surveillance, and disease control in Albania. A team of ECDC and EU Member State experts conducted the assessment during a country visit, with the participation of officials from the European Commission. The team held more than 60 review meetings, visited 28 institutions in six municipalities in four regions, and met officials at the national level. In November 2017, ECDC sent a draft technical assessment report for comments to Albania.

After consultation with the European Commission, ECDC began preparing for an assessment of Kosovo and Bosnia and Herzegovina (2018 and 2019). In December, an ECDC delegation went on a preparatory mission to Bosnia and Herzegovina, visiting three autonomous entities of the country.

In 2017, ECDC continued its technical cooperation with the ENP partner countries through financial assistance from TAIEX⁷. The overall objective was to support the exchange of best practices, the progressive participation of ENP partner countries in ECDC activities, and the strengthening of local capacities to detect, assess, and respond to, threats related to communicable diseases. Six meetings and joint activities were organised, bringing together a total of 66 experts. This included the organisation of a best practice workshop in Ukraine to support the development of Ukraine's surveillance strategy. This event was organised as part of ECDC's continuous technical support to the country and a follow-up of the 2015 assessment of Ukraine's national systems for the prevention and control of communicable diseases. Finally, observers from five ENP partner countries were integrated into the ECDC threat detection network.

ECDC further intensified its cooperation with major national public health institutes and centres for disease prevention and control with formalised bilateral partnerships: the Centre established a network of contact points in national public health organisations in the USA, Canada, China and Israel.

⁶ Financial support provided by the European Commission (DG NEAR), grant contract ECDC-IPA4/2015/361-042

⁷ Technical Assistance and Information Exchange instrument of the European Commission

Indicators for international relations

No.	Objective	Indicator	Target 2017	Verification	Result 2017
18	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.	list of joint activities		Work Programme 2017 list of key outputs	80% (4 out of 5)

4.3 Country support

Context

Since its establishment, ECDC has provided capacity support to the Member States through various means, such as training, assessments/peer reviews, facilitation of sharing of experiences and good practices, development of toolkits and guidance, and laboratory support. These activities have also not always been implemented in a coordinated and structured way and were often based on an ECDC perspective rather than on broad country perspectives. The second external evaluation of ECDC stated that ECDC needed to gain a better understanding of the national health systems. ECDC should also gain a better understanding of the needs in a particular country so it can address these needs in a strategic country support framework.

In 2016, the Management Board adopted a new <u>strategy for country support</u>,. It defines how ECDC in a coordinated, structured and country-focused way could meet national public health needs and support sustainable national capacities and capabilities.

The country support strategy outlines a common and coordinated approach to assess national public health needs, determine priorities, and build capacity. 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;
- to plan and implement together with the Coordinating Competent Bodies cost-efficient and wellstructured ways to support public health activities in the Member States.

Activities include training courses, sharing of experiences and best practices, country preparedness, country capacity strengthening, laboratory support, surveillance support, and support to policymaking.

Results achieved in 2017

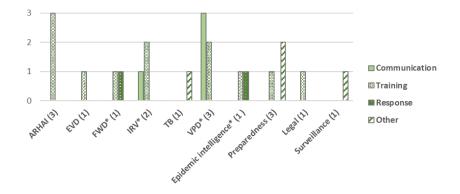
An exploratory call for support requests from the Member States was launched in March 2017, when the Director contacted the Directors and the National Coordinators of CCBs. Sixteen requests were received from seven countries (the Czech Republic, Estonia, Germany, Latvia, Lithuania, Malta, Romania). The requests were analysed and evaluated and the needs clarified with the countries. Solutions to meet the countries' needs were discussed with the beneficiary countries and with the relevant ECDC Disease Programmes or sections. The requests mainly covered the following areas:

- Training activities (e.g. train the trainers, e-learning modules, workshops)
- Communication support (e.g. communication tools, communication strategy, communication campaigns)
- Twinnings and exchange visits
- Country visits

Here are a few examples of the received requests: influenza vaccination of health professionals and how to influence their attitudes towards vaccination; evaluation of data quality in communicable disease surveillance; communication/training on immunisation; study visit at ECDC for an exchange of experiences on epi intelligence and risk assessment; training of national experts in the area of ARHAI; training/twinning with other Member States on vector-borne diseases.

The pilot has undergone an internal evaluation in September 2017, complemented with a formal feedback from the Member States and the Coordinating Competent Bodies. Conclusions were positive, with the need to put additional efforts in aligning the country support mechanism with the general ECDC planning process. A page on country support was added on the ECDC website. Additionally, ECDC started working on upgrading the functionalities of its CRM system to add information on its interactions with Member States.

Figure 8. Number of requests by area and type of support



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. However, 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 agree rapidly on a set of coherent, technically sound core messages about a threat can be a huge support to response efforts.

Results achieved in 2017

ECDC published 210 reports in 2017, a (detailed list in Annex 8), including rapid risk assessments and surveillance reports. ECDC and the WHO launched a new joint branding, first applied to the publication of the HIV/AIDS annual surveillance report 2017; the co-branding will be extended to all joint reports and activities. The number of subscribers to the publications newsletter is now 3 312, an increase of 480. ECDC is increasingly publishing data, graphs, maps and infographics as downloadable, copyright-free assets, to allow partners and stakeholders to reuse ECDC content.

In 2017, ECDC redesigned its web portal. The mobile-friendly design includes a more efficient search engine. Added features include antibiotic consumption reports from The European Surveillance System (TESSy). It also provides public access to the interactive Surveillance Atlas of Infectious Diseases.

Overall, 1 281 596 website sessions were recorded for 2017, compared with 2 284 454 in 2016⁸. The number of followers on ECDC's corporate Twitter account (@ECDC_EU) grew by 24 percent, with over 3 909 new followers in 2017. ECDC's dedicated Twitter account on outbreaks (@ECDC_Outbreaks) grew, from 2 367 followers in 2016 to 3 659 followers by the end of 2017 – representing a 55 percent increase.

Media analyses show that 8 292 (5 844 in 2016)⁹ media clippings mentioning ECDC were published in the EU in 2017 (both print and online, excluding social media), with a potential audience reach of 5.7 million citizens (about 1% of the EU population). Antimicrobial resistance, HIV/AIDS and vaccines were the most popular topics mentioned in the news media.

ECDC and WHO published a number of joint reports on tuberculosis, HIV, and influenza, and improved the coordination of joint messages.

Throughout the year, ECDC provided a professional press office service for health journalists. In close cooperation with the European Commission, the Health Security Committee as well as the WHO Regional Office for Europe, ECDC provided EU-wide communication response to public health issues.

Over 40 countries across Europe participated in the tenth edition of the European Antibiotic Awareness Day on 18 November 2017. The Day was marked by national events and campaigns on prudent antibiotic use. An exhibition in Brussels displayed national materials from antibiotic awareness campaigns. It was ECDC's most successful EAAD so far; 154 participants from more than 50 professional organisations took part in EAAD activities: journalists, representatives from almost all EU Member States, and institutional partners from the European Commission, WHO/Europe, EFSA and EMA. In terms of social media, ECDC's visibility more than doubled compared with 2016 (88.5% vs 46%), particularly in social media.

ECDC produced a communication toolkit for professionals in hospitals and healthcare settings, including key messages in all EU languages and a comprehensive set of ready-to-use templates. ECDC continued to partner with WHO for the World Antibiotic Awareness Week.

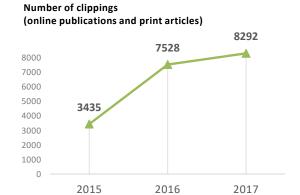
⁸ The comparison might be misleading because compliance with new EU data regulations was added to the ECDC website in June 2017: visitors that do not explicitly agree with the use of cookies, which could amount to up to 90% of actual visitors, cannot be tracked.

⁹ 93.5% neutral, 6.1% positive, 0.2% negative, 0.2% mixed.

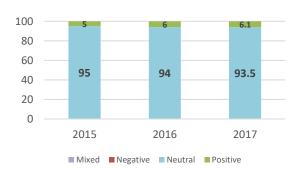
Indicators for health communication

No.		Indicator	Target 2017	Verification	Result 2017
19	Ensure that ECDC scientific and technical outputs are timely, easily available, impactful,	(1) Usage of the ECDC web portal and social media channels	+5% web visitors +10% followers on Twitter	Web and social metrics used for verification	(1) 1 281 596 website sessions were recorded for 2017, compared with 2 284 454 in 2016 ⁹ .
	reusable and adjusted to the needs of our target audiences	(2) Perception of timeliness, usability and usefulness of ECDC outputs	Favourable perception of at least 75% respondents	Perception study	The number of followers on ECDC's corporate Twitter account (@ECDC_EU) grew by 24%, with over 3,909 new followers in 2017. ECDC's dedicated Twitter account on outbreaks (@ECDC_Outbreaks) grew, from 2,367 followers in 2016 to 3,659 followers by the end of 2017 – representing a 55% increase, a trend that is observed among all ECDC Twitter accounts.
20	Consolidate the reputation of ECDC as an independent, transparent agency that produces and disseminates high quality scientific content	Increase of media articles in Europe referencing ECDC and its experts	+5% compared to previous year	Media monitoring	+41.9% The media analysis shows that 8.292 (vs. 5,844 in 2016) media clippings mentioning ECDC were published in the EU in 2017 (both published and online, excluding social media) with a potential audience reach of 5.7 million citizens. Antimicrobial resistance, HIV/AIDS and vaccines were the most often reported topics. Tone of the clippings: 93.5% neutral, 6.1% positive, 0.2% negative, 0.2% mixed
21	Support sharing of knowledge, data and analysis among stakeholders with a focus on strengthening communication capacity and preparedness in EU Member States	(1) Number of ECDC materials, workshops, meetings and training activities in the area of risk and crisis communication. (2) Provision of Lines to take (LTTs) documents for handling media queries in public health crisis, for information to Member States and the Commission	At least 3 activities 100% of Lines To Take (LTTs) shared with Member States and the Commission	Annual review of communication activities Quality and timeliness verified by feedback from European Commission on HSC actions and decisions	(1) Four activities: - Panel presentation on 'How risk communication plays an important role in public health emergencies' at the Asia-Europe Foundation high-level meeting on 'Risk communication and leadership during health emergencies' (Seoul, June 2017) - Communication component in regional multi-country simulation exercise (SIMEX) held in Austria on preparedness for avian influenza: Presentation on ERC and importance of pseudo-media in the training course on exercise design and development of media injects for the SIMEX (November 2017) -ENVI agencies crisis training: Presentation on ECDC's work on ERC, participation in the SIMEX and review of ENVI agencies' ERC communication toolkit (November 2017) - 'Health, risk and crisis communication' module at the ECDC Continuous Professional Development Workshop on 'Crossborder health threats: Assessment, decision making and communication' (December 2017)

Figures 9 and 10. Referencing of ECDC in media in Europe



Tone of the media clippings (in%)



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 2017

In 2017, *Eurosurveillance* switched seamlessly to a new publication platform with improved workflows. The associated new website now offers attractive features such as article level metrics, customised alerts and searches, citation tracking, and topical collections. Moreover, editors are able to change content of previously static pages more flexibly; dispatch to major scientific databases works is now automatic.

The journal remained an attractive outlet for public health experts and scientists from Europe and elsewhere; this was reflected by the number and quality of submissions: the total number of submissions increased to 901 (2016: 864; 2015: 770), an average of 75 per month. In total, 230 items were published: 69 rapid communications, 118 regular articles, and 43 in other categories (editorials, letters, news and miscellaneous).

Some 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 in *Eurosurveillance* remained Europe. 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.

Eurosurveillance continued to be among the top ten of infectious disease journals. With 7.2, the awarded impact factor was the highest since the journal was awarded its first IF in 2012. 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).

The journal is active on Twitter and expanded its social media activities to the professional network LinkedIn. *Eurosurveillance* was represented at six international meetings (workshops, conferences, etc.) with invited presentations and other contributions. Its scientific seminar on 'One Health' during ESCAIDE attracted more than 130 participants. Special print editions were distributed at international conferences.

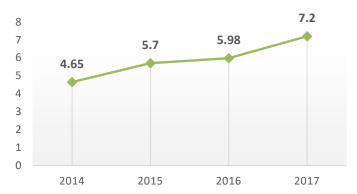
Topics covered in 2017 included plasmid-mediated colistin resistance conferred by the *mcr-1 to X* genes; the hepatitis A outbreak in MSM in Europe, emerging avian influenza A(H5NX), HIV pre-exposure prophylaxis (PrEP), food- and waterborne outbreaks, and measles. A special issue was dedicated to immunisation information systems.

During 2017, the productive collaboration with the editorial board continued during the board meeting in October where several new policies and guidelines were discussed, for example a policy on supplementary material.

Indicators for Eurosurveillance

No.	Objective	Indicator	Target 2017	Verification	Result 2017
22			50 issues and	Eurosurveillance web site	50 issues and 230 items published in 2017
	level profile and	and items published	200 items		
	attractiveness of	Impact factor for	published in	Journal Citation Reports,	
	Eurosurveillance	Eurosurveillance and	2017	Thomson Reuters, SCImago	
		journal rank			
		positioning in	Impact Factor		IF = 7.2 (the highest ever)
		Quartile 1	>3		
		•			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).

Figure 11. Eurosurveillance impact factor



6. Disease Programmes

6.1 Antimicrobial resistance and healthcare-associated infections

Context

Antimicrobial resistance (AMR) and healthcare-associated infections (HAIs) are high on the EU and global agenda (WHO global action plan on AMR¹¹). In 2017, the European Commission adopted the EU One Health Action Plan against Antimicrobial Resistance. 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 guidance, best practices or success stories in preventing and controlling AMR and HAIs. ECDC and its partners are working to change this.

Results achieved in 2017

ECDC continued to coordinate and support European networks for the 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. Together with AMR data, data on surveillance of surgical site infections from HAI-Net are now available online from ECDC's Surveillance Atlas of Infectious Diseases.

ECDC responded to three requests from the European Commission in 2017:

- Revised case definitions relative to antimicrobial resistance
- Second inter-agency antimicrobial consumption and resistance analysis (JIACRA) report with EMA/EFSA
- Joint ECDC—EFSA—EMA scientific opinion on a list of outcome indicators for surveillance of antimicrobial resistance and antimicrobial consumption in humans and food-producing animals.

To support the dissemination and sharing of best practices and effective strategies, ECDC expanded its <u>Directory of online resources for the prevention and control of AMR and HAIs.</u> This repository includes guidance documents from EU and international agencies, professional societies, and EU Member States.

ECDC issued a guidance document entitled 'Infection prevention and control measures and tools for the prevention of entry of carbapenem-resistant Enterobacteriaceae into healthcare settings'. In accordance with the ECDC roadmap for the integration of genomic/molecular typing (whole genome sequencing) into its surveillance activities, ECDC also launched the molecular typing surveillance of carbapenem-resistant and/or colistin-resistant Enterobacteriaceae.

In partnership with WHO's World Antibiotic Awareness Week (13–19 November), ECDC organised on 18 November the 10th European Antibiotic Awareness Day 2017 (see 5.1 above). ECDC also cooperated with campaigns on prudent antibiotic use in the United States, Canada, Australia and New Zealand during the same week.

ECDC performed five one-week country visits to discuss AMR issues and provide an objective assessment of the situation in the countries, based on factual observations, conclusions and suggestions. These visits were carried out in Italy, Romania, Luxembourg, Malta, and Belgium; the latter three were conducted with the Directorate-General for Health and Food Safety, applying a 'One Health' perspective.

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

35

¹⁰ 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 are a challenge for ECDC and national public health authorities because of the complexity of their transmission patterns and their potential to cause large and sudden outbreaks. The Zika virus outbreak in 2016, for example, resulted in a WHO public health emergency. In recent years, several vector-borne disease outbreaks occurred in Europe, 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 increase the risk for these diseases to become endemic in some areas in Europe. Most vector-borne diseases follow complex epidemiological patterns, such as seasonality and pathogen persistence in reservoirs/vectors without the occurrence of human disease. They can quickly (re-)emerge or become (re-)introduced if conditions are suitable. During the transmission season, ECDC published real-time maps of cases for all of Europe, giving national health authorities (e.g. blood transfusion authorities) timely information for their decision-making. ECDC also collects data to help public health experts understand the factors that could trigger sudden outbreaks.

Results achieved in 2017

For most part of the year, ECDC continued to follow up on the situation of the sudden outbreak of Zika virus, which began at the end of 2015 (the Centre produced two updated risk assessments). Together with WHO and the US CDC, the Centre continued its work on the Zika country classifications for travel advice. ECDC published a literature review on information needed to implement efficient vector control measures for *Aedes aegypti* and *Aedes albopictus*.

ECDC prepared, or contributed to rapid risk assessments on significant EVD outbreaks: update on Zika virus infection (2 risk assessments), yellow fever (3), chikungunya with clusters in France and Italy (3), Ebola haemorrhagic fever (1), and mass gatherings (4).

The new modelling tool (a desktop application developed in 2016) to appraise and compare vector control strategies against West Nile fever in Europe was pilot tested in the field between March and October 2017. The tool will be adjusted in 2018, based on the results of the pilot. Another modelling tool for the decision-making process for the surveillance and vector control of dengue, chikungunya and Zika in Europe is under preparation.

Surveillance of West Nile disease was strengthened in 2017 by including animal cases, e.g. horses ('One Health' approach) to identify possibly affected areas. Real-time data and maps are available on the ECDC Atlas for West Nile fever cases in Europe and come from the Animal Disease Notification System (ADNS) of the European Commission. These activities also contribute to increased blood safety in Europe.

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

In October 2017, ECDC convened an expert meeting to review options on the surveillance of Lyme borreliosis. ECDC submitted the case definition for Lyme neuroborreliosis to the European Commission, for possible addition to the list of the communicable diseases notifiable at EU level.

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. For this reason, the European Food Safety Authority (EFSA) is a key partner of ECDC.

A key objective of ECDC's Food- and Waterborne Diseases and zoonoses (FWD) Programme, which also covers Legionnaires' disease, is to improve the EU-level surveillance for timely public health actions. New technologies, such as automated molecular typing and whole genome sequencing (WGS) of pathogens, have great potential to improve the response time for cross-border threats. Strengthening the public health microbiology capacity of the Member States through external quality assurance schemes continues to be important.

Results achieved in 2017

ECDC and EFSA held the third joint networks meeting in Parma in October 2017. The topic was 'One Health approach to collaborative response to foodborne diseases outbreaks in the EU/EEA'. The meeting provided an opportunity to review and analyse the lessons learnt from two major multicounty foodborne outbreaks that year.

A total of 54 'urgent inquiries' were posted on EPIS-FWD, 15 of which affected more than one country¹¹. Salmonellosis, VTEC infections and listeriosis were the most frequently reported diseases. EPIS lets ECDC and other public health experts to exchange technical information and assess whether a public health threat is of relevance to the European Union. ECDC produced 10 rapid risk assessments in this area, including on new salmonella serotypes caused by sesame seeds and three joint rapid outbreak assessments with EFSA.

ECDC improved its communication with the European Commission and EFSA by providing immediate notification summaries on signals related to multi-country outbreaks. Summaries are based on data from Member States and deal with suspected outbreaks related to food.

ECDC, the US CDC and Public Health Canada published a joint vision paper on whole genome sequencing (WGS) in foodborne diseases aiming to ensure that data from WGS surveillance are comparable globally.

ECDC further developed the ELiTE project, which improves our understanding of 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. The workshop also strengthened capacity in six Member States that are not yet using this technology for outbreak investigation. A retrospective validation of WGS-enhanced surveillance of listeriosis in Europe was performed in order to establish criteria for the assessment of multi-country events; the validation was based on 2 726 isolates sequenced from 2010–2016.

ECDC and EFSA published the annual Zoonoses Report. ECDC and EFSA also published a summary report on antimicrobial resistance in zoonotic indicator bacteria from humans, animals and food. ECDC coordinated external quality assessments (EQA) for laboratories in the following areas: *Salmonella* and *Campylobacter* (antimicrobial sensitivity testing), *Salmonella*, VTEC, and *Listeria monocytogenes* (typing). The 8th meeting of the FWD network meeting took place in Parma, right after the joint ECDC–EFSA networks meeting.

The ECDC FWD professional exchange programme (FWDEEP) continued: three experts from Member States visited Germany and Slovenia to learn about topics such as the detection of foodborne viruses, legionellosis surveillance systems, and outbreak response. The exchange programme offers a hands-on learning opportunity for public health experts. It is aimed at the development of skills and competences, improved public health laboratory capabilities, disease surveillance, disease detection, and response to food- and waterborne outbreaks.

-

¹¹ Forty-seven in 2016; the increase is partly due to the improved sensitivity of detection tools.

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 crosscutting issues, such as the links to sexual behaviour, deprived or poor communities, heavy stigma and, in some cases, discrimination and marginalised members of the community affected most by infection. An even stronger common characteristic is that these diseases have a tendency to persist as silent epidemics, with resulting challenges for disease detection, burden estimates, 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; disease-specific data may help support this advocacy.

Results achieved in 2017

In 2017, ECDC played a key role in supporting the Maltese and Estonian EU presidencies to organise successful conferences and keep HIV high on the EU political agenda. ECDC assisted the Maltese presidency to co-organise a conference on HIV in January 2017 in Malta entitled 'Fast-track the end of AIDS in the EU practical evidence-based interventions'. The conference resulted in a document, the Malta Declaration on HIV/AIDS, calling for fast actions towards ending the HIV/AIDS epidemic by 2030 in the European Union. The EU health ministers further discussed the document during an informal Council meeting in March 2017 and in the EU Health Council (EPSCO) in June 2017.

Estonia also added HIV to the priorities of its presidency, and ECDC supported the Estonian conference in December 2017 in Tallinn on eliminating HIV and tuberculosis in the EU. The emphasis was on financing HIV and TB services and ensuring the sustainable integration of measures into the national health systems.

ECDC published a number of articles in scientific journals. Topics included the legislations on sex workers and how it impacts their vulnerability to HIV (Lancet), the HIV continuum of care in the EU, and HIV in older adults in Europe (Lancet). A rapid risk assessment on hepatitis A in men having sex with men (MSM) was also published.

An extensive evaluation of the HIV surveillance system in Europe was conducted as a pilot for the EPHESUS project. ECDC piloted a new surveillance system for HIV drug resistance and is currently testing an advanced protocol on carrying out seroprevalence studies in the general population.

In June 2017, ECDC and EMCDDA organised a conference in Lisbon on hepatitis to share experiences and discuss how Europe can improve hepatitis surveillance and optimise its response to hepatitis among people who inject drugs. Other topics included the progress made towards the elimination of viral hepatitis in relation to the WHO criteria. In the area of hepatitis surveillance, ECDC convened a meeting of its network and discussed how surveillance could be made easier.

An expert meeting including various stakeholders convened to discuss the role of ECDC in preventing HIV and other sexually transmissible infections; ECDC will start implementing the experts' recommendations in 2018.

6.5 Influenza and other respiratory viruses

Context

In Europe, seasonal influenza has one of the highest morbidity and mortality rates. Zoonotic influenza and other emerging respiratory viruses also threaten public health in new and unexpected ways. Strong virological and epidemiological surveillance is needed to guide vaccination programmes for seasonal influenza. In 2009, the EU Council adopted a Recommendation¹², which established a vaccination coverage target of 75% among the elderly and those at risk for severe influenza. In addition, strong (pandemic) preparedness is essential: at the level of surveillance, in the area of laboratory activities, and with regard to comprehensive actions in line with Decision 1082/2013/EU on serious cross-border threats to health.

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 for respiratory diseases include: strong surveillance systems for seasonal influenza/re-emerging respiratory viruses (disease severity, serological profiles); monitoring the overall impact of seasonal, zoonotic and pandemic influenza; 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 these diseases, international collaboration is essential, 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 2017

In 2017, ECDC published an expert opinion on antivirals (neuraminidase inhibitors) for the prevention and treatment of influenza.

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. To improve surveillance, ECDC organised its annual network meeting on the theme of severe disease surveillance.

In November 2017, ECDC coordinated a cross-sectoral simulation exercise (human and animal sectors) with eight south-eastern Member States. The exercise took place in Vienna, and a report will be published in 2018. ECDC and WHO published a pandemic preparedness guide, based on the lessons learnt from the 2009 pandemic, to provide advice to countries which want to revise their national plans. In June, ECDC conducted a joint ECDC/WHO country visit to Bulgaria to review the current pandemic preparedness plan. The Centre also held an expert meeting on national pandemic preparedness plans.

In September 2017, ECDC and EFSA published the first quarterly situation assessment report on avian influenza. ECDC monitors zoonotic influenza viruses and other emerging respiratory viruses in real time through its epidemic intelligence function.

In order to achieve a higher vaccination rate in healthcare workers, ECDC launched an e-learning module for vaccination campaign managers. ECDC continued funding the external I-MOVE network, which provides estimates of seasonal influenza vaccine effectiveness in Europe. ECDC published an overview report for eight influenza seasons from 2007–2008 to 2014–2015. The report also covered national recommendations for vaccination and coverage rates in the EU Member States based on surveys conducted by the VENICE network¹³.

ECDC continued coordinating 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.

¹² Council Recommendation 2009/1019/EU of 22 December 2009 on seasonal influenza vaccination

¹³ Vaccine European New Integrated Collaboration Effort. The VENICE network objective is to collect, share and disseminate information on national immunisation programmes through a network of professionals, 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 in vulnerable, hard-to-reach populations. TB in migrants also contributes to the epidemiology. In medium- and high-burden countries, TB is more often present 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 supports the EU/EEA Member States in the implementation of the *WHO End TB Strategy*. ECDC implements its strategy by organising TB surveillance with the WHO Regional Office for Europe, by coordinating a laboratory network to strengthen TB laboratory diagnosis, by developing scientific advice tailored to the EU/EEA situation, and by directly supporting Member States.

Since its founding, 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 WHO's Regional Office for Europe *Tuberculosis action plan for the WHO European Region 2016–2020*, which is the regional adaptation of the *WHO End TB Strategy*.

Results achieved in 2017

On World TB Day (24 March), ECDC and the WHO presented the joint annual report on tuberculosis surveillance and monitoring in Europe. ECDC supported the Member States in their World TB day campaigns which focused on the global theme 'United to end TB'. On this occasion, ECDC also released the second report on molecular surveillance of multidrug-resistant tuberculosis (MDR TB).

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 in the prevention and control of TB and multidrug-resistant TB. In 2017, the Centre organised a TB training course in Bulgaria and an exchange visit in Finland ('From hospital to ambulatory care'). Experts from the five countries mentioned above attended. ECDC also provided consultancy to Latvia.

ECDC updated the European Union Standards for Tuberculosis Care (ESTC) in collaboration with the European Respiratory Society. In preparation for a guidance document on programmatic latent tuberculosis control, ECDC prepared technical reports with the evidence base derived from systematic reviews, modelling work and cost effectiveness analyses.

ECDC continued to organise and support the TB surveillance network and the network of TB reference laboratories. Both networks held successful annual meetings in 2017. A surveillance meeting in The Hague was organised together with the WHO Regional Office for Europe.

As in previous years, ECDC coordinated external quality assessments on TB diagnostics, molecular typing and whole genome sequencing. The Centre also held laboratory training sessions on a variety of topics.

In 2017, ECDC started a pilot project aimed at generating evidence on whole genome sequencing for TB. The project wants to establish analysis and reporting standards, standardise whole genome sequencing methodology, collect proposals for a genotype nomenclature, and ensure data comparability within the EU/EEA.

ECDC contributed to the first WHO ministerial conference on the multi-sectoral response to 'ending TB in the sustainable development era' in Moscow. The Centre also contributed to a senior policy dialogue meeting on TB and HIV that was organised by the Estonian EU presidency.

ECDC published sixteen peer-reviewed publications on TB in scientific journals (e.g. *Eurosurveillance, PLOS-ONE, BMC Public Health, Clinical Microbiology and Infections, European Respiratory Journal, Lancet Infectious Diseases*). Topics included TB surveillance, TB prevention, and TB control in vulnerable and hard-to-reach populations.

6.7 Vaccine-preventable diseases

Context

The implementation of effective national vaccination programmes across Europe is a public health success story. To safeguard the health of European citizens, vaccination programmes need to be continued, and in some cases extended. ECDC supports the Commission and the 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' (2014) and the 'Council Conclusions on Childhood Immunisation' (2011).

Addressing the challenges that national vaccination programmes face in Europe requires ECDC to play a proactive role as knowledge agent. ECDC provides timely scientific guidance and data for action that can support policies and decision-making at the national level. Some of the most pressing challenges include: sizeable clustered or scattered populations across the EU that are not vaccinated or undervaccinated; continued outbreaks of diseases such as measles and rubella that are targeted for elimination; evidence that waning immunity might be undermining some vaccination programmes (e.g. pertussis); and shortages of routine vaccines that in some instances require an adaptation of existing vaccination schemes. 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. Implementing and sustaining multi-country studies on vaccine effectiveness, safety, and impact also remains critical to adequately inform vaccination policies at the EU and national levels.

Results achieved in 2017

ECDC helped Member States address the issue of vaccine hesitancy in Europe. ECDC published a catalogue of interventions to increase the awareness of existing tools and their potential impact. A social media toolkit to support national vaccination campaigns was developed during European Immunisation Week 2017, in close coordination with the WHO Regional Office for Europe. A technical advisory group (TAG) with communications and immunisation experts was set up to develop communications strategies that have the potential to increase vaccination coverage rates in Europe. The group consisted of communications specialists, immunisation experts, and key stakeholders (e.g. European healthcare professionals). ECDC also reached out to stakeholders and their professional associations (healthcare workers, nurses, and hospitals associations) to strengthen their awareness of vaccination issues.

ECDC also organised a workshop during the 2017 European Health Forum in Gastein, Austria, on 'Addressing vaccine hesitancy in the post-factual¹⁴ era'. The discussion focused on practical solutions to address the problem. One hundred participants attended the workshop.

In April 2017, ECDC published a comprehensive report on the implementation and use of electronic immunisation information systems in the EU. The report constitutes a key tool to strengthen the performance and monitoring of immunisation programmes.

ECDC strengthened its collaboration with the European Commission and the Member States. The Centre was instrumental in preparing the launch of a 'joint action' on vaccination, co-funded by CHAFEA. ECDC will collaborate as a technical partner.

ECDC published a rapid risk assessment on measles and provided monthly measles updates, intended as 'data for action' so that Member State intensify their efforts to reach the measles elimination goal and meet the goals set out in the WHO European Vaccine Action Plan 2014–2020.

In 2017, 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 monitor antimicrobial resistance and serotype replacement.

The <u>EU Vaccine Scheduler</u> tool continued to be among the most visited features on ECDC's web portal, with more than 52 000 users and over 224 000 page views.

¹⁴ 'Post-factual' refers to the current debate on the dissemination of fake news or the spread of pseudo-scientific news on media and social media.

Indicators for Disease Programmes

No.	Objective	Indicator	Target 2017	Verification	Result 2017
23	Strengthened Europe's defences against	Proportion of key outputs of the SPD 2017	90%	Measured and verified by Management Information System	84.4% (76/90)
	infectious diseases by	achieved		anagement internation eyetem	ARHAI = 25/31
	dedicated programmes aiming at the best possible				EVD = 9/9
	knowledge and				FWD = 9/11
	implementation for				HSH = 6/6
	prevention and control.				IRV= 5/8
					TB = 7/7
					VPD = 15/18
24		Satisfaction by the Member States on the value of the Disease Programmes	>80% satisfaction by two-third of the respondents	As measured by the survey DP evaluation report (when available)	The first DP evaluation reports will be available as from 2018 only
25		Added value of the Disease Programmes is periodically evaluated	Each programme is evaluated every five years and a follow-up plan is	DP evaluation report	A common protocol for the consistent evaluation of all Disease Programme completed in 2017. Subsequently, two Disease Programmes to be evaluated
			made and executed.		per year, starting with IRV and FWD in 2018

7. Management

7.1 General management

Context

On 22 March 2017, the Management Board elected Dr Andrea Ammon, MD, MPH, as the new Director of ECDC. Her tenure is for a period of five years. The Director-elect attended a hearing before the ENVI Committee of the European Parliament on 10 April and was formally appointed Director on 16 June 2017.

Dr Ammon had been ECDC's Acting Director since 1 May 2015.

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, supported by 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, ECDC has an independence policy in place since 2016 that ensures transparency and identifies conflicts of interest. The compliance officer oversees the implementation of this policy. An electronic system for the submission of declarations of interest minimises the amount of errors in the submitted documents. This facilitates the implementation of the independence policy and increases the compliance rate.

Results achieved in 2017

In 2017, ECDC improved its electronic system for the submission of declarations of interest. An independence policy for ECDC staff has been developed and will be presented to the Management Board in early 2018.

In 2015, the Management Board adopted a joint Action Plan to address the results of the second external evaluation of ECDC. The Centre presented a final report documenting the implementation of the Action Plan to the Management Board, who approved it in November 2017.

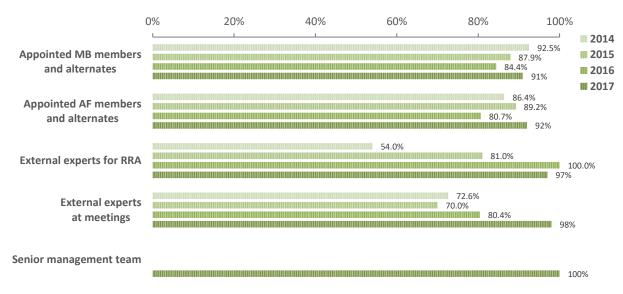
In 2017, the Management Board also approved the proposed timeline for the third external evaluation of ECDC and appointed a Management Board External Evaluation Steering Committee (MEES). The MEES held its first meetings. The draft terms of reference of the third external evaluation will be submitted to the Management Board for approval in March 2018. The evaluation is expected to start in the second half of 2018.

ECDC finalised the Single Programming Document (SPD) 2018, which was approved by the Management Board, and prepared the final draft of the SPD 2019, which was sent to the EU institutions for consultation in January 2018, 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.

Indicators for general management

No.	Objective	Indicator	Target 2017	Verification	Result 2017
26	Implementation of the	Proportion of approved annual and specific	100%	Report from the	Annual Dols submitted by:
	independence policy of the agency	declarations of interest (DoI) for delegates to Governing Bodies, ad hoc scientific panels, invited experts and ECDC staff members before		compliance officer	- appointed Management Board members and alternates: 91%
		participation to the specified activities as defined in the policy.			- appointed Advisory Forum members and alternates: 92%
					- Senior Management Team: 100%
					External experts
					- External experts for rapid risk assessment: 97%
					- External experts at meetings: 98%

Figure 12. Percentage of declarations of interest



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 Coordinating Competent Bodies (CCB) and ECDC's official national counterpart organisations, formally appointed by the Member States. ECDC operates a Customer Relationship Management (CRM) system to support collaboration and improve the flow of information between the Member States and ECDC.

Country visits help the Director to better understand the public health systems and policies of individual Member States. ECDC also nurtures its relationship with ECDC's host country, Sweden.

The Centre is part of the EU family of institutions and organisations and collaborates closely with them 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), the European Medicines Agency (EMA), and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA).

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 European Parliament regularly invites the Director for exchanges of views or for providing information on specific diseases and/or outbreaks.

Results achieved in 2017

Maintaining and improving coordination with the Member States and the European Commission remained a top priority. In 2017, ECDC continued supporting the European Commission with the implementation of Decision 1082/2013/EU on serious cross-border threats to health. Decision 1082/2013/EU 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. Regular meetings and video conferences with DG SANTE took place at both the operational and the strategic level. In 2017, an annual joint ECDC/DG SANTE management team meeting was introduced to align strategies and foster synergies.

ECDC continued to invest in partnerships with individual Member States and maintained close collaboration with its host country Sweden. As in previous years, ECDC participated in the annual European Health Forum (EHF) in Gastein, Austria. The EHF provides a platform for discussions within the field of public health and healthcare for approximately 600 policymakers and public health professionals. In 2017, the Centre organised a workshop on vaccination and vaccine hesitancy (see Section 6.7). In November, the Director visited KEELPNO, the Greek national public health institute, and met with the Minister of Health.

The annual exchange of views between the Director of ECDC and the ENVI Committee of the European Parliament took place in January 2017. ECDC was represented by its acting director. ECDC also participated in several exchanges of views and conferences in the European Parliament, e.g. on the Zika virus outbreak, AMR and healthcare-associated infections, and vaccine-preventable diseases. The Director also met with ECDC's European Parliament contact member in the ENVI Committee.

The Annual Meeting for Directors and National Coordinators of the ECDC's CCBs convened in September 2017 at ECDC. Participants discussed the pilot test for the new ECDC country support mechanism, the development of a stakeholder management system (SRM), and the development of the ECDC Disease Programme Strategies. The importance of the CCBs' collaboration with ECDC was highlighted.

ECDC continued to collaborate with other European agencies, in particular with EFSA, EMA, EMCDDA, and CHAFEA, the European Commission's executive agency. ECDC continues to be active in the network of European Agencies, and joined the troika of the network in 2017. ECDC will chair the network starting in September 2018.

Indicators for collaboration and cooperation

No.	Objective	Indicator	Target 2017	Verification	Result 2017
27	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 through dedicated surveys	No dedicated survey in 2017
28	Successful meetings achieved through the provision of enhanced and more cost effective organisational and substantive support.	Level of satisfaction of representatives of Member States.	90% of questionnaires completed provided ratings of very good to excellent.		Data not available from meetings questionnaires as not yet aggregated

7.3 Resource management and organisational development

Context

The main objective of this area of work is to provide the structure, means, services and expertise to manage ECDC's human and financial resources in the most efficient and effective way. Due to its nature, some of the main long-term strategic goals remain constant, e.g. ensuring the reliability of the accounts and the legality and regularity of the underlying transactions.

ECDC constantly aims to improve its administrative and operational processes and thus its support for ECDC core activities. This includes continuing the clarification of roles and responsibilities, increased knowledge sharing and staff training. The objective is to strengthen the Centre's ability to deliver tangible benefits for public health in Europe. This implies that certain processes will be automated to reduce the administrative burden, ensure compliance, and save resources.

ECDC's move to new premises in April 2018 will provide staff and visiting stakeholders with a safe, environmentally friendly and cost-effective workspace.

Results achieved in 2017

As of 31 December 2017, ECDC employed a total of 263 staff members. Almost all EU Member States are represented among the Centre's staff (with Luxembourg and Croatia being the exceptions). The Centre reached an all-time low vacancy rate of 2% (including job offers accepted). The Centre continued to adopt the implementing rules to the revised EU Staff Regulations with regard to staff entitlements and working conditions.

Budget execution in terms of commitment appropriations at year end reached 99.8%, equivalent to EUR 57.9 million. The budget execution in terms of payment appropriations at year end reached 81.7%, equivalent to EUR 47.4 million. ECDC's commitment and payments forecasting application improved the implementation and execution of the budget.

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 2017. The infrastructure for the electronic submission of tender documents was put in place. ECDC also started testing a new system of electronic workflows for other areas of work to ensure faster and more efficient processes. A review of internal key processes based on 'lean methodology' was successfully piloted in 2017 in order to simplify and optimise the organisation of external meetings. ECDC will apply the lean methodology to additional key processes in the future.

ECDC organised 120 operational meetings and supported 660 staff business trips during 2017.

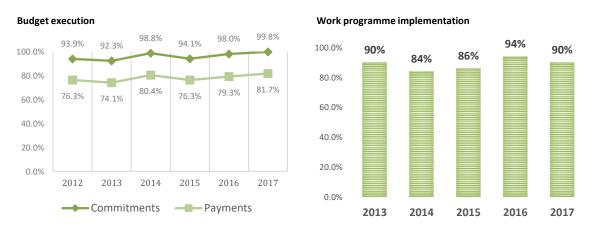
ECDC continued to improve and strengthen its internal processes, in particular with regard to contract management and project management. Regular contract management training sessions were provided for staff interacting with ECDC's contractors. ECDC introduced a new user-friendly, intranet-based library of processes which makes internal processes easily accessible to all ECDC staff.

Internal communication and knowledge services were improved in 2017. ECDC conducted an evaluation of its intranet. New functions were added to the document and knowledge management systems. The ECDC library expanded its selection and improved its services.

Indicators for resource management and organisational development

No.	Objective	Indicator	Target 2017	Verification	Result 2017
29	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	100% committed 80% paid	Verified by Internal Audit Services	99.8% of budget committed 81.7% of payments executed
		Percentage of invoices paid within the time limits of the ECDC Financial Regulation	95%		87%
		Rate of cancellation of payment appropriations	5%		1.57%
		Rate of outturn	5%	Dividing the balance of the outturn 2017 by the total revenue	1.95%
30	Implementation of the annual 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	90% of activities implemented (82.4% fully completed, 7.6% partly) 5% delayed to 2018 5% cancelled
31	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	2% vacancy rate (178 posts filled including offers sent and accepted, number of posts in the establishment plan: 180)
		Percentage of staff satisfaction/engagement	65%	ECDC biannual staff survey	Engagement index 52%
32	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')	- 90%	Internal Control	22% (2 out of 9) recommendations implemented within the originally agreed deadlines (having an original deadline in 2017).

Figures 13 and 14. ECDC budget execution and work programme implementation



7.4 Information and communication technologies

Context

ECDC's Information and Communication Technologies (ICT) Unit plays an important role in enabling ECDC's core missions such as disease 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. Developing, operating and maintaining 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 developing ECDC's ICT systems requires significant investments of both staff time and financial resources. In pursuing its IT strategy management framework, adopted in early 2017, the Centre allocates ICT resources based on the following strategic statements and principles:

- Vision: 'By 2020, information technologies (IT) will be a strategically governed and responsive service
 provider enabling ECDC's mandate with fit-for-purpose, interoperable, sustainable, innovative and bestvalue-for-money services.'
- Mission statement: 'Daily provision of IT services that enable ECDC to fight communicable diseases.'
- Principles: 'Business drives the IT strategy' and 'IT strategy guides IT decision-making'

Results achieved in 2017

In 2017, ECDC launched a new web portal on a new technology platform. The new website is user friendly, has several new functionalities, and a powerful search engine. It also allows the web editors to manage and publish content more quickly. ECDC also launched a new web platform for the *Eurosurveillance*, which brings the journal in line with other modern scientific publishing platforms.

In 2017, ECDC received a request from DG SANTE to reengineer the existing EWRS system by 2018. The work started in 2017 as ECDC's top priority IT project.

ECDC completed the roadmap of the new surveillance system reengineering (SSR) project and started its implementation. The roadmap foresees the implementation of new core surveillance IT solutions for 42 projects over four years (see also Section 1.1).

As part of the IT strategy management framework, ECDC agreed on a new IT target operating model, which defines how ECDC IT services and activities will operate by 2020. It foresees the future outsourcing of infrastructure services, development and maintenance activities. The single governance of projects was designed in 2017 to ensure alignment of the internal governance of ECDC projects, both IT and non-IT. ECDC made progress on a project management tool to provide detailed information on ICT costs.

In 2017, ECDC also prepared the migration of its ICT infrastructures to the new ECDC building. The Director approved a new IT security framework, which will ensure better management of incidents and better risk management measures to protect ECDC against external cyber threats.

ECDC's ICT services fulfilled the performance standards set in the service level agreement (SLA) with its internal users and the European Commission. 96% of the 6 936 requests and incidents were fulfilled in time; 24 of the 28 business applications under the SLA had an uptime of 100% (lowest uptime: 99.86%); 26 of the 28 infrastructure back-end systems had an uptime of 100% (lowest uptime: 99.9%). ECDC handled 270 change requests and tested and deployed 169 application releases or new applications. To save mission and travel costs, 968 audio- and videoconferences were handled. The improved security of the IT networks prevented 20 139 intrusion attempts.

ECDC maintains approximately 33 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.

Non-exhaustive list of mission-relevant IT solutions

System/application	Description
Early Warning and Response System (EWRS)	Supports critical communication about serious cross border health threats, in accordance with decision 1082, through an email-based platform between the Member States, the European Commission, other EU agencies and WHO
Epidemic Intelligence System (EPIS)	Supports risk assessment of public health events that may represent a serious cross border health threat as per decision 1082 through an ECDC-moderated communication platform (e.g. European Legionaires' Disease Surveillance Network, the food- and waterborne EPIS platform and others). Foreseen to be replaced in 2019 by a new Events and Threats Management System, as part of the SSR implementation roadmap.
The European Surveillance System (TESSy)	Supports collection, validation, cleaning, analysis and dissemination of data for public health surveillance, 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 regular Daily round table reports and the weekly Communicable Disease Threats Reports.

System/application	Description
Emergency Operations Centre (EOC)	A set of ICT solutions that support an effective access to information and management of situations of public health emergency.
ECDC web portal	Supports an important part of the external communication, e.g. making available outputs for public health professionals, information for the public. The current Portal, supported on a modern content management system was launched in June 2017.
Surveillance Atlas of Infectious Diseases	Launched in 2014, this tool provides a highly interactive and graphical access to surveillance data. It is accessible via ECDC's web portal. The Atlas has been evolving, especially by increasing the number of diseases covered.
Eurosurveillance	Supports the edition and publication of <i>Eurosurveillance</i> , an open access European journal on communicable diseases. The current web site is supported by a modern publication platform since 2017.
ECDC Extranets	Support collaboration of public health networks, working groups and institutional bodies (MB and AF). Currently ECDC manages >20 extranets.
ECDC Virtual Academy	Launched in 2016, allows ECDC to make use of blended and pure e-learning capacities in support of its public health training activities.
Customer Relationship Management (CRM) system	A primary business system of contacts, relationships (internal and external) and interactions with ECDC stakeholders. Supports a centralised management of MS and other external contacts. Position of the system is a user-friendly one-stop-shop with the evolution to meet growing business needs.
Intranet	Tool for internal communication and support of internal processes.
Document Management System (DMS) and Records Management (RM)	Supports the management of electronic formats of documents, providing a single point of controlled access to documents in the Centre contributing to dematerialisation of paper based processes.
E-mail system	Supports electronic internal and external communication. It is a crucial component in support of many processes of the Centre and in communication with external entities.
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.
SARMS	ECDC Scientific Advice Repository and Management System supports the monitoring of ECDC outputs with scientific content from production to clearance and dissemination.
EED	ECDC expert directory is a roster of potential external experts that allows ECDC – when deemed necessary by the Centre – to increase the number of experts and areas of knowledge and skills beyond its own expert staff and expertise.
ECDC library	The library provides information delivery services throughout its collection and by making available the tools to ease the access to information. The library develops a collection (both electronic and print) and provides services via the library intranet and physical area.
ECDC KM Services	Knowledge Management Service is a collective term, describing Terminology Services, Talent Map and Enterprise Search.
Terminology Services (TS)	A system that allows human and machine user to benefit using shared professional vocabularies in order to improve transparency and consistency of ECDC the language used in ECDC documents as well as to ensure consistent metadata-tagging.
Enterprise Search (ES)	Enterprise Search is the single, unified search interface to find all kind of ECDC information, stored in various systems at once. It is available via the ECDC Intranet
Talent (Map TaMa)	An internal system to map professional competences into a searchable database of ECDC staff profile, on a voluntary basis.
Management Information System (MIS)	Internal system used to plan and monitor the implementation of the annual work programme of ECDC
IT Programme Management tool	Common planning and monitoring system for IT project management and other IT work programme items (e.g. IT solutions maintenance). Includes for example scheduling, risk and issue logging.

Indicators for information and communications technologies

No.	Objective	Indicator	Target 2017	Verification	Result 2017
33	Ensured agencies operations by maintaining constant availability of IT services elements to ensure a smooth running of the Centre's activities	Performance of ICT services in regards to: - availability of enterprise infrastructure services and backend systems	99% each		26/28 infrastructure services and backend systems had an uptime of 100%; lowest uptime = 99.9%
	(dedicated applications, databases, web portal)	 availability of hosted applications under service level agreement (SLA) 	100% each		24/28 applications had an uptime of 100%; lowest uptime = 99.86%
		- proportion of ICT front-office incidents resolved as per SLA.	90%		96% (out of 6936 requests)

Part II (a). Management

1 Management Board

During its 39th meeting in March 2017, the Management Board elected Dr Andrea Ammon as the new Director of ECDC for the period 2017–2022.

The Management Board also approved the Annual Report of the Director 2016, adopted the ECDC Single Programming Document 2018, and discussed the priorities for the Single Programming Document 2019. In addition, the Board endorsed the Final Annual Accounts of 2016, including the Report on Budgetary and Financial Management, took note of the Supplementary and Amending Budgets for 2017, approved the Draft Budget for 2019, and adopted the Centre's Budget and Establishment Table for 2018.

During its 40th meeting in June 2017, the Management Board approved the proposed timeline for the Third External Evaluation of ECDC and appointed the members of the MB External Evaluation Steering Committee (MEES). The MEES subsequently convened five meetings (audio and face-to-face) while taking note of the Progress Report on the Third External Evaluation of ECDC in November 2017. The draft Terms of Reference of the Third External Evaluation will be submitted to the Management Board for approval in March 2018. During the same meeting, the Management Board approved the composition of the ECDC Audit Committee as well as the membership of the subgroup tasked with reviewing the implementing rules. The Management Board also approved a proposal to re-establish the Working Group on Revised Rules of Procedure of the ECDC Management Board. A Progress Report was presented to the Management Board in November 2017.

During its 41st meeting in November 2017, the Management Board approved the end-of-term report of the Joint Action Plan to address recommendations arising from the Second External Evaluation. During the same meeting, the Management Board approved the proposed measures to ensure that the activities of the Management Board and the Advisory Forum are more complementary and synergistic. In accordance with Implementing Rule No. 25, the Management Board appointed three Reporting Officers for the appraisal of the Director, notwithstanding the Chair of the Management Board in his capacity as the Appeal Assessor. During this meeting, the Management Board also approved the ECDC International Relations Policy 2020 as well as the proposal for the Third ECDC Joint Strategy Meeting (JSM).

2 Major events

18 January Signing the Memorandum of Understanding between ECDC and EUPHA, ECDC,

Stockholm

24 January Meeting with Ahmad Khalifa AlFalasi, CEO, Corporate Services and Investment of

Dubai Tourism, ECDC, Stockholm

30 January Presentation by Acting Director during the joint Maltese EU Presidency and ECDC

Technical Meeting on HIV/AIDS, St. Julian's, Malta

31 January ECDC Acting Director's annual exchange of views on 2016 activities and 2017

priorities, Committee on the Environment, Public Health and Food Safety (ENVI),

European Parliament, Brussels

20–21 February Visit by a delegation representing the Committee on the Environment, Public Health

and Food Safety (ENVI) of the European Parliament, ECDC, Stockholm

28 February Presentation by Acting Director during a meeting with ENVI Chair, MEP Adina-Ioana

Vălean and with European Agency Directors of EMA, EFSA, ECHA and EEA, Brussels

21–22 February 48th meeting of the ECDC Advisory Forum, ECDC, Stockholm

1 March Participation during meeting of the Heads of EU Agencies, Brussels

6 March Presentation by Acting Director during the 5th Joint Conference of the DGHM and

VAAM annual meeting, Würzburg

21 March 34th meeting of the Audit Committee, ECDC, Stockholm

21–22 March 39th meeting of the ECDC Management Board, ECDC, Stockholm

24 March Presentation by Acting Director in the Africa Centre for Disease Control and Prevention

First Scientific Symposium to launch its five-year strategic plan, Addis Ababa

10 April Hearing of the Director-elect during the European Parliament's Committee on

Environment, Public Health and Food Safety (ENVI) meeting, Brussels

19–20 April Presentation by Acting Director during International Association of National Public

Health Institutes (IANPHI) European Directors Meeting, Kyiv

25 April Exchange of views on the Zika virus disease epidemic and the implications for the

European Union, ENVI Committee of the European Parliament, Brussels

25 April Presentation by Acting Director during a public hearing on added benefits of the EU on

the environment, public health and food safety, ENVI Committee of the European

Parliament, Brussels

11 May High-level event on TB and European Health Security: The critical role of TB R&D in

the context of AMR, European Commission, Brussels

18 May Moderation of a session by Acting Director during the 15th National Congress of

Clinical Microbiology and Infection, Sofia

23–24 May 49th Meeting of the ECDC Advisory Forum, ECDC, Stockholm

29 May Meeting with President and the Secretary General of the European Health Forum

Gastein, ECDC

31 May Presentation by Acting Director during Workshop on Vaccination, European

Commission, Brussels

7 June Visit by Director General of DG SANTE, ECDC

12 June Visit by Minister of Health and for Equal Opportunities in Luxembourg, ECDC

13–14 June 40th Meeting of the ECDC Management Board, ECDC

20 June Opening by Director of the Annual Influenza Meeting, Stockholm

27 June Presentation by Director in Event on AMR, European Parliament, Brussels

29–30 June Presentation by Director during Health Security Committee Plenary Meeting,

Luxembourg

5–7 July Heads of EU Agencies Meeting, Parma

26–27 September 50th Meeting of the ECDC Advisory Forum, ECDC, Stockholm

27–28 September Meeting of the Directors and National Coordinators of the Coordinating Competent

Bodies

3–6 October ECDC workshop 'Vaccine hesitancy' at the European Health Forum, Gastein

9 October Visit by Dr Tapani Piha, Head of B3 Unit-Cross border healthcare, eHealth, DG SANTE,

ECDC

11 October Strategy meeting of the management teams of DG SANTE and ECDC, Brussels

18 October Visit by Swedish Ministry of Finance and Ministry of Health and Social Affairs, ECDC

23–24 October Panel participation by Director at the Annual Meeting IANPHI, Rome

25 October Opening presentation by Director at the Pisa Festival of Innovation in Public Health,

Pisa

4 November 10th European Public Health conference, Stockholm

6–8 November European Scientific Conference on Applied Infectious Disease Epidemiology

(ESCAIDE), Stockholm

9 November Health Security Committee, Luxembourg

15 November ECDC Lunch workshop, European Antibiotic Awareness Day event, Brussels

16–17 November First WHO global ministerial conference on 'Ending TB in the sustainable development

era: a multisectoral response', Moscow

21–22 November 41st Management Board Meeting, Stockholm

24 November Director's country visit, Greece

25 November Global awareness of microbial resistance and antibiotic stewardship, Athens

27–28 November Symposium 'Rationale Entscheidung unter Unsicherheit', Hamburg

12 December 51st Meeting of the ECDC Advisory Forum (audioconference)

3 Budgetary and financial management

Fund source C1 (current year appropriations)

Budget execution in terms of commitment appropriations at year end reached 99.8%, equivalent to EUR 57.9 million.

Budget execution in terms of payment appropriations at year end reached 81.7%, equivalent to EUR 47.4 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 net budget transfers for EUR 0.9 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 10.4 million to 2018.

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 91.3%, equivalent to EUR 10 million.

Procurement procedures

The Procurement section dealt with a significant number of procedures. Eighteen open calls for tenders were published along with one open call for proposals. In the context of the ECDC Fellowship Programmes, eight framework partnership agreements and 55 specific grant agreements were concluded. In addition, 83 negotiated procedures and 17 reopening procedures within ICT framework contracts were completed. Regular Committee on Procurement, Contracts and Grants (CPCG) meetings were held, resulting in the issuance of 36 CPCG Opinions.

Interest charged by suppliers through late payments (> 30 days): EUR 4103.04.

Summary information on budgetary operations for the year

The core budget of the Centre for 2017 (EUR 58 million) remained at approximately the same level as in the previous year.

For additional information see Annex 6, annual accounts (see Document MB 42/11): '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).

The majority of the Centre's jobs (74.8%) are related to the implementation of activities linked to the Centre's operational work. A total of 17.3% of the jobs belong to 'administrative support and coordination', while 7.9% of the jobs are defined as neutral (i.e. primarily in the area of finance/accounting and internal control) (see Annex 4).

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, formerly referred as 'annual work programme'), which will be used for 2018–2020, it was decided to monitor ECDC's progress only through the SPD as from 2017. 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 Single Programming Document. The Management Board revised the set of indicators in November 2017, for the SPD 2018–2020. ECDC internally monitors the Annual Work Programme projects and activities on a quarterly basis, and its implementation is reported to the Management Board at each Management Board meeting and in the Annual Report of the Director. During the year, projects are discussed with the Units and Programmes, and corrective actions are taken as necessary. As of the beginning of 2017, the Financing Decision (list of procurements), part of the SPD, is revised at each meeting of the Management Board to update the list of procurements.

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 2017, 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 2017, the AODs signed a Declaration of Assurance to the AO, similar to the one signed by the AO herself, in the area for which they were 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 2017, new internal procedures became effective, for example, on the preparation and monitoring of the annual

work programme, organisation of ECDC public health training activities, authorship and acknowledgement of contributions to scientific work and related outputs, and open access to scientific publications.

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 are 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 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 exante 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 2017, 26 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 2017, the two verifications selected in the GVP 2016 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 2017, it was decided to focus on the non-salary related expenditures in Title 1 of the budget. The report was issued in February 2017 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 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 regularly followed up and presented to the Audit Committee of the Management Board.

In 2017, the IAS did not perform a specific audit. Instead, it developed a new IAS plan covering 2018–2020, which will be presented to the Management Board in March 2018.

7.2 European Court of Auditors

The European Court of Auditors (ECA) audits ECDC every year. 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 opinion¹⁵ for 2016, indicating that the accounts are reliable and the transactions underlying the accounts are legal and regular.

Three comments were received in the final report from the ECA for 2016 (which do not call the Court's opinion into question). One related to interim arrangements, one to weaknesses in the procurement process, and one to high carry-overs of committed appropriations in operating expenditure (Title III). For the first two comments, ECDC has already taken the appropriate actions; for the last one, work is ongoing.

The ECA audit of the 2017 annual accounts is ongoing. The first part of the audit was performed in September 2017. The audit will be finalised during spring 2018, and a draft report will be available by June 2018 the latest.

58

¹⁵ 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.

8 Follow-up of recommendations and action plans for audits

At the end of 2017, seven very important IAS observations, and four important IAS observations were officially open (from the 2015 internal audit on data management in ECDC and the 2016 internal audit on the procurement process in ECDC). However, all of these observations have now been implemented by ECDC and reported to the IAS for review.

In addition, all outstanding actions to be implemented from the ECA's special report (no. 12/2016) on 'Agencies' use of grants: not always appropriate or demonstrably effective' were implemented. This has not yet been confirmed by the ECA.

The only outstanding issue with the ECA is the one regarding the high carry-overs of committed appropriations in operating expenditure (Title III) as mentioned above. In this context, ECDC is currently carefully analysing the advantages/disadvantages, in liaison with the ECA, of introducing differentiated budget appropriations, including the risks of added complexity and resources. A conclusion is planned to be reached by June 2018; changes can be implement on 1 January 2019 the earliest.

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 section provides an overview of the measures taken by the European Centre for Disease Prevention and Control (ECDC) in the light of observations and comments made by the Discharge Authority on 27 April 2017 in respect of the implementation of the budget of 2015.

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

Reference	Observation of the Discharge Authority	Response and measures taken by ECDC
P8_TA-PROV(2017) 0164, paragraph 2	Notes from the Court's report that various weaknesses were found affecting the transparency of the Centre's procurement procedures, including a lack of a clear link with the Centre's annual work programme, insufficient substantiation of the estimated contract value or absence of a financial benchmark to assess the tenderer's financial capacity; acknowledges the fact that the Centre implemented a new version of its procurement monitoring application in 2016 which makes a clear link between the procurement procedures and the annual work programme; acknowledges furthermore that prior to the launch of any procurement procedure above EUR 25 000, the Centre now requests a substantiation of estimated contract values;	Since November 2016 ECDC has changed the format and process to create the Financing Decision for its procurements as part of its annual work programme. Changes in the procurement plan are systematically monitored and updates to the Financing Decision are submitted for approval to the Management Board before procedures are launched. In addition, for negotiated procedures which do not require prior publication of a contract notice in the Official Journal, an ex-ante publicity notice inviting interested candidates to come forward with a request to participate in the procedure is published. A note to the file template has been created to also document the budget estimation for procedures below 25.000. A minimum threshold for the financial capacity is now added to the procurement documents for each procedure.
P8_TA-PROV(2017) 0164, paragraph 7	Takes note that as from 1 May 2015, following a decision of the management board of the Centre, the Acting Director has replaced the Centre's Director until a new Director takes office;	Dr Andrea Ammon, MD, MPH, was elected as the new Director of ECDC for a period of five years by the ECDC Management Board on 22 March 2017 and was formally appointed on 16 June 2017, following a hearing before the ENVI Committee of the European Parliament on 10 April 2017.
P8_TA-PROV(2017) 0164, paragraph 9	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 procedure 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.
P8_TA-PROV(2017) 0164, paragraph 10	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.
P8_TA-PROV(2017) 0164, paragraph 12	Notes that the Centre has taken specific initiatives in order to increase transparency relating to its contacts with lobbyists, and that an internal procedure on meetings with the pharmaceutical sector is under preparation; calls on the Centre to enact a proactive lobby transparency policy;	In addition to the internal procedure on meetings with the pharmaceutical industry, an internal procedure on the conclusion of memoranda of understandings and collaboration agreements with third parties is under development
P8_TA-PROV(2017) 0164, paragraph 19	Underlines that the Centre should continue promoting dialogue with stakeholders and citizens and incorporate it as part of the priorities and activities to be implemented;	Stakeholder dialogue and engagement is an important aspect, notably in two of the Centre's priority areas; 1) prudent use of antibiotics as part of the annual European Antibiotic Awareness Days and increasingly on vaccine uptake/hesitancy supporting European Immunization week and other European and national activities in the field. To further strengthen the stake-holder work one post has been redirected to work on stakeholder strategy and engagement.
P8_TA-PROV(2017) 0164, paragraph 20	Recommends that the Centre develop impact indicators; believes that such impact indicators are essential tools in order to measure the effectiveness of the Centre;	ECDC is currently reviewing the indicators of its Single Programming Document, which are reported in ECDC Annual Activity Report. The new set of indicators is currently being finalised and will be submitted for approval to the Management Board in November 2017. Generally speaking, as recognised also by the network of EU Agencies, evaluations are a more effective tool than indicators to measure impact. These evaluations are based on a number of indicators but also include interviews and direct feedback from Stakeholders.

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 performs 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. ECDC presented a final report showing its final implementation, approved by the Management Board in November 2017.

In 2017, the Management Board approved the proposed timeline for the Third External Evaluation of ECDC, and appointed the members of the Management Board External Evaluation Steering Committee (MEES). The MEES convened its first meetings. The draft Terms of Reference of the Third External Evaluation will be submitted to the Management Board for approval in March 2018. The evaluation is expected to start later in 2018.

The external evaluation report is available on ECDC website: http://www.ecdc.europa.eu/en/aboutus/Key%20Documents/ECDC-external-evaluation-2014.pdf

ECDC started also two dedicated external evaluations in 2017:

- The implementation of EPHESUS, a four years' project (2017-2020) aimed at evaluating all the EU/EEA public health infectious diseases surveillance systems, to strengthen their efficiency and usefulness and to ensure they are fit for purpose for public health. In 2017, a common protocol for evaluation was agreed and the first evaluations took place for surveillance systems for HIV/AIDS (summer 2017) and for antimicrobial resistance and healthcare associated infections (Dec. 2017). See p.15
- The evaluation of ECDC Disease Programmes. In 2017, a common protocol for the evaluations of all Diseases programmes was agreed. Evaluations of the IRV and FWD programmes will start in April 2018 to be finalised by the end of 2018. The rest of the Disease Programmes will be evaluated in 2019-2020.

Internal evaluations

In addition, ECDC adopted a procedure for the internal evaluation in 2015. The 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 evaluations¹⁶; 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, 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 interventions¹⁷.

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.

To date, ECDC conducted the following internal evaluations:

- Assessment of the governance of IT (2015);
- Evaluation of the deployment of ECDC experts in Africa (2016);
- Evaluation of the ECDC intranet (2017).

¹⁶ ECDC Founding Regulation, Article 14.5.b

¹⁷ '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 (<u>Article 29(5) FR</u>).

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 support

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 Surveillance and epidemic intelligence

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 (appointed 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 has again assisted the European Commission in analysing the country reports on national preparedness under Article 4 of Decision 1082/2013.

1.1.4 Response support

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 Training and capacity building

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 2018 ECDC is planning an external evaluation of the programme. Based on a collaboration agreement, ECDC together with the Association of Schools of Public Health in the European Region (ASPHER) is mapping the curriculum on communicable disease (CD) control in the European schools of public health, and forming an ECDC-ASPHER network of schools with a strong CD curriculum to ensure alignment between our respective training activities, meeting the present and future needs of trained public health professionals.

1.1.6 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 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 Collaboration and cooperation with EU institutions, Member States and non-EU countries

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, and based on the outcome of the mid-term review finalised in the beginning of 2017, revised ECDC International Policy 2020 was approved by the ECDC Management Board in November 2017. 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, as well as providing further operational guidance e.g. on organising joint activities. 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. As regards the work with the EU enlargement countries ECDC has been carrying out stakeholder surveys, the second one was initiated in the end of 2017 and results will be ready Q1 2018. 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.

ECDC carries out most of its international activities with funding from the European Commission. The grant based funding for the work with the European Neighbourhood Policy (ENP) partner countries finished in the end of 2016, and since that ECDC has used other Commission funding mechanisms, in particular TAIEX, to continue the collaboration. However, this non-sustainability of funding endangers the relations, which have been successfully built up over last years. ECDC has since 2013 been scientifically supporting MediPIET, a training programme and network covering 18 accession and ENP countries, funded by the European Commission. The second phase of the

programmes was successfully closed in 2017, and presently an additional two-year extension (2018-2019) is under discussion.

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.

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 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 2018).

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 2017. The results were validated by the 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

2017 Declaration of Assurance by the Director of ECDC

I, the undersigned, Andrea Ammon, 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, 2 March 2018

Andrea Ammon

Director

Management Board's analysis and assessment

The Management Board has assessed the Annual Report of the Director for the financial year 2017. The Management Board appreciates the results achieved by the Centre and notes in particular the following:

On the content of the report:

- ECDC was able to ensure a high level of implementation of its initial Work Programme for 2017: 90%, with 82.4% of the activities fully implemented and 7.6% partly. As an example, ECDC prepared 41 rapid risk assessments, 38 of which were published. ECDC responded to 59 scientific requests from the European Commission, the European Parliament and the Member States.
- ECDC finalised the roadmap for the implementation of 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.
- 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 support the Member States and the European Commission in the area of preparedness and decision 1082/2013/EC on serious cross-border health threats.
- While giving high priority to the areas of antimicrobial resistance and vaccine-preventable diseases, in 2017, ECDC continued to implement actions to prevent and address all communicable diseases areas across Europe. It provided scientific outputs for guidance and practical tools to ensure access to information and data to health professionals and policymakers in Europe.
- ECDC made the final preparation for moving to its new premises as from March 2018.
- ECDC launched its new web portal with a new structure, navigation and design that includes a more
 efficient search to find more easily the ECDC outputs.
- The Management Board approved the final monitoring of 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. In the meantime, ECDC launched the preparation for the Third external evaluation, which will be conducted in 2018.

On the structure of the report:

- The Annual Report for 2017 follows the common template to all EU agencies to ensure comparability with other EU agencies by the discharge authority.
- Annex 1-a of the report presents the results of the indicators included in the Single Programming Document 2017. In 2017, the Management Board adopted a list of revised indicators for the Single Programming 2018.
- Annex 1-b of the Report presents a systematic review of the implementation of the Centre expected outputs for 2017, as set in the Single Programming Document, adopted by the Management Board in November 2017.

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 2017.

Annexes

Annex 1. Implementation of the Work Programme 2017

90% of the activities of the Work Programme for 2017 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 November 2016.

Expected outputs 2017	Implemented	Comments
Strategy 1.1 Surveillance		
Improved technical surveillance platforms and processes;	Yes	Further extension of the Atlas to new diseases and pathogens, and new user-friendly layout. Disease determinants included in the Geoportal. Automated annual epidemiological report production
Protocol for epidemiological EU/EEA-level surveillance system evaluation and first batch of evaluation reports	Yes	Common protocol for evaluation agreed. Pilot evaluations of surveillance systems for HIV/AIDS (report in summer 2017) and for antimicrobial resistance and healthcare associated infections (report in December 2017).
EU/EEA surveillance standards and monitoring indicators for surveillance systems evaluated in 2017	Partly	Done in 2017 for HIV/AIDS and antimicrobial resistance and healthcare associated infections.
Peer-reviewed scientific articles analysing surveillance data in depth;	Yes	10 peer reviewed scientific articles published in 2017
5. Technical support to Member States that wish to establish automated transfer of surveillance data to ECDC;	No	No requests for support received
Strategy 1.2. Epidemic intelligence		
Provision of reliable threat detection and assessment services to the European Commission and Member States	Yes	
New tools to support rapid investigation and analysis of multi-country outbreaks and facilitate work of Member States and the European Commission finalised.	Yes	
Strategy 2.1 Scientific advice		
Improved ECDC prioritisation mechanism (IRIS) for scientific advice;	Yes	
2. Improved ECDC Scientific Advice Repository and Management System (SARMS)	Yes	
3. High-quality scientific advice outputs published on ECDC's website and in peer-reviewed journals; further improved in relation to quality of scientific analysis and content, evidence-based approach, transparency of methods and processes, as well as consistency and utility of presentation	Yes	
4. 2017 edition of the European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE 2017) to support knowledge exchange and networking, involving European Commission services like SANTE, CHAFEA and other EU agencies	Yes	

	Implemented	Comments
Expected outputs 2017 5. Implemented framework contract for systematic reviews in the area of ECDC's remit depending on the result of the preparatory work done in 2016	No No	An internal consultation concluded that a single framework contract would limit access to the required range of expert contractors and subject matter expertise. ECDC developed instead an alternative approach, based on documented standards and guidance for commissioning.
6. Training workshops in methods and tools for evidence-based practice and decision-making for ECDC staff and ECDC partners at EU and country level	Yes	
7. A draft strategy paper on ECDC engagement with EU-funders and with on-going research projects to maximise mutual benefit to the research community and ECDC	Partly	ECDC worked with partners in the EU agencies' ANSA network to develop a joint paper on engagement with EU funders and ongoing research projects in view of identifying ways of maximising the mutual benefit.
Strategy 2.2 Microbiology		
Publication of EULabCap report on mid-term evaluation of progress 2013- 15 of EU public health microbiology capacities including appraisal of impact of country capacity support actions	Yes	
2. Publication of ECDC annual microbiology support activity report	Yes	
3. Pilot studies performed according to strategic roadmap for whole genome sequencing-based surveillance developed with the Member States along the Molecular Typing for Surveillance Task Force recommendations to ensure public health added value and EU wide participation	Yes	Progressing according to roadmap 2017. Number of ongoing and newly launched pilot studies
4. Evaluation report on ECDC supported External Quality Assessment schemes	Yes	EQA strategy revised based on the evaluation
5. Joint EFSA-ECDC report on antimicrobial resistance in Salmonella and Campylobacter in humans and food/animals compliant with EUCAST interpretive criteria (Cf. FWD Disease Programme)	Delayed	Work in progress. Report to be published in November 2018
Strategy 3.1 EU and Country Preparedness Support		
Technical guidance and tools in support of national preparedness planning	Yes	
Technical support to the preparedness working group under the Health Security Committee and IH	Yes	
Direct support to countries' preparedness planning based on needs assessments in a country specific and regional approach	Yes	
Based on agreement with WHO align activities on the improvement of implementation and monitoring of IHR by supporting national preparedness planning	Yes	
Strategy 3.2 Response and emergency and operations		
Mobilisation mechanisms for public health response teams developed	Yes	
2. ECDC emergency operation centre strengthened to support deployment of field teams (i.e. training, briefing, communication, security and health related issues, debriefing upon return	Yes	
Strategy 4.1 Training		
The EPIET and EUPHEM paths of the ECDC fellowship programmes put into one programmatic framework with core courses, profession-specific courses and elective courses dependent on professional background and future career ambitions of the fellows	Yes	Elective courses to be added, besides online ones.
2. The new Continuous Professional Development Programme (CPDP) launched supporting the senior level workforce through blended learning	Yes	Catalogue available and first winter workshop organised.
3. Performance assessment for fellowship and implemented CPDP modules integrated in the LMS	Yes	gu
4. Blended approach for Computer Tools and Vaccine modules in	Partly	Webinars online. Partly

Expected extracts 2017	lumlamantad	Commonto
Expected outputs 2017	Implemented Yes	Comments Preparatory work and
5. A joint ECDC-ASPHER network of schools of public health with interested in and curriculum on communicable disease prevention and control in place	165	mapping done. Workshop in February 2018.
Scientific leadership and support to the implementation phase of the Mediterranean Programme for Intervention Epidemiology Training (MediPIET) and support in finding sustainable solutions for the programme post 2017	Yes	A two-year extension of the programme (2018- 2019) is under discussion.
Strategy 4.2 Coordinated country support		
A robust and coherent methodology on needs and opportunities assessments across the broad areas of ECDC support activities agreed with the Advisory Forum, the Coordinating Competent Bodies and the European Commission	Yes	
Agreed mechanisms for transparent priority setting of ECDC country support activities	Yes	
3. Pilot implementation of the new country support approach in a few priority countries with signed multiannual collaboration agreement between ECDC and the countries outlining the expected input from each party	Yes	
Strategy 4.3 International relations		
ECDC-IPA4 project completed, including progress report on participation of EU enlargement countries in thematic EPIS platforms and TESSy on selected diseases, as well as in epidemic intelligence, preparedness and response, and public health microbiology focal points networks; ECDC follow-up action conceptualised and negotiated under IPA	Yes	
Upon request from the European Commission, technical assessment of one enlargement country completed, Technical Assessment Report prepared and post-assessment phase up and running	Yes	
Upon request from the European Commission, contribution to Sub- committee meetings on EU accession preparations and input provided in preparation of European Commission's annual enlargement progress report	Yes	
Upon request from the European Commission, assistance to the European Commission in preparing EU enlargement countries for EWRS reporting	No	No request from the European Commission
5. Follow-up of projects under European Neighbourhood Instrument (ENI) or other financial instruments has been initiated and implementation started, if granted by the European Commission	Yes	
Strategy 5.1 Health Communication		
Timely communications of ECDC scientific and technical content adapted to its main target audiences through an array of appropriate communication channels	Yes	
Technical guidance and training on risk communication as part of ECDC support to national preparedness planning	Yes	
3. Technical support to the communication working group under the Health Security Committee	Yes	
Technical support to national health communication campaign activities, notably the European Antibiotic Awareness Day	Yes	
Strategy 5.2 Eurosurveillance		
1. Website 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	Publication platform and website seamlessly launched in September 2017
2. Visibility of the journal further enhanced by a scientifically attractive seminar embedded in a large conference and presence of staff at scientific conferences and strategic presence on social media.	Yes	Seminar on 'One Health' with around 130 attendees on the margins of ESCAIDE
3. Follow up actions of the editorial board meeting end 2017 implemented	Yes	011
Series of scholarly, educational articles aimed at capacity building and contribution to life-long learning started	Yes	Strategy and practical approach discussed at board meeting to be implemented consecutively in 2018
5. Implementation/updated editorial policies reflecting new developments where necessary.	Yes	Done
6. Published articles using evidence-based methods	Yes	Done where appropriate
Strategy 6.1 Antimicrobial resistance and healthcare-associated infection	ns - ARHAI	
Key outputs on AMR		
EARS-Net: updated interactive database 2016 on surveillance of AMR and summary of 2016 data	Yes	

Expected outputs 2017	Implemented	Comments
2. ESAC-Net: updated interactive database 2016 on surveillance of	Yes	Comments
antimicrobial consumption and summary of 2016 data		
3. ESAC-Net: report on pilot survey on antimicrobial consumption in European hospitals	Delayed	Delayed due to lack of human resources
ESAC-Net: study on the quality and consistency of antimicrobial consumption surveillance data and proposal of corrective measures, e.g. consensus expert meeting on defined daily doses	Yes	
5. Surveillance Atlas of Infectious Diseases (incl. country summary sheets): data on AMR and antimicrobial consumption	Partly	Data on antimicrobial consumption will be available in the Atlas in 2018
6. EARS-Net and ESAC-Net (together with HAI-Net): Results of pilot testing of a common operational unique identifier for hospitals that participate in the three networks	Cancelled	Cancelled as pending for a system for decentralised storage of TESSy data at Member State level
7. Revised estimates of the burden of AMR	Partly	Will be published in 2018
8. Provision of morbidity and mortality surveillance information on AMR to the European Commission and OECD to support economic impact assessment and modelling	Yes	
9. Contribution to the 2nd Joint Interagency Antimicrobial Consumption and Resistance Analysis Report (JIACRA)	Yes	Report published
10. In accordance with the ECDC roadmap for integration of genomic/molecular typing surveillance, launch of molecular typing surveillance of carbapenemase-producing Enterobacteriaceae (CPE) as part of the 2nd European Survey of Carbapenemase-Producing Bacteria (pending revision of the ECDC roadmap for integration of genomic/molecular typing surveillance and SMT decision about resources for its implementation)		
11. Development of a methodology for pilot molecular surveillance of meticillin-resistant Staphylococcus aureus (MRSA) (pending revision of the ECDC roadmap for integration of genomic/molecular typing surveillance and SMT decision about resources for its implementation)	Cancelled	Cancelled due to lack of human resources
12. Guidance (general principles) for the prudent use of antimicrobial agents in human medicine	Yes	
13. Work on guidance for screening for multidrug-resistant (MDR) bacteria in healthcare settings started, including a priority list, according to defined criteria, of MDR bacteria for which patients should be screened	Partly	Work is ongoing and result expected in 2018
14. Revision of international proposal for definitions of multidrug-resistant (MDR), extensively drug-resistant (XDR) and pandrug-resistant (PDR) bacteria	Cancelled	Cancelled due to lack of human resources
15. Support to the European Commission on the implementation of its 2nd Action Plan on AMR	Yes	
16. Country visits to discuss AMR issues: initial one-week visits, shorter follow-up visits, as well as provision of support to country visits on AMR organised by DG SANTE	Yes	Five visits
17. Close collaboration with the Joint Action on AMR (and HAIs)	Yes	
18. Support to WHO on the implementation of the Global Action Plan on AMR	Yes	
19. 10th European Antibiotic Awareness Day (EAAD), 18 November 2017, in partnership with the 3rd WHO World Antibiotic Awareness Week	Yes	
20. Participation in the expert group of the Northern Dimension Partnership on Public Health and Social Well-being (NDPHS)	No	No invitation to participatereceived in 2017
21. Contribution the Transatlantic Task Force on AMR (TATFAR), in particular (a) consultation and collaboration on a point prevalence survey of HAIs, (b) contribution to the development of a common system for sharing and analysing AMR patterns identified as urgent and serious threats, and (c) encouraging efforts to harmonise, to the extent possible, interpretive criteria for susceptibility reporting of bacterial isolates for contribution of data to the WHO Global Antimicrobial Resistance Surveillance System (GLASS)	Yes	
Key outputs on HAIs		1
22. HAI-Net: 2nd Point prevalence survey of HAI and antimicrobial use in European acute care hospitals; complete data collection and validation studies	Yes	
23. HAI-Net: 3rd Point prevalence survey in European long-term care facilities; complete data collection	Yes	
24. HAI-Net: first report on surveillance of Clostridium difficile surveillance	Partly	Work is ongoing and result expected in 2018

Expected outputs 2017	Implemented	Comments
25. Surveillance Atlas of Infectious Diseases (incl. country summary sheets): data on HAIs, structure and process indicators on prevention and control of HAIs	Yes	First data on surgical sites infections in the Atlas
26. HAI-Net (together with EARS-Net and ESAC-Net): Results of pilot testing of a common operational unique identifier for hospitals that participate in the three networks	Cancelled	Cancelled as pending for a system for decentralised storage of TESSy data at Member State level
27. Revised estimates of the burden of HAIs	Yes	Already delivered Q4 2016
28. Provision of morbidity and mortality surveillance information on HAI to the European Commission and OECD to support economic impact assessment and modelling	Yes	
29. Further implementation of the directory (repository) of online resources for the prevention and control of HAIs and AMR	Yes	
30. Produce a first toolbox of essential control options and interventions to prevent and control HAIs and AMR	Partly	Work is ongoing and result expected in 2018
31. Training courses for healthcare workers: control of multidrug-resistant micro-organisms in health care settings	Yes	One course in 2017
Strategy 6.2 Emerging and Vector-borne Diseases – EVD		
In-depth analysis of TESSy data and dissemination of publications with integration of animal and/or vector data based on the One Health approach where appropriate	Yes	
Support to Member States with the implementation of options for Lyme neuroborreliosis' surveillance to assess trends	Yes	
3. Real-time surveillance of mosquito-borne diseases (e.g. West Nile Fever) and development of an 'early information system' to detect outbreaks	Yes	
Increased laboratory capacity building for early detection and surveillance of EVDs through an outsourced laboratory network in coordination with the Microbiology Coordination Section and other EU related initiatives	Yes	
5. Technical support to the Member States in emerging issues related to EVDs and actively supporting preparedness and training programmes on EVDs at ECDC	Yes	
Data collection on disease vectors and the pathogens they transmit for updated vector distribution maps (mosquitoes, ticks and sand-flies), and ad hoc support in entomological expertise (with EFSA via an outsourced network, VectorNet)	Yes	
7. a) Risk analyses of emergence of EVDs and assessment tools to support decision making such as orientation of control strategies (e.g. dengue and chikungunya), aiming for effective EVD surveillance and MS preparedness	a) Yes	
b) Risk assessments and preparedness plans on three vector-borne diseases for authorities responsible for safety of substances of human origin	b) Partly	Update of the risk assessment plan for Zika
8. Quantitative analysis of the current dynamics of global air-traffic patterns and social and environmental/climatic drivers for a comprehensive understanding of the risk of importing infectious diseases (e.g. dengue, chikungunya, zika) and the spread of outbreaks to/from the European Union	Yes	
Strategy 6.3 Food- and Waterborne Diseases and zoonoses - FWD		
European Union Summary Report on trends and sources of zoonoses, zoonotic agents and foodborne outbreaks 2016, EFSA-ECDC joint report	Yes	
2. European Union Summary Report on antimicrobial resistance in zoonotic and indicator bacteria from humans, animals and food 2016, EFSA-ECDC joint report	Yes	
3. External quality assessments services for typing of Listeria monocytogenes, Salmonella, verocytotoxin-producing E. coli , for antimicrobial resistance of Salmonella and Campylobacter , and for Legionnaires' disease	Partly	Done , except legionella due to delay in procurement
4. Discussion paper on a potential revision of human TSE surveillance in EU/EEA	Delayed	Preliminary discussion took place, expected for 2018, due to workload and transitional period for the coordination of the project
5. Capacity building opportunities through the FWD Expert Exchange Programme (FWDEEP)	Yes	3 exchange visits
6. ECDC network meeting for Food- and Waterborne Diseases and Zoonoses Network (FWD-Net) meeting together with EFSA, AMR meeting together with EURL for antimicrobial resistance, EuroCJD and European Legionnaires' Diseases Surveillance Network meeting	Yes	EuroCJD will be organised in 2018, as agreed with Member States (meeting every 3 years only)

Francisco autorità 2047	lumla manta d	Comments
7. Strategy paper for tackling the emergence of listeriosis in EU/EEA in close collaboration with EFSA, EURL for Listeria monocytogenes and Member	Implemented Delayed	Comments Delayed to 2018 due to the workload in dealing with outbreaks
States, endorsed by the European Commission 8. International collaboration strengthened with global partners like US CDC and research projects, e.g. COMPARE and GMI, as well as with Institute Pasteur, towards an agreement on global WGSbased nomenclature at least for Listeria monocytogenes	Yes	Walloadoreale
9. Follow up of detected and notified multi-country microbiological clusters on a regular basis for Salmonella , Listeria monocytogenes and VTEC	Yes	
10. Multidisciplinary workshop to enhance preparedness e.g. by reviewing lessons learnt from a multicountry foodborne outbreak	Yes	Workshop in January 2018
11. Addressing any emerging issue related to food- and waterborne diseases and zoonoses; e.g. emergence of Hepatitis E	Yes	2 publications in 2017
Strategy 6.4 HIV, Sexually Transmitted Infections and viral Hepatitis – HS	SH	
Scientific Advice in the form of guidance or technical reports on MS identified important topics: uptake of testing for HIV and hepatitis B and C, new STI point of care tests, pre-exposure prophylaxis (PrEP) for HIV and structural determinants of risk among sex workers and youth	Yes	
2. More detailed analysis of the surveillance and molecular data with broader publication of this analysis in scientific journals	Yes	
3. Various analytical reports and peer reviewed publications using additional sources of data to better explain the epidemiology if these diseases. These will include: the routine surveillance reports and associated scientific publications; evidence summary in preparation for the HIV testing guidance; evidence based opinion on prevention among youth; paper on structural barriers to uptake of testing; evidence summary in preparation for the Hepatitis testing guidance; paper on structural determinants affecting vulnerability of sex workers; paper on the HIV continuum of care in Europe; paper of the results of the LGV enhanced surveillance pilot; paper on Hepatitis B and C Sentinel morbidity and mortality estimates; various Dublin Monitoring reports among possible others.	Yes	
4. Country visits to support MS in dealing with specific problems or threats depending on the expressed needs of the MS and the resources available	Yes	
5. Reports on Monitoring the EU response to HIV, and possibly hepatitis	Yes	
Draft for an established framework for prevention will be gradually developed after an Advisory Group on prevention has been set up to help define the possible extent and scope of the work of ECDC in this area	Yes	
Strategy 6.5 Influenza and other respiratory viruses - IRV		
 Weekly high quality (with established standards and definitions) and high- impact surveillance reports on FluNewsEurope.org during the season. Strengthened routine surveillance mechanism for monitoring of genetic and antigenic viral characteristics, severe respiratory disease, risk factors and influenza mortality 	Yes	
Timely and high-quality risk assessment and scientific advice on emerging respiratory pathogens (including MERS-CoV and avian influenza A(H7N9) and A(H5N1)) and support to international outbreak assessment missions	Yes	Although there were very few rapid risk assessments for influenza and respiratory diseases. No request received for outbreak assessment mission.
External Quality Assessments for influenza or one emerging respiratory virus performed with successful results	Delayed	Initiated during the summer. Delayed to 2018 due to the signature of the procurement.
a) Timely vaccine effectiveness estimates and vaccine coverage data available to stakeholders	a) Yes b) No	b) only one request was received, from Bulgaria
b) Three preparedness case studies or country visits done c) Literature review on effectiveness of non-pharmaceutical	,	
c) Literature review on enectiveness of non-pharmaceutical countermeasures done	c) delayed	 c) Delayed due to internal reprioritisation of resources to vaccine- preventable diseases
5. a) Production at least one peer review publication on the analysis and interpretation of data submitted to ECDC in <i>Eurosurveillance</i> or another journal	a) Yes	a) 5 done in 2017
b) Presentations at least one international conference by each IRV expert.	b) Yes	

Expected outputs 2017	Implemented	Comments
Strategy 13. Vaccine-preventable diseases - VPD	implemented	Comments
Methodologies and guidance aimed to strengthen immunisation systems in the EU/EEA Member States under the umbrella of the VENICE project for both VPDs and influenza. This output is expected to streamline the process related to the development of new guidance on immunisation; set up and moderate a platform for sharing scientific products, mathematical models, literature reviews, etc.	Partly	The work could not start before the reallocation/reprioritisatio n of resources at mid- year.
Evidence-based guidance on priority diseases. 2017 will particularly focus on the ECDC guidance on pneumococcal vaccination in adults as well as HPV.	Delayed	Guidance on pneumococcal vaccination cancelled because of lack of resources; HPV delayed in Q3/Q4 2018
Interactive ECDC ATLAS surveillance tool with data and analyses on all vaccine-preventable diseases incidence and rates in EU Member States	Yes	
4. Data and analysis for measles and rubella (targeted for global elimination) on a monthly basis, as well as in-depth analysis reports twice during the year. In addition, develop a poliomyelitis page on the ECDC ATLAS surveillance tool to map AFP surveillance system data in relation with quality indicators	Yes	
5. Actions aimed to coordinate and implement relevant preparedness activities, with special focus on poliomyelitis (targeted for global eradication), and technical support based on relevant needs identified.	Postponed to 2018	Lack of resources in 2017; reprioritisation only at mid-year
6. Scientific studies and analyses aimed to support European Commission activities on the feasibility of a life-course approach to vaccination.	Delayed	Lack of resources in 2017; reprioritisation only
7. Consolidation of activities in the area of electronic immunisation information systems (IIS) contributing to the following key tasks: o Share generic advocacy materials for the promotion of IIS in EU Member	Partly	at mid-year Report on advocacy material for the promotion of IIS in Member States
States; o Develop definitions, technical specifications, check-lists, meta-data sets and other technical documents related to IIS;		published; The last two actions are delayed, following input from an expert meeting in
o Develop guidelines, handbooks and training materials on implementing IIS		November 2017. The documents will be finalised in Q2 2018.
Scientific advice provided to the European Commission with regards to the following key activities identified by the Council Conclusions on Vaccination as an Effective Tool in Public Health:	Yes	
o Implementing actions concerning database updates, vaccine scheduler and vaccination registries		
o Continue providing technical support as necessary and based on identified needs to address issues around vaccine shortages		
o Provide the European Commission with data and policy analysis on individual Member States concerning action on VPDs in migrant populations		
Communication toolkits for healthcare workers supporting vaccination activities with a special focus on reaching vaccination-hesitant groups and piloting social marketing tools	Yes	In Italy and Austria
10. Tools and scientific advice to support Member State capacity to monitor trends in vaccine acceptance and build public trust in vaccination programmes.	Yes	Monitoring of social media launched. Results expected in March 2018
11. Technical support to national health communication campaigns activities, notably by fostering the establishment of a European Vaccine Awareness Day, and by continuing to support the WHO Europe's European Immunisation Week through ECDC-relevant activities.	Yes	
12. Continued provision of data from active hospital-based sentinel surveillance systems for pertussis as well as for invasive pneumococcal disease continued in order to assess the impact and effectiveness of vaccines for both diseases, and serotype replacement for pneumococci.	Yes	
13. Provision of high quality epidemiological, laboratory and molecular surveillance for VPDs	Yes	
14. Progress report on further implementation of meningococcal molecular surveillance	Yes	
15. Development of peer review publications based on outcomes and findings from analysis and interpretation of surveillance data	Yes	
16. Pertussis laboratory networks and their activities maintained such as EQAs, twinning exchanges and training workshops; EQA schemes for diphtheria diagnosis in EU Member States	Yes	

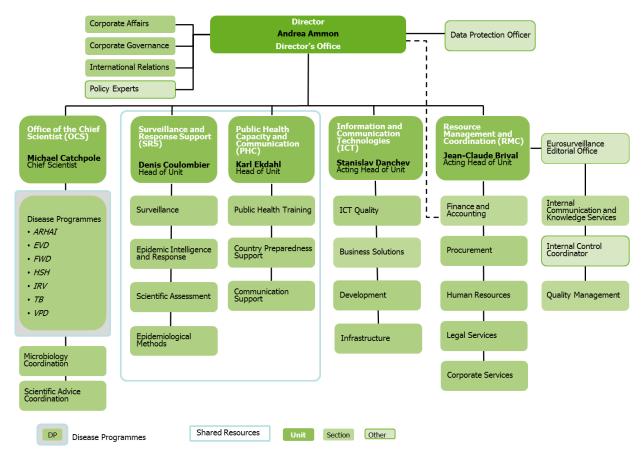
Expected outputs 2017	Implemented	Comments
17. Coordination of the VPD Disease Network and further develop and cross-collaboration with international partners (e.g. WHO Regional Office for Europe, European Medicine's Agency) as well as input provided in cross-stakeholder initiatives of relevance such as the IMI ADVANCE project and other key projects under Horizon2020, such as IMOVE +	Yes	
18. Identification of skill gaps with regards to VPD Core Competencies by target group based on Member State needs in view of implementing relevant public health training activities	Yes	
Strategy 6.7 Tuberculosis - TB		
Coordination of the laboratory sub-network (European Reference Laboratory for Tuberculosis Network), with an annual network meeting	Yes	
2. Coordination of the surveillance sub-network, with an annual network meeting, production of the joint surveillance report with WHO	Yes	
3. Support to high priority countries with development and implementation of country strategies and activities for TB prevention and control	Yes	
4. Scientific advice on latent TB control as a programmatic intervention. The Centre foresees finalizing and disseminating the guidance document entitled 'Introducing programmatic latent tuberculosis control in the European Union and candidate countries'. This document will provide scientific advice on who, when and how to diagnose and treat latent TB infection, as well as interventions to improve latent tuberculosis infection management	Partly	Preparation work done in 2017. The finalisation of the output expected in 2018, due to reprioritisation of resources to vaccine-preventable diseases.
5. Update of the European Union Standards for Tuberculosis Care (ESTC).	Yes	
6. Perform scientific analyses based on TESSy data	Yes	
7. Support to the European Commission with data and analysis on Member State level and with development or monitoring the implementation of policy document(s),	Yes	
MANAGEMENT		
Strategy 7.1 General Management	V	
All recommendations of the second external evaluation are implemented; progress will be reported in a summarising document to the MB.	Yes	
2. All necessary processes are simplified as much as possible and clearly indicate the roles and responsibilities of actors	Yes	
3. An organisation-wide EA Framework is agreed upon	Yes	
4. The revised SMAP will be implemented within the SPD 2018-2020 according to the agreed milestones	Yes	
5. All Dol will be timely checked and an electronic submission and storage system facilitates the process	Yes	
6. AF and MB meetings are smoothly implemented	Yes	
Strategy 7.2 Collaboration and cooperation		
Activities of ECDC support and complement the work of DG SANTE and CHAFEA	Yes	
2. ECDC's collaboration with other EU agencies adds to synergy visible in joint reports, assessments and projects	Yes	
3. The EP is informed about ECDC activities and provided information in a format useful for making decisions	Yes	
The regular dialogue with the Competent Bodies results in targeted and tailored support meeting the needs of the respective MS and providing outputs readily to be used for public health action in the MS	Yes	
Strategy 7.3. RESOURCES MANAGEMENT		
1. Final ECDC premises	Yes	
2. Improved roles and responsibilities definition across the processes and better visibility on ECDC staff use through enhanced time recording	Yes	
3. ECDC project management methodology, better definition and monitoring of benefit realisations and further consolidation of quality management and evaluation systems (including the evaluation of two Disease programmes)	Yes	
4. Further streamlining of ECDC procurement, mission and meeting and finance processes	Yes	
5. Continuous and active participation to the network of the EU agencies and sub-network activities	Yes	
Strategy 7.4 Information and Communication Technology		
Maintained and secure infrastructures and applications are hosted as per SLA requirements	Yes	

Expected outputs 2017	Implemented	Comments
2. Existing systems are maintained as per ICT work plan commitments	Yes	
3. New systems are developed as per ICT work plan commitments	Yes	
4. Main processes are defined clearly indicating roles and responsibilities	Yes	
5. A continuous improvement plan is defined for 2017 and actions implemented	Yes	
6. Defined IT Enterprise Architecture roadmap	Yes	
7. The 'Technology Trend Watch' function is defined	Yes	

Annex 2. Statistics on financial management

See Annex 6: Report on budget and financial management of the European Centre for Disease Prevention and Control

Annex 3. Organisational chart



March 2018

Annex 4. Establishment plan

ECDC establishment table 2017

Category and grade	Establishment plan in voted EU budget 2016		
Category and grade	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	ТА	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)		
Senior officer	TA	AD 5	Support		
Officer	TA	AST 4	Support		
	CA	FG IV			

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)
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	ТА	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	ТА	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	17.5%	17.3%
Administrative support	16.9%	16.7%
Coordination	0.6%	0.6%
Operational	74.4%	74.8%
Top-level operational coordination	2.7%	2.7%
Programme management and implementation	61.3%	61.9%
Evaluation and impact assessment	0.0%	0.0%
General operational	10.4%	10.1%
Neutral	8.1%	7.9%
Finance/control	8.1%	7.9%
Linguistics	0.0%	0.0%

Annex 5. 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 staff members have been recording their working time per activity.

Strategies and groups	FTEs*	Committed Title 1	Committed Title 2	Committed Title 3	Committed TOTAL
Surveillance and epidemic intelligence	21.8	2,330,448	243,576	1,226,467	3,800,491
Surveillance	14.8	1,678,775	165,541	1,183,727	3,028,043
1. Public health surveillance	6.4	717,791	71,182	808,113	1,597,085
2. Molecular surveillance	1.3	133,107	14,929	76,679	224,715
3. Methods to support disease prevention and control	1.3	131,109	14,296	298,935	444,340
Management and administrative support	5.8	696,768	65,135	-	761,903
Epidemic intelligence	7.0	651,674	78,034	42,741	772,448
1. Epidemic intelligence	5.3	477,356	59,789	42,741	579,885
2. Rapid assessment of public health events	1.6	174,318	18,245		192,563
2. Scientific support	11.4	1,323,927	127,147	798,373	2,249,447
Scientific advice	8.4	937,061	93,858	707,942	1,738,861
Scientific advice coordination	2.0	223,835	21,899	150,560	396,295
2. Research coordination and studies	0.3	26,271	3,861	72,400	102,532
3. Scientific liaison activities	1.8	139,639	20,117	459,696	619,452
4. Management and administrative support	4.3	547,316	47,981	25,286	620,583
Microbiology support	3.0	386,866	33,288	90,431	510,585
1. Microbiology support	3.0	386,866	33,288	90,431	510,585
3. Preparedness and response	3.8	359,604	42,101	86,955	488,659
EU and countries preparedness support	0.7	70,160	7,701	808	78,669
2. EU preparedness	0.7	70,160	7,701	808	78,669
Response and emergency operations	3.1	289,444	34,399	86,147	409,990
1. Support to EU outbreaks	1.5	145,926	17,127	86,147	249,200
2. Emergency operations	0.1	11,863	1,501	-	13,364
Management and administrative support	1.4	131,654	15,772	-	147,426
4. Training and capacity building	17.7	1,846,494	198,320	4,327,149	6,371,963
Public Health Training	9.9	1,019,920	110,867	3,849,769	4,980,556
1. Fellowships EUPHEM -EPIET	4.6	393,618	51,127	3,481,825	3,926,571
2. Training networks	1.2	151,077	13,387	223,859	388,323
3. MediPiet	0.2	36,723	2,541	-	39,264
4. e-learning	1.0	116,024	11,546	94,414	221,985
5. Management and administrative support	2.9	322,478	32,265	49,670	404,413
Coordinated Country Support	5.1	613,217	57,007	402,277	1,072,500
1. Coordinated Country Support	2.2	269,207	24,333	402,277	695,817
2. Management and administrative support	2.9	344,010	32,673		376,683
International relations	2.7	213,357	30,447	75,103	318,907
1. Cooperation with the World Health Organisation (WHO)	2.2	32,291	24,930	2,268	59,488
2. Working with non-EU Countries	15.9	405,226	178,577	72,836	656,638
5. Communication	14.0	1,699,093	157,074	407,396	2,263,564
Public Health Communication	7.3	969,159	81,554	347,726	1,398,438
Press, media and Information services	3.4	318,257	38,528	221,624	578,409
2. Editorial services	1.3	178,375	15,099		193,473
3. Web portal and extranets	2.3	248,839	25,574		274,413
4. Translations	0.0	1,807	254	82,118	84,178
5. Country support on risk communication	0.0	-	-	-	-
6. Management and administrative support	2.6	256,280	28,656	43,984	328,920
Eurosurveillance	8.7	757,921	97,127	59,670	914,718
1. Eurosurveillance	8.4	702,142	93,722	59,670	855,534
Management and administrative support	0.3		3,405	-	59,184

6. Disease programmes	46.8	5,336,967	524,060	6,206,969	12,067,996
1. Antimicrobial resistance and healthcare-associated infect	10.4	1,289,184	116,443	1,339,817	2,745,444
2. Emerging and vector borne diseases - EVD	3.5	429,311	39,717	635,056	1,104,084
3. Food- and Waterborne Diseases and Zoonoses - FWD	7.4	852,866	82,864	610,209	1,545,939
4. HIV, Sexually Transmitted Infections and viral Hepatitis - I	4.9	561,939	55,174	869,127	1,486,240
5. Influenza and other Respiratory Viruses - IRV	5.1	632,818	57,381	656,804	1,347,002
6. Tuberculosis - TB	5.8	661,920	65,413	526,579	1,253,911
7. Vaccine Preventable Diseases - VPD	9.6	908,306	106,940	1,569,379	2,584,624
7. General Management	107.1	10,435,394	7,040,491	4,956,682	22,432,567
Management	10.5	1,027,014	485,768	-	1,512,782
1. Strategic Advice	0.5	46,613	5,108	-	51,721
2. Ensuring independence	0.1	9,863	1,495	-	11,359
3. Organisation Governance meetings	2.6	225,526	178,339	-	403,864
4. Management and administrative support	7.3	745,013	300,826	-	1,045,839
Cooperation and collaboration	2.3	219,780	26,151	68,490	314,421
1. ECDC in the 'family' of European Institutions and Bodies	0.5	53,906	5,276	-	59,182
2. Working with the European Union Member States	1.7	152,602	19,576	68,490	240,667
3. Stakeholder engagement coordination	0.1	13,272	1,299		14,571
Resources Management	62.4	5,918,385	5,201,334	501,053	11,620,772
1. Human Resources	13.9	1,270,174	156,134	-	1,426,308
2. Finance and Accounting	11.7	1,145,047	212,967	-	1,358,014
3. Legal and procurement	8.7	741,954	97,655	-	839,609
4. Quality management, project management and plannin	5.8	683,345	378,748	-	1,062,093
5. Internal Control	1.2	216,607	55,336	-	271,943
6. Internal Communication and Knowledge Services	5.5	491,319	571,615	501,053	1,563,987
7. Corporate Services	13.7	1,110,387	3,695,763	-	4,806,151
8. Management and administrative support	1.8	259,552	33,115	-	292,667
ICT	31.8	3,270,215	1,327,238	4,387,139	8,984,592
1. Software services	10.4	937,555	693,488	2,197,236	3,828,280
2. Hosting, operating, maintenance, administration and se	10.4	1,049,805	276,387	2,135,000	3,461,192
4. Management and administrative support	11.0	1,282,855	357,363	54,903	1,695,121
Generic expenses not related to core work	40.0	4,381,778	448,251		4,830,028
Activity carried over from previous year	1.2	123,127	13,048		136,175
Ad hoc request (not included in Annual Work programme)	8.6	961,112	95,950		1,057,062
Contribution by DP to core Units work	0.4	56,195	4,642		60,836
Contribution by shared resource to DP work	1.2	138,447	13,801		152,247
Non-core and administrative tasks	26.2	2,832,277	293,016		3,125,292
Preparation of activity for next year	2.1	228,176	23,112		251,287
Public Health Emergency (PHE)	0.4	42,381	4,632		47,012
Time not worked** or not reported***	10.2	3,181,445	114,218		3,295,664
Total	280.0	31,003,120	8,976,803	18,009,992	57,989,915

The Activity Based Costing reflect the structure of the presentation of the ABB in the Single Programming Document. Its analysis should be complemented by the analysis of the benchmarking exercise that classifies staffs according to their operational/administrative/neutral role. For the annual report 2018, the two exercises (ABB and benchmarking) will be merged, following the same methodology as used for the SPD 2018.

Annex 6. Final annual accounts 2017 of the European Centre for Disease Prevention and Control

See (draft/final) annual accounts: Report on budget and financial management of the European Centre for Disease Prevention and Control (MB document MB42/11).

1. Final annual accounts - certification

The annual accounts of the European Centre for Disease Prevention and Control for the year 2017 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, 14 June 2018

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 as of 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 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 euros 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 principle¹⁸. 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 as of 31 December 2017.

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 15 November of the following year, in accordance with Article 99 of ECDC's Financial Regulation.

-

 $^{^{18}}$ This differs from cash-based accounting because of elements such as carryovers.

3. Financial statements

3.1 Balance sheet

	Notes	As of 31 Dec 2017	As of 31 Dec 2016	
		(All amounts in EUR)		
Assets				
A. Non-current assets				
Intangible assets	3.5.2	1.329.109,57	1.172.352,90	
Intangible assets under construction	3.5.2	0,00	321.830,22	
Tangible fixed assets	3.5.3	1.404.197,14	1.727.382,97	
Total assets		2.733.306,71	3.221.566,09	
Total non-current assets		2.733.306,71	3.221.566,09	
B. Current assets				
Pre-financing	3.5.4	80.731,08	55.169,84	
Stocks	3.5.5	11.545,97	18.589,45	
Short-term receivables	3.5.6	647.455,22	473.867,89	
Deferred charges	3.5.7	637.830,36	530.742,40	
Cash and cash equivalents	3.5.8	11.673.720,58	13.658.647,88	
Total current assets		13.051.283,21	14.737.017,46	
Total assets		15.784.589,92	17.958.583,55	
Liabilities				
A. Capital				
Accumulated surplus	3.4	8.811.346,24	9.808.341,75	
Economic result of the year	3.4	(207.850,31)	(996.995,51)	
Total capital		8.603.495,93	8.811.346,24	
B. Non-current liabilities				
Long-term provisions	3.5.9	0,00	475.184,00	
C. Current liabilities				
Short-term provisions	3.5.10	296.389,00	0,00	
Accounts payable	3.5.11	680.841,00	1.171.420,26	
Pre-financing to be returned to the Commission	3.5.12	1.079.296,82	2.638.822,59	
Open pre-financing from grants	3.5.12	327.607,43	208.029,32	
Accrued charges	3.5.13	4.796.959,74	4.653.781,14	
		7.181.093,99	8.672.053,31	
Total liabilities		15.784.589,92	17.958.583,55	

3.2 Statement of financial performance

All amounts in EUR

		2017	2016
Operating revenue	3.5.14	57.243.644,38	56.078.018,63
Administrative expenses – total	3.5.15	(43.716.649,81)	(43.597.018,79)
Staff related expenses	3.5.15	(27.407.791,23)	(26.727.857,68)
Depreciation/amortisation/write-off	3.5.15	(1.951.415,92)	(2.368.453,26)
Other administrative expenses	3.5.15	(14.357.442,66)	(14.500.707,85)
Operational expenses – total	3.5.16	(13.671.945,35)	(13.633.212,38)
Surplus from administrative and operating activities		(144.950,78)	(1.152.212,54)
Financial revenues	3.5.17	0,00	0,00
Financial expenses	3.5.17	(12.035,31)	(11.009,66)
Currency exchange gains/(losses)	3.5.18	(50.864,22)	166.226,69
Economic result for the year		(207.850,31)	(996.995,51)

3.3 Cash flow statement

All amounts in EUR

	2017	2016
Cash flows from ordinary activities		
Surplus/(deficit) from ordinary activities	(207.850,31)	(996.995,51)
Operating activities		
Adjustments		
Amortisation (intangible fixed assets)	991.483,65	1.277.970,82
Depreciation (tangible fixed assets)	958.515,27	991.659,44
Increase/(decrease) in provisions for risks and liabilities	(178.795,00)	(18.771,00)
Increase/(decrease) in value reduction for doubtful debts	0,00	0,00
(Increase)/decrease in stock	7.043,48	1.549,29
(Increase)/decrease in long-term pre-financing	0,00	0,00
(Increase)/decrease in short-term pre-financing	(25.561,24)	12.300,16
(Increase)/decrease in Short-term receivables	(280.675,29)	31.701,51
(Increase)/decrease in receivables related to consolidated EU entities	0,00	0,00
Increase/(decrease) in accounts payable	(331.932,52)	163.480,00
Increase/(decrease) in liabilities related to consolidated EU entities	(1.455.415,80)	(2.783.678,72)
Other non-cash movements	35.762,50	98.823,00
Net cash flow from operating activities	(487.425,26)	(1.221.961,01)
Cash flows from investing activities		
Increase of tangible and intangible fixed assets	(1.497.502,04)	(946.808,56)
Net cash flow from investing activities	(1.497.502,04)	(946.808,56)
Net increase/(decrease) in cash and cash equivalents	(1.984.927,30)	(2.168.769,57)
Cash and cash equivalents at the beginning of the period	13.658.647,88	15.827.417,45
Cash and cash equivalents at the end of the period	11.673.720,58	13.658.647,88

3.4 Statement of changes in capital

All amounts in EUR

Capital	Rese	erves	Accumulated surplus/deficit	Economic result of the year	Total capital
(All amounts in EUR)	Fair value reserve	Other reserves			
Balance as of 1 January 2017	0,00	0,00	9.808.341,75	(996.995,51)	8.811.346,24
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	(996.995,51)	996.995,51	0,00
Economic result of the year	0,00	0,00	0,00	(207.850,31)	(207.850,31)
Balance as of 31 December 2017	0,00	0,00	8.811.346,24	(207.850,31)	8.603.495,93

3.5 Notes on 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.

Reporting currency

The Centre's reporting currency is the euro.

Transactions and balances

Foreign currency transactions are converted into euros using the exchange rates prevailing on the date of the transactions.

Year-end balances of monetary assets and liabilities denominated in foreign currencies are converted into euros on the basis of the exchange rates that apply 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.

Payroll charges

All salary calculations giving the total staff expenses included in the statement of financial performance of the Agency are externalised 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.

Intangible fixed assets and internally developed intangible fixed assets

Intangible fixed assets are valued at their acquisition price, converted into euros at the rate applying when they were purchased, less depreciation and impairment. The exception are 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 rules based on the International Public Sector Accounting Standards (IPSAS). One of these exceptions related to Accounting Rule no. 6 and the non-capitalisation of internally developed intangible assets, normally software. From 2010 onwards, this exception has been lifted and, as a consequence, the annual accounts have to reflect the capitalisation 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 capitalised and recorded as 'assets under construction'. Once a 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 three and eight 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 capitalised are disclosed in these annual accounts 2017, as well as the yearly amortisation of capitalised intangible assets. In addition to the criteria, which an intangible asset should meet, a threshold had to be set for the capitalisation 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 no. 6 in the annual accounts of 2017, 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, Eurosurveillance 2.0 and others).

The internally developed ICT projects, called Webportal 2.0 and Eurosurveillance 2.0, which were previously booked as an asset under construction, went live in June 2016 and September 2017. Therefore, the development costs, which reached the threshold of EUR 150 000 for each project, have been capitalised and are being depreciated accordingly.

As a consequence, in 2017, Eurosurveillance 1.3 has been impaired, as it was replaced by Eurosurveillance 2.0 and no longer has a service potential.

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%
Plants, machinery and equipment	10% to 25%
Furniture and vehicles	10% to 25%
Fixtures and fittings	10% to 33%
Computer hardware	25%

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

An asset's residual value 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 capitalised and depreciated over the lease period, which runs until 31 May 2018.

Impairment of assets

Assets that have an indefinite useful life are not subject to amortisation and are tested regularly for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised 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.

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 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 recognised as inventories and reported at their printing costs. The cost of these inventories is assigned by using the first-in, first-out method (FIFO). Publications which are, at year end, older then N-1, are written down as they no longer hold a service potential expected to be realised from their distribution.

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.

Cash and cash equivalents

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

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.

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 1 Jan 2017	4.120.730,77	2.112.730,53	6.233.461,30	00,0	321.830,22	6.555.291,52
Additions	661.554,24	164.855,86	826.410,10		0,00	826.410,10
Disposals						
Transfer between headings	321.830,22		321.830,22		(321.830,22)	0,00
Other changes						
Gross carrying amounts 31 Dec 2017	5.104.115,23	2.277.586,39	7.381.701,62	0,00	0,00	7.381.701,62
Accumulated amortisation and impairment 1 Jan 2017	(3.197.721,43)	(1.863.386,97)	(5.061.108,40)			(5.061.108,40)
Amortisation	(719.202,76)	(106.309,42)	(825.512,18)			(825.512,18)
Impairment	(165.971,47)		(165.971,47)			(165.971,47)
Disposals						
Accumulated amortisation 31 Dec 2017	(4.082.895,66)	(1.969.696,39)	(6.052.592,05)			(6.052.592,05)
Net carrying amounts 31 Dec 2017	1.021.219,57	307.890,00	1.329.109,57	0,00	0,00	1.329.109,57

Not capitalised cost	Research cost	Not capitalised development cost
Cost of the year 2017	743.507,72	183.745,75

3.5.3 Fixed assets

All amounts in EUR

	Buildings	Plants and equipment	Computer hardware	Furniture and vehicles	Other fixtures and fittings	Total
Gross carrying amounts 1 Jan 2017	2.261.231,62	17.128,00	4.392.657,12	887.443,79	1.188.219,75	8.746.680,28
Additions		636,79	612.717,04	56.407,86	1.330,25	671.091,94
Disposals			(235.639,28)	(34.593.58)	(39.504,40)	(309.737,26)
Transfer between headings						
Other changes	-528.921,00					-528.921,00
Gross carrying amounts 31 Dec 2017	1.732.310,62	17.764,79	4.769.734,88	909.258,07	1.150.045,60	8.579.113,96
Accumulated depreciation 1 Jan 2017	(1.827.062,65)	(17.128,00)	(3.537.897,12)	(745.204,79)	(892.004,75)	(7.019.297,31)
Depreciation	(305.830,33)	(79,79)	(464.634,04)	(52.092,86)	(135.878,25)	(958.515,27)
Write-back of depreciation						
Disposals			234.748,28	34.460,58	39.111,40	308.320,26
Impairment						
Write-back of impairment						
Transfer between headings						
Other changes	494.575,50					494.575,50
Accumulated depreciation 31 Dec 2017	(1.638.317,48)	(17.207,79)	(3.767.782,88)	(762.837,07)	(988.771,60)	(7.174.916,82)
Net carrying amounts 31 Dec 2017	93.993,14	557,00	1.001.952,00	146.421,00	161.274,00	1.404.197,14

3.5.4 Pre-financing

The Centre has signed grant agreements with several health institutions and universities in 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 of 31 Dec 2017 are reported below:

	All amounts in EUR
Non cleared pre-financing at 31 Dec 2017	1.794.296,39
Accrued charges on pre-financing	(1.713.565,31)
Open pre-financing at 31 Dec 2017	80.731,08

3.5.5 Stock

All amounts in EUR

	1 Jan 2017	Additions	Disposals	Write down at year end	31 Dec 2017
ECDC publications	18.589,45	10.879,76	(17.923,24)	0,00	11.545,97
Other	0,00	0,00	0,00	0,00	0,00
Total	18.589,45	10.879,76	(17.923,24)	0,00	11.545,97

The additions reflect the amount of publications purchased at printing cost in 2017. The amount disposed shows the amount of publications distributed free of charge in 2017. The amount written down equals the value of publications in stock that are older than N-1 because they no longer hold a service potential that can be expected to be realised from their distribution.

3.5.6 Short-term receivables

Short-term receivables relate to the following:

All amounts in EUR

		/ didaco = 0
	31 Dec 2017	31 Dec 2016
VAT receivable from Member States	559.146,20	408.560,03
Receivable from other EU institutions and public bodies	26.891,57	17.772,31
Receivable regarding staff	17.964,83	26.348,71
Other	43.452,62	21.186,84
Total	647.455,22	473.867,89

Short-term receivables are mainly VAT receivable from the Swedish authorities. According to a 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. EUR 152 at EU year-end rate 2017). The VAT receivable appearing in the accounts relates to invoices paid in the last quarter of 2017. Previous claims regarding 2017 were already paid back in full.

All amounts in EUR

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 43 452.62 is included under 'Other' and reflects the amount due to ECDC following several court rulings, recoveries from health institutes under the EPIET training programme, recovery of expenses from suppliers, and recovery of expenses related to an IMI grant.

3.5.7 Deferred charges and 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 2017, is reported here.

3.5.8 Cash in bank

Account number 59368289476 (EUR)

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

The balances as of 31 December 2017 are as follows:

31 Dec 2017	31 Dec 2016
11.051.661,66	13.089.024,22
324.307,88	148.603,88
100.235,14	96.686,96
0,00	71.324,02
107 515 00	238 063 25

Account number 59308246266 (EUR) Account number 54238209257 (EUR) Account number 54238218396 (EUR) Account number 52011096375 (SEK) 197.515.90 238.963,25 Account number 52011170974 (SEK) 0,00 9.481,59 Account number 52031003712 (SEK) 0,00 959.04 Account number 52031009052 (SEK) 0,00 3.604,92 11.673.720,58 13.658.647,88

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 2017.

3.5.9 Long-term provisions

There are no long-term provisions booked in the 2017 annual accounts.

3.5.10 Short-term provisions

In accordance with the lease contract with the landlord, the Centre has the obligation to restore the building in its original state at the end of the lease on 31 May 2018.

On 30 May 2018, ECDC signed with its former landlord an agreement regarding the dilapidation costs to be paid in order to fulfil this obligation. Therefore, a short-term provision has been booked to reflect this amount.

Another short-term provision has been booked to reflect the 2 months of rent which ECDC is paying following the removal to its new premises at the end of March 2018.

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 2017 31 Dec 2016 Vendors 538.299,23 926.448,61 19 123 24 2.580,11 Other payables to the Commission Payables to other EU agencies 799,37 32.810,64 Other payables to Member States 21.996,66 116.041,50 Sundry payables 100.622,50 93.539,40 Total 680.841,00 1.171.420,26

3.5.12 Pre-financing

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 European Commission.

In 2017, ECDC has a positive budget outturn (see also 5.1). As a result, EUR 1 079 296.82 has to be paid back to the European Commission in 2018. There are two main sources, from a budgetary perspective, for the return of

funds: EUR 954 000 has to be returned regarding carried forward funds from 2016, and EUR 125 000 regarding the Centre's 2017 budget.

Open pre-financing

An amount of EUR 328 000 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 two grant agreements for actions with the candidate and potential candidate countries (IPA).

3.5.13. Accrued expenses and deferred income

Accrued expenses are estimates provided by the authorising officers on the cost of services and deliveries of goods incurred during 2017 but not yet invoiced or processed. In addition, the cost of the untaken leave of staff during 2017 is reported here.

		All amounts in EUR
	31 Dec 2017	31 Dec 2016
Untaken annual leave	450.331,37	405.475,53
Accrued charges	4.346.628,37	4.248.305,61
Total	4.796.959,74	4.653.781,14

3.5.14. Operating revenue

The Centre is almost exclusively financed by the EU budget, together with the EFTA Member States which contribute to its 2017 budget with 2.47%. In 2017, the Centre booked EUR 56 895 478.03 as revenue from the EUR 58 042 653 cashed from the European Commission.

In addition, the Centre has booked as revenue an amount of EUR 147 000, which is the result of the year-end cutoff made on two grants grant agreements received from the European Commission for actions with the candidate and potential candidate countries (IPA), which ECDC implemented throughout 2017. Here, the posting versus open pre-financing is equal to the expenditures made under the grants during 2017.

The sale of rolling stock for EUR 12 000 is also part of the 2017 revenue.

An amount of EUR 120 000 was booked as miscellaneous income. This income consists of recovery of taxes, recovery of costs from staff regarding the current and previous years, the cut-off on the IMI grant (which is not consolidated with EC), the reversal of 2016 cut-off postings, and the recovery of pre-financing given by ECDC for the ECDC fellowship programme (EPIET /EUPHEM) through grant implementation.

Below is the breakdown of the revenue for the year:

	All amounts in E	
	2017	2016
Community subsidy (including EEA contribution)	56.963.356,18	55.608.827,41
Revenue from grant implementation	146.997,57	368.462,56
Sales revenue	12.551,64	0,00
Other revenue	120.738,99	100.728,66
Total	57.243.644,38	56.078.018,63

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:

related costs. The breakdown of the main areas is provided below.		
		All amounts in EUI
	2017	2016
Staff-related expenses	26.993.109,61	26.410.562,29
Training cost – staff	414.681,62	317.295,39
Costs related to seconded national experts and trainees	338.085,20	292.095,92
Mission expenses	556.902,01	615.144,17
Management board, advisory forum and administrative meetings	242.180,39	163.827,17
Rent and building costs	4.863.624,80	4.473.753,44
Depreciation/amortisation/write-off	1.951.415,92	2.368.453,26
Recruitment-related costs	121.081,08	22.104,64
IT costs research	743.507,72	969.061,85
IT costs development	183.745,75	57.605,00
IT costs operational	4.264.882,18	4.600.759,79
Expenses with other consolidated entities	884.386,24	906.766.11

	2017	2016
Other	2.159.047,29	2.399.589,76
Administrative expenses – total	43.716.649,81	43.597.018,79

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.

l amou		

	2017	2016
Operational expenses – total	13.671.945,35	13.633.212,38

3.5.17. Finance income/expense

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

In 2017, 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 area. As a result, a substantial part of the Centre's activities are carried out in Swedish crowns while the Centre's income, as well as its reporting currency, is euro. The exchange rate differences encountered in 2017 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 crowns, as the exchange rate used in our financial system differs from the daily rate used by the bank when the payments were actually made. These three components resulted in exchange rate loss of EUR 50 000 (versus gains of EUR 166 000 in 2016).

3.5.19. Contingent assets and liabilities

As of 31 December 2017, the Centre had agreements with several contractors and suppliers for the amount of EUR 6 135 000. These agreements relate mainly to operational projects and are covered by budgetary commitments against the 2017 appropriations.

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 May 2018, and the rental costs for the remaining period amount to EUR 705 417.

In July 2016, ECDC signed a new lease agreement regarding new premises for the Centre, starting 28 Feb 2018. The duration of the new lease agreement is 15 years.

The payment schedule for the following years is presented below:

All amounts in EUR

	Charges paid		Charges sti	l to be paid	
	Charges paid during the year	<1yr	1–5 years	>5 years	Total charges to be paid
Printers/copiers	332,17	0,00	0,00	0,00	0,00
Current building	1.758.041,41	705.417,00			705.417,00
New building		607.461,00	13.215.311,00	24.833.105,00	38.655.877,00
Total	1.758.373,58	1.312.878,00	13.215.311,00	24.833.105,00	39.361.294,00

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. Information on how those risks are managed is set out below.

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 Centre manages its liquidity risk by continually monitoring its actuals cash positions and by launching its funding requests based on forecasts of its expected outflows.

The table below provides details 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 2017				
Payables with third parties	157.591,92	0.00	0.00	157.591,92
Payable with consolidated entities	1.426.027,49	0.00	0.00	1.426.027,49
Total financial liabilities	1.583.619,41	0.00	0.00	1.583.619,41
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

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's/borrower's 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 2017	31 Dec 2016
Counterparties with external credit rating	12.232.866,78	14.067.207,91
Prime and higher rate	12.232.866,78	14.067.207,91
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	726.139,38	596.050,26
European Commission and consolidated entities	3.262,06	1.371,88
Other debtors who did not default	722.877,32	594.678,38
Total	12.959.006,16	14.663.258,17

- 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 is not 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.

The Centre could, however, earn interest on balances it holds in 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 crowns (SEK).

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

The largest expenditure made in Swedish crowns are the salaries of the staff. According to the Staff Regulations, up until 2014 the remuneration had to be paid in the currency of the country where the staff member performs his or her duties. Since 2014, the remuneration can also be paid in EUR. In the Centre, all but a few staff members were paid in Swedish crowns (equivalent of EUR 26.1 million) in 2017. In addition, the following costs are paid in Swedish crowns: 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 2017	SEK- EUR equivalent	EUR	Total EUR
Monetary assets	790.720,72	12.168.285,44	12.959.006,16
Receivables with Member States	559.146,20	0,00	559.146,20
All receivables with third parties (including accruals and deferrals)	34.058,62	688.818,70	722.877,32
Receivables with consolidated entities	0,00	3.262,06	3.262,06
Cash and cash equivalents	197.515,90	11.476.204,68	11.673.720,58
Monetary liabilities	0,00	1.583.619,41	1.583.619,41
Payables with third parties	0,00	157.591,92	157.591,92
Payables with consolidated entities	0,00	1.426.027,49	1.426.027,49
Net position	790.720,72	10.584.666,03	11.375.386,75

Interest rate sensitivity analysis

Considering the limited impact that ECDC could experience from interest rate risk, an 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).

On 16 June 2017, a new Director took up her position at ECDC. All members of the SMT are temporary agents of the European Communities in the following grades at 31 Dec 2017.

Grade	Number of staff in the grade
AD14	1
AD12	3
AD11	1
AD10	1
Total	6

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.

Starting in July 2017, the contribution of staff to the pension scheme amounts to 10.01% of their basic salary.

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

Future benefits payable to ECDC staff under the EU 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

	,	all diffidults in Lore
	2017	2016
Revenue		
EU subsidy	58.042.653,00	58.247.650,00
Grant funds from Commission	0,00	0,00
Other revenue	510.127,27	191.501,60
Total revenue (a)	58.552.780,27	58.439.151,60

	2017	2016
Expenditure		
Title I: Staff		
Payments	30.450.429,70	29.461.772,34
Appropriations carried over	552.689,93	1.297.778,34
Title II: Administrative Expenses		
Payments	5.412.064,18	5.179.794,97
Appropriations carried over	3.564.739,22	1.772.180,83
Title III: Operating Expenditure		
Payments	11.929.586,71	11.950.188,46
Appropriations carried over	6.869.051,47	8.258.413,20
Total expenditure (b)	58.778.561,21	57.920.128,14
OUTTURN FOR THE FINANCIAL YEAR (a-b)	-225.780,94	519.023,46
Cancellation of unused payment appropriations carried over from previous year	953.754,87	1.231.031,11
Adjustment for carry-over from the previous year of appropriations available at 31 Dec 2016 arising from assigned revenue	402.187,11	721.888,37
Exchange differences for the year (gain+/loss-)	(50.864,22)	166.879,65
BALANCE OF THE OUTTURN ACCOUNT FOR THE FINANCIAL YEAR	1.079.296,82	2.638.822,59
Balance 2016	2.638.822,59	5.079.603,75
Positive balance from 2016 reimbursed in year 2017 to the Commission	-2.638.822,59	-5.079.603,75
Result used for determining amounts in general accounting	1.079.296,82	2.638.822,59
EU subsidy (2017 Revenue)	56.963.356,18	
Pre-financing remaining open to be reimbursed to EU in 2018	1.079.296,82	

4.2 Reconciliation between the budget outturn account and the statement of financial performance

All amounts in EUR

	All amounts in EUR
Statement of financial performance 2017	(207.850,31)
Adjustment for accrual items (items not in the budgetary result but included in the economic result)	
Adjustments for accrual cut-off (reversal 31 Dec 2016)	(5.359.614,38)
Adjustments for accrual cut-off (cut-off 31 Dec 2017)	5.298.258,24
Unpaid invoices at year end but booked in charges	0,00
Depreciation of intangible and tangible fixed assets	1.951.415,92
Provisions	(198.186,50)
Recovery orders issued in 2017 in class 7 and not yet cashed	(33.495,31)
Pre-financing given in previous year and cleared in the year	40.227,28
Pre-financing received in previous year and cleared in the year	(143.336,84)
Payments made from carry-forward of payment appropriations	9.972.430,39
Other (reversal of deferred charges, stock decrease)	529.198,61
Adjustment for budgetary items (item included in the budgetary result but not in the economic result)	
Asset acquisitions (less unpaid amounts)	(1.805.501,20)
New pre-financing paid in the year 2017 and remaining open as of 31 Dec 2017	(80.731,28)
New pre-financing received in the year 2017 and remaining open as of 31 Dec 2017	1.386.692,01
Budgetary recovery orders issued before 2017 and cashed in the year	1.360,04
Budgetary recovery orders issued in 2017 on balance sheet accounts (not 7 or 6 accounts) and cashed	6.353,44
Payment appropriations carried over to 2017	(10.986.480,62)
Cancellation of unused carried over payment appropriations from previous year	953.754,87
Adjustment for carry-over from the previous year of appropriations available at 31 $$ Dec arising from assigned revenue	402.187,11
Other (deferred charges paid in 2017)	(647.384,65)
Budget Outturn Account 2017	1.079.296,82

5. Budget execution

Budget execution/fund source C1 – current year appropriations

						•				
Budget line position	Budget line description	Commitment appropriation transaction amount	Executed commitment amount	% commit- ted	Payment appropriation transaction amount	Executed payment amount	% paid	RAL	Cancelled	
A-1100	Basic salaries	11,881,702.56	11,881,688.30	100.00%	11,881,702.56	11,881,688.30	100.00%	0.00	14.26	
A-1101	Family Allowances	1,747,178.74	1,747,178.74	100.00%	1,747,178.74	1,747,178.74	100.00%	0.00	0.00	
A-1102	Expatriation Allowances	1,737,490.79	1,737,490.79	100.00%	1,737,490.79	1,737,490.79	100.00%	0.00	0.00	
	Total Article 110	15,366,372.09	15,366,357.83	100.00%	15,366,372.09	15,366,357.83	100.00%	0.00	14.26	
A-1111	Contract Agents – Basic Salaries	3,889,719.80	3,889,719.80	100.00%	3,889,719.80	3,889,719.80	100.00%	0.00	0.00	
A-1112	Contract Agents – Allowances	1,203,408.11	1,203,408.11	100.00%	1,203,408.11	1,203,408.11	100.00%	0.00	0.00	
	Total Article 111	5,093,127.91	5,093,127.91	100.00%	5,093,127.91	5,093,127.91	100.00%	0.00	0.00	
A-1140	Birth and Death grants	2,500.00	2,379.72	95.19%	2,500.00	2,379.72	95.19%	0.00	120.28	
A-1141	Travel expenses from place of employment to place of origin	524,000.00	522,951.81	99.80%	524,000.00	522,951.81	99.80%	0.00	1,048.19	
A-1142	Overtime	86,000.00	85,502.71	99.42%	86,000.00	85,502.71	99.42%	0.00	497.29	
A-1149	Learning and Development	374,200.00	363,811.08	97.22%	374,200.00	221,033.41	59.07%	142,777.67	10,388.92	
	Total Article 114	986,700.00	974,645.32	98.78%	986,700.00	831,867.65	84.31%	142,777.67	12,054.68	
A-1170	Freelance and joint interpreting and conference service interpreters	53,940.00	53,940.00	100.00%	53,940.00	35,340.00	65.52%	18,600.00	0.00	
A-1173	Translations	138,560.00	130,329.73	94.06%	138,560.00	108,108.73	78.02%	22,221.00	8,230.27	
A-1174	Payment for administrative assistance from the Community institutions	175,000.00	175,000.00	100.00%	175,000.00	165,001.68	94.29%	9,998.32	0.00	
A-1175	Interim services	1,813,000.00	1,811,567.23	99.92%	1,813,000.00	1,670,411.57	92.14%	141,155.66	1,432.77	
A-1176	Relocation Services	13,000.00	11,235.00	86.42%	13,000.00	5,985.00	46.04%	5,250.00	1,765.00	
	Total Article 117	2,193,500.00	2,182,071.96	99.48%	2,193,500.00	1,984,846.98	90.49%	197,224.98	11,428.04	
A-1180	Miscellaneous expenditure on recruitment	130,000.00	126,487.36	97.30%	130,000.00	96,199.52	74.00%	30,287.84	3,512.64	
A-1181	Travel expenses	10,400.00	10,275.85	98.81%	10,400.00	10,275.85	98.81%	0.00	124.22	
A-1182	Installation, resettlement and transfer allowances	156,200.00	156,150.02	99.97%	156,200.00	156,150.02	99.97%	0.00	49.98	
A-1183	Removal Expenses	90,500.00	89,506.78	98.90%	90,500.00	54,971.83	60.74%	34,534.95	993.22	
A-1184	Temporary daily subsistence allowance	62,061.97	62,061.97	100.00%	62,061.97	62,061.97	100.00%	0.00	0.00	
	Total Article 118	449,161.97	444,481.98	98.96%	449,161.97	379,659.19	84.53%	64,822.79	4,679.99	
A-1190	Weightings applied to remunerations	5,071,829.21	5,071,829.21	100.00%	5,071,829.21	5,071,829.21	100.00%	0.00	0.00	

Budget line position	Budget line description	Commitment appropriation transaction amount	Executed commitment amount	% commit- ted	Payment appropriation transaction amount	Executed payment amount	% paid	RAL	Cancelled
	Total Article 119	5,071,829.21	5,071,829.21	100.00%	5,071,829.21	5,071,829.21	100.00%	0.00	0.00
	Total Chapter	29,160,691.18	29,132,514.21	99.90%	29,160,691.18	28,727,688.77	98.52%	404,825.44	28,176.97
A-1300	Mission expenses, travel expenses and incidental expenditure	585,400.00	585,369.25	99.99%	585,400.00	455,452.02	77.80%	129,917.23	30.75
	Total Article 130	585,400.00	585,369.25	99.99%	585,400.00	455,452.02	77.80%	129,917.23	30.75
	Total Chapter	585,400.00	585,369.25	99.99%	585,400.00	455,452.02	77.80%	129,917.23	30.75
A-1410	Medical Service	92,500.00	90,189.71	97.50%	92,500.00	77,569.48	83.86%	12,620.23	2,310.29
	Total Article 141	92,500.00	90,189.71	97.50%	92,500.00	77,569.48	83.86%	12,620.23	2,310.29
	Total Chapter	92,500.00	90,189.71	97.50%	92,500.00	77,569.48	83.86%	12,620.23	2,310.29
A-1520	Staff Exchanges	338,500.00	338,500.00	100.00%	338,500.00	337,908.69	99.83%	591.31	0.00
	Total Article 152	338,500.00	338,500.00	100.00%	338,500.00	337,908.69	99.83%	591.31	0.00
	Total Chapter	338,500.00	338,500.00	100.00%	338,500.00	337,908.69	99.83%	591.31	0.00
A-1700	Entertainment and Representation Expenses	4,500.00	2,992.44	66.50%	4,500.00	2,436.44	54.14%	556.00	1,507.56
	Total Article 170	4,500.00	2,992.44	66.50%	4,500.00	2,436.44	54.14%	556.00	1,507.56
	Total Chapter 17	4,500.00	2,992.44	66.50%	4,500.00	2,436.44	54.14%	556.00	1,507.56
A-1801	Social Contact Between Staff	20,000.00	19,887.74	99.44%	20,000.00	15,708.02	78.54%	4,179.72	112.26
A-1802	Sickness Insurance	563,000.00	562,903.56	99.98%	563,000.00	562,903.56	99.98%	0.00	96.44
A-1803	Accident and Occupational Diseases	63,508.82	62,945.51	99.11%	63,508.82	62,945.51	99.11%	0.00	563.31
A-1804	Unemployment for temporary staff	208,000.00	207,817.21	99.91%	208,000.00	207,817.21	99.91%	0.00	182.79
	Total Article 180	854,508.82	853,554.02	99.89%	854,508.82	849,374.30	99.40%	4,179.72	954.80
	Total Chapter	854,508.82	853,554.02	99.89%	854,508.82	849,374.30	99.40%	4,179.72	954.80
	Total Title 1	31,036,100.00	31,003,119.63	99.89%	31,036,100.00	30,450,429.70	98.11%	552,689.93	32,980.37
A-2000	Rent and Related expenditure	1,758,653.00	1,758,041.43	99.97%	1,758,653.00	1,758,041.43	99.97%	0.00	611.57
A-2001	Insurance	8,000.00	7,542.46	94.28%	8,000.00	7,542.46	94.28%	0.00	457.54
A-2002	Water, Gas, Electricity, etc.	150,500.00	150,500.00	100.00%	150,500.00	135,528.51	90.05%	14,971.49	0.00
A-2003	Maintenance, cleaning	221,500.00	219,026.40	98.88%	221,500.00	196,404.43	88.67%	22,621.97	2,473.60
A-2004	Fitting-out	6,000.00	6,000.00	100.00%	6,000.00	4,689.70	78.16%	1,310.30	0.00
A-2005	Security of Building	696,000.00	695,700.00	99.96%	696,000.00	584,789.63	84.02%	110,910.37	300.00
A-2006	Restauration and Canteen costs	77,000.00	77,000.00	100.00%	77,000.00	70,000.00	90.91%	7,000.00	0.00
A-2009	Other expenditure on buildings	829,537.00	829,486.19	99.99%	829,537.00	262,780.99	31.68%	566,705.20	50.81

Budget line position	Budget line description	Commitment appropriation transaction amount	Executed commitment amount	% commit- ted	Payment appropriation transaction amount	Executed payment amount	% paid	RAL	Cancelled
	Total Article 200	3,747,190.00	3,743,296.48	99.90%	3,747,190.00	3,019,777.15	80.59%	723,519.33	3,893.52
	Total Chapter 20	3,747,190.00	3,743,296.48	99.90%	3,747,190.00	3,019,777.15	80.59%	723,519.33	3,893.52
A-2110	Purchases of new hardware for operation the centre	1,712,396.00	1,710,332.20	99.88%	1,712,396.00	787,927.03	46.01%	922,405.17	2,063.80
A-2111	Purchase of new software for the operation at the centre	605,994.00	602,707.07	99.46%	605,994.00	509,014.68	84.00%	93,692.39	3,286.93
A-2112	Purchase and Maintenance of printing and reproduction equipment	89,099.00	89,098.70	100.00%	89,099.00	6,957.23	7.81%	82,141.47	0.30
A-2114	Support for administrative applications and projects, fees, document and archive management	517,803.00	517,568.12	99.95%	517,803.00	432,378.44	83.50%	85,189.68	234.88
A-2115	Developments of administrative and management applications and systems	658,300.00	658,090.88	99.97%	658,300.00	400,155.53	60.79%	257,935.35	209.12
	Total Article 211	3,583,592.00	3,577,796.97	99.84%	3,583,592.00	2,136,432.91	59.62%	1,441,364.06	5,795.03
	Total Chapter 21	3,583,592.00	3,577,796.97	99.84%	3,583,592.00	2,136,432.91	59.62%	1,441,364.06	5,795.03
A-2200	Technical equipment and AV installations	62,000.00	60,560.00	97.68%	62,000.00	0.00	0.00%	60,560.00	1,440.00
A-2201	Furniture	1,051,049.00	1,037,672.14	98.73%	1,051,049.00	4,758.92	0.45%	1,032,913.22	13,376.86
A-2202	Purchase and maintenance of vehicles	6,000.00	5,658.48	94.31%	6,000.00	5,378.48	89.64%	280.00	341.52
	Total Article 220	1,119,049.00	1,103,890.62	98.65%	1,119,049.00	10,137.40	0.91%	1,093,753.22	15,158.38
	Total Chapter 22	1,119,049.00	1,103,890.62	98.65%	1,119,049.00	10,137.40	0.91%	1,093,753.22	15,158.38
A-2300	Stationery and office supplies	29,500.00	25,844.10	87.61%	29,500.00	11,765.91	39.88%	14,078.19	3,655.90
A-2301	Financial and other charges, exchange losses	8,500.00	8,159.10	95.99%	8,500.00	7,659.10	90.11%	500.00	340.90
A-2302	Library expenses, purchase of books and info subscriptions	15,000.00	15,000.00	100.00%	15,000.00	13,822.25	92.15%	1,177.75	0.00
A-2306	Miscellaneous insurance	8,000.00	8,000.00	100.00%	8,000.00	3,202.00	40.03%	4,798.00	0.00
A-2307	Legal Expenses	40,500.00	40,410.00	99.78%	40,500.00	19,660.00	48.54%	20,750.00	90.00
A-2308	Business Continuity	6,300.00	6,250.00	99.21%	6,300.00	0.00	0.00%	6,250.00	50.00
A-2309	Other operating expenditure	30,000.00	30,000.00	100.00%	30,000.00	29,859.15	99.53%	140.85	0.00
	Total Article 230	137,800.00	133,663.20	97.00%	137,800.00	85,968.41	62.39%	47,694.79	4,136.80

Budget line position	Budget line description	Commitment appropriation transaction amount	Executed commitment amount	% commit- ted	Payment appropriation transaction amount	Executed payment amount	% paid	RAL	Cancelled
	Total Chapter 23	137,800.00	133,663.20	97.00%	137,800.00	85,968.41	62.39%	47,694.79	4,136.80
A-2400	Postal and delivery charges	24,800.00	24,706.87	99.62%	24,800.00	23,206.87	93.58%	1,500.00	93.13
	Total Article 240	24,800.00	24,706.87	99.62%	24,800.00	23,206.87	93.58%	1,500.00	93.13
A-2410	Telecommunicati on and internet charges	105,609.00	105,608.97	100.00%	105,609.00	66,036.27	62.53%	39,572.70	0.03
	Total Article 241	105,609.00	105,608.97	100.00%	105,609.00	66,036.27	62.53%	39,572.70	0.03
	Total Chapter 24	130,409.00	130,315.84	99.93%	130,409.00	89,243.14	68.43%	41,072.70	93.16
A-2500	Governance and administrative meetings	109,703.00	109,611.77	99.92%	109,703.00	70,505.17	64.27%	39,106.60	91.23
A-2501	Evaluation and Strategic Management Consulting	178,290.00	178,228.52	99.97%	178,290.00	0.00	0.00%	178,228.52	61.48
	Total Article 250	287,993.00	287,840.29	99.95%	287,993.00	70,505.17	24.48%	217,335.12	152.71
	Total Chapter 25	287,993.00	287,840.29	99.95%	287,993.00	70,505.17	24.48%	217,335.12	152.71
	Total Title 2	9,006,033.00	8,976,803.40	99.68%	9,006,033.00	5,412,064.18	60.09%	3,564,739.22	29,229.60

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	2,800,401.00	2,799,774.85	99.98%	2,800,401.00	1,893,085.25	67.60%	906,689.60	626.15
B3-001	Epidemic intelligence and response	65,380.00	62,727.94	95.94%	65,380.00	16,502.20	25.24%	46,225.74	2,652.06
B3-002	Scientific advice (including microbiology support)	5,522,346.00	5,520,349.15	99.96%	5,522,346.00	3,492,466.92	63.24%	2,027,882.23	1,996.85
B3-003	Public Health Training	3,928,662.00	3,906,909.16	99.45%	3,928,662.00	2,504,363.15	63.75%	1,402,546.01	21,752.84
B3-004	Health Communication	512,700.00	504,214.54	98.34%	512,700.00	308,730.77	60.22%	195,483.77	8,485.46
B3-005	Public Health Informatics	4,543,752.00	4,535,329.08	99.81%	4,543,752.00	3,112,827.68	68.51%	1,422,501.40	8,422.92
B3-006	Preparedness/ Capacity support	402,283.00	402,276.61	100.00%	402,283.00	135,963.68	33.80%	266,312.93	6.39
B3-007	Eurosurveillance	61,996.00	59,670.12	96.25%	61,996.00	34,620.13	55.84%	25,049.99	2,325.88
B3-009	Collaboration and (country) cooperation	163,000.00	143,593.25	88.09%	163,000.00	65,438.90	40.15%	78,154.35	19,406.75
	Total Chapter 30	18,000,520.00	17,934,844.70	99.64%	18,000,520.00	11,563,998.68	64.24%	6,370,846.02	65,675.30
	Total Title 3	18,000,520.00	17,934,844.70	99.64%	18,000,520.00	11,563,998.68	64.24%	6,370,846.02	65,675.30
	Grand Total	58,042,653.00	57,914,767.73	99.78%	58,042,653.00	47,426,492.56	81.71%	10,488,275.17	127,885.27

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)	69,630.00	0.00	0.00%	69,630.00	0.00	0.00%	69,630.00
B3-003	Public Health Training	3,816.90	3,434.02	89.97%	3,816.90	3,084.02	80.80%	732.88
	Total Title 3	73,446.90	3,434.02	4.68%	73,446.90	3,084.02	4.20%	70,362.88
	Grand Total	73,446.90	3,434.02	4.68%	73,446.90	3,084.02	4.20%	70,362.88

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 opinions and studies	75,147.00	75,147.00	100.00%	75,147.00	75,147.00	100.00%	0.00
	Total Title 3	75,147.00	75,147.00	100.00%	75,147.00	75,147.00	100.00%	0.00
	Grand Total	75,147.00	75,147.00	100.00%	75,147.00	75,147.00	100.00%	0.00

Budget execution/fund source C8 – appropriations carried over

Annex 6.4 – 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 and Development	180,322.97	159,191.49	88.28%	180,322.97	159,191.49	88.28%	21,131.48
	Total Article 114	180,322.97	159,191.49	88.28%	180,322.97	159,191.49	88.28%	21,131.48
A-1170	Freelance and joint interpreting and conference service interpreters	17,800.00	15,130.00	85.00%	17,800.00	15,130.00	85.00%	2,670.00
A-1173	Translations	69,812.00	67,831.92	97.16%	69,812.00	67,831.92	97.16%	1,980.08
A-1174	Payment for Administrative Assistance	3,500.00	2,982.79	85.22%	3,500.00	2,982.79	85.22%	517.21
A-1175	Interim services	762,797.20	662,377.76	86.84%	762,797.20	662,377.76	86.84%	100,419.44
A-1176	Relocation services	2,835.00	1,890.00	66.67%	2,835.00	1,890.00	66.67%	945.00
	Total Article 117	856,744.20	750,212.47	87.57%	856,744.20	750,212.47	87.57%	106,531.73
A-1180	Miscellaneous expenditure on recruitment	30,842.54	28,654.71	92.91%	30,842.54	28,654.71	92.91%	2,187.83
A-1183	Removal Expenses	24,206.49	23,331.18	96.38%	24,206.49	23,331.18	96.38%	875.31
	Total Article 118	55,049.03	51,985.89	94.44%	55,049.03	51,985.89	94.44%	3,063.14
	Total Chapter 11	1,092,116.20	961,389.85	88.03%	1,092,116.20	961,389.85	88.03%	130,726.35
A-1300	Mission expenses, travel expenses and incidental expenditure	123,767.24	95,021.49	76.77%	123,767.24	95,021.49	76.77%	28,745.75
	Total Article 130	123,767.24	95,021.49	76.77%	123,767.24	95,021.49	76.77%	28,745.75
	Total Chapter 13	123,767.24	95,021.49	76.77%	123,767.24	95,021.49	76.77%	28,745.75
A-1410	Medical Service	55,924.10	48,554.36	86.82%	55,924.10	48,554.36	86.82%	7,369.74

Annex 6.4 –								
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
	Total Article 141	55,924.10	48,554.36	86.82%	55,924.10	48,554.36	86.82%	7,369.74
	Total Chapter 14	55,924.10	48,554.36	86.82%	55,924.10	48,554.36	86.82%	7,369.74
A-1520	Staff Exchanges	414.80	413.82	99.76%	414.80	413.82	99.76%	0.98
	Total Article 152	414.80	413.82	99.76%	414.80	413.82	99.76%	0.98
	Total Chapter 15	414.80	413.82	99.76%	414.80	413.82	99.76%	0.98
A-1700	Entertainment and Representation Expenses	4,652.00	3,619.80	77.81%	4,652.00	3,619.80	77.81%	1,032.20
	Total Article 170	4,652.00	3,619.80	77.81%	4,652.00	3,619.80	77.81%	1,032.20
	Total Chapter 17	4,652.00	3,619.80	77.81%	4,652.00	3,619.80	77.81%	1,032.20
A-1801	Social Contact Between Staff	20,904.00	20,904.00	100.00%	20,904.00	20,904.00	100.00%	0.00
	Total Article 180	20,904.00	20,904.00	100.00%	20,904.00	20,904.00	100.00%	0.00
	Total Chapter 18	20,904.00	20,904.00	100.00%	20,904.00	20,904.00	100.00%	0.00
	Total Title I	1,297,778.34	1,129,903.32	87.06%	1,297,778.34	1,129,903.32	87.06%	167,875.02
A-2002	Water, Gas, Electricity Expenses	38,441.14	26,408.89	68.70%	38,441.14	26,408.89	68.70%	12,032.25
A-2003	Maintenance, cleaning	52,522.42	52,341.74	99.66%	52,522.42	52,341.74	99.66%	180.68
A-2004	Fitting-out	37,072.27	36,316.23	97.96%	37,072.27	36,316.23	97.96%	756.04
A-2005	Security of Building	127,917.47	126,526.47	98.91%	127,917.47	126,526.47	98.91%	1,391.00
A-2006	Restauration and Canteen costs	14,000.00	14,000.00	100.00%	14,000.00	14,000.00	100.00%	0.00
A-2009	Other expenditure on buildings	110,916.27	101,309.50	91.34%	110,916.27	101,309.50	91.34%	9,606.77
	Total Article 200	380,869.57	356,902.83	93.71%	380,869.57	356,902.83	93.71%	23,966.74
	Total Chapter 20	380,869.57	356,902.83	93.71%	380,869.57	356,902.83	93.71%	23,966.74
A-2110	Purchases of new hardware for operation the centre	210,741.37	203,510.87	96.57%	210,741.37	203,510.87	96.57%	7,230.50
A-2111	Purchase of new software for the operation at the centre	218,374.62	213,293.22	97.67%	218,374.62	213,293.22	97.67%	5,081.40
A-2112	Purchase and Maintenance of printing and reproduction equipment	20,459.83	11,876.73	58.05%	20,459.83	11,876.73	58.05%	8,583.10
A-2114	Developments to support administrative and management applications	523,252.78	505,610.58	96.63%	523,252.78	505,610.58	96.63%	17,642.20
	Total Article 211	972,828.60	934,291.40	96.04%	972,828.60	934,291.40	96.04%	38,537.20
	Total Chapter 21	972,828.60	934,291.40	96.04%	972,828.60	934,291.40	96.04%	38,537.20
A-2200	Technical equipment and AV installations	42,560.00	42,560.00	100.00%	42,560.00	42,560.00	100.00%	0.00
A-2201	Furniture	12,747.28	12,747.28	100.00%	12,747.28	12,747.28	100.00%	0.00

Annex 6.4 –								
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-2202	Purchase and maintenance of vehicles	45,616.00	44,686.74	97.96%	45,616.00	44,686.74	97.96%	929.26
	Total Article 220	100,923.28	99,994.02	99.08%	100,923.28	99,994.02	99.08%	929.26
	Total Chapter 22	100,923.28	99,994.02	99.08%	100,923.28	99,994.02	99.08%	929.26
A-2300	Stationery and office supplies	27,763.15	27,730.69	99.88%	27,763.15	27,730.69	99.88%	32.46
A-2301	Financial and other charges, exchange losses	500.00	273.18	54.64%	500.00	273.18	54.64%	226.82
A-2302	Library expenses, purchase of books and info subscriptions	2,608.10	1,570.06	60.20%	2,608.10	1,570.06	60.20%	1,038.04
A-2306	Miscellaneous Insurance	760.21	365.19	48.04%	760.21	365.19	48.04%	395.02
A-2307	Legal Expenses	41,500.00	41,500.00	100.00%	41,500.00	41,500.00	100.00%	0.00
A-2308	Business Continuity	30,000.00	30,000.00	100.00%	30,000.00	30,000.00	100.00%	0.00
A-2309	Other operating expenditure	2,449.50	2,449.50	100.00%	2,449.50	2,449.50	100.00%	0.00
	Total Article 230	105,580.96	103,888.62	98.40%	105,580.96	103,888.62	98.40%	1,692.34
	Total Chapter 23	105,580.96	103,888.62	98.40%	105,580.96	103,888.62	98.40%	1,692.34
A-2400	Postal and delivery charges	31.00	31.00	100.00%	31.00	31.00	100.00%	0.00
	Total Article 240	31.00	31.00	100.00%	31.00	31.00	100.00%	0.00
A-2410	Telecommunic ation and internet charges	59,913.05	20,530.54	34.27%	59,913.05	20,530.54	34.27%	39,382.51
	Total Article 241	59,913.05	20,530.54	34.27%	59,913.05	20,530.54	34.27%	39,382.51
	Total Chapter 24	59,944.05	20,561.54	34.30%	59,944.05	20,561.54	34.30%	39,382.51
A-2500	Governance and administrative meetings	42,528.59	22,708.81	53.40%	42,528.59	22,708.81	53.40%	19,819.78
A-2501	Evaluation and Strategic Management Consulting	109,505.78	109,505.78	100.00%	109,505.78	109,505.78	100.00%	0.00
	Total Article 250	152,034.37	132,214.59	86.96%	152,034.37	132,214.59	86.96%	19,819.78
	Total Chapter 25	152,034.37	132,214.59	86.96%	152,034.37	132,214.59	86.96%	19,819.78
	Total Title 2	1,772,180.83	1,647,853.00	92.98%	1,772,180.83	1,647,853.00	92.98%	124,327.83
B3-000	Surveillance	1,327,937.58	1,264,533.99	95.23%	1,327,937.58	1,264,533.99	95.23%	63,403.59
B3-001	Epidemic intelligence and response	150,689.47	141,112.03	93.64%	150,689.47	141,112.03	93.64%	9,577.44
B3-002	Scientific advice (including microbiology support)	2,381,324.94	2,267,139.05	95.20%	2,381,324.94	2,267,139.05	95.20%	114,185.89
B3-003	Public Health Training	1,412,068.66	1,078,252.96	76.36%	1,412,068.66	1,078,252.96	76.36%	333,815.70
B3-004	Health Communication	126,621.08	125,801.08	99.35%	126,621.08	125,801.08	99.35%	820.00
B3-005	Public Health Informatics	2,086,227.23	2,007,973.85	96.25%	2,086,227.23	2,007,973.85	96.25%	78,253.38

Annex 6.4 – 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
B3-006	Preparedness/ Capacity support	237,479.77	205,562.24	86.56%	237,479.77	205,562.24	86.56%	31,917.53
B3-007	Eurosurveillance	65,072.47	49,023.13	75.34%	65,072.47	49,023.13	75.34%	16,049.34
B3-009	Collaboration and (country) cooperation	68,804.89	55,275.74	80.34%	68,804.89	55,275.74	80.34%	13,529.15
	Total Chapter 30	7,856,226.09	7,194,674.07	91.58%	7,856,226.09	7,194,674.07	91.58%	661,552.02
	Total Title 3	7,856,226.09	7,194,674.07	91.58%	7,856,226.09	7,194,674.07	91.58%	661,552.02
	Grand Total	10,926,185.26	9,972,430.39	91.27%	10,926,185.26	9,972,430.39	91.27%	953,754.87

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
B3-011	ECDC – IPA 5	310,000.00	79,737.72	25.72%	310,000.00	2,604.81	0.84%	307,395.19
B3-012	Directorate- General for Neighbourhood and Enlargement Negotiations grant 3 – actions with candidate countries and potential candidate countries	157,334.55	154,914.16	98.46%	157,334.55	137,122.31	87.15%	20,212.24
B3-013	Advance project – IMI	174,710.79	95,959.26	54.92%	174,710.79	74,475.65	42.63%	100,235.14
B3-014	Directorate- General for International Cooperation and Development – ENPI grant	73,154.24	73,154.24	100.00%	73,154.24	73,154.24	100.00%	0.00
	Total Title 3	715,199.58	403,765.38	56.45%	715,199.58	287,357.01	40.18%	427,842.57

Intangible fixed assets and internally developed intangible fixed assets

Intangible fixed assets are valued at their acquisition price, converted into euros 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 EU rules. One of these exceptions related to Accounting Rule no. 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 capitalisation 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 capitalised 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 three and eight 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 capitalised, are disclosed in these annual accounts 2017, as well as the yearly amortisation of capitalised intangible assets. In addition to the criteria, which an intangible asset should meet, a threshold had to be set for the capitalisation 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 no. 6 in the annual accounts of 2017, 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, Eurosurveillance 2.0 and others)

The internally developed ICT projects, called Webportal 2.0 and Eurosurveillance 2.0, which were previously booked as an asset under construction, went live in June 2016 and September 2017. Therefore, the development cost, which reached the threshold of EUR 150 000 for each project, has been capitalised and is being depreciated accordingly.

As a consequence, in 2017, Eurosurveillance 1.3 has been impaired, as it has been replaced by Eurosurveillance 2.0 and no longer has a service potential.

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 and 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 capitalised and depreciated over the lease period which runs until 31 May 2018.

Impairment of assets

Assets that have an indefinite useful life are not subject to amortisation and are tested regularly for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised 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.

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 recognised 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 then N-1, are written down as these hold no longer a service potential expected to be realised from their distribution.

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.

Cash and cash equivalents

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

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.

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.

6. Report on budget and financial management of the European Centre for Disease Prevention and Control (thirteenth financial year – 2017)

6.1 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.

2017 was the fourth 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 2017, 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.

On 16 June 2017, a new Director took up position at ECDC.

ECDC is divided into five Units and the Director's Office. The Heads of Unit 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 Director and the Heads of Unit, which play an important role in the management of ECDC.

The Annual Work Programme 2017 (Single Programming Document 2017), which was prepared in accordance with the 'Strategic multi-annual Work Programme 2014–2020', was adopted by the Management Board in November 2016. The programme includes specific objectives. Implementation was followed up on a regular basis through the Management Information System (MIS), which was implemented in 2009. The MIS is a central point of reference for the management and helps monitoring the activities of the work programme. The monthly reporting to the SMT of key data, such as commitments, payments and budget transfers, was continued and continuously improved during 2017. Towards the end of the year, the monitoring of the budgetary implementation was intensified in order to facilitate the decision-making for the re-allocation of funds. As a result, ECDC has accomplished a significantly increased budget implementation in 2017.

In 2017, 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 delegated financial responsibility, 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 Director. Thereby, a very limited number of persons act as AO/AOD at ECDC. The AODs can enter into budgetary and legal commitments and authorise payments. However, all budgetary and legal commitments over EUR 250 000 have to be signed by the Director.

For the 2017 expenditure, 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 were delegated responsibility.

6.2 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 euros and the accounts are presented in euros.

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.

6.3 Budget implementation

The use of ABAC WF (the EU integrated budgetary and accounting system) reinforced compliance with the accrual accounting rules and ensured that ECDC's 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, at EUR 58 million in 2017, compared with EUR 58.2 million in 2016.

	Budget line	Initial available budget	Adjustments	Final available budget
2000 IC1	EU budget – current year appropriations	51,686,396.25	0,00	51,686,396.25
2001 IC4	EU budget – earmarked funds (reuse previous years)	5,079,603.75	0,00	5,079,603.75
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)	1,276,653.00	0,00	1,276,653.00
300	Subsidy from the EEA/EFTA	1.276.653,00	0,00	1.276.653,00
	Total revenue 2017	58.042.653,00	0,00	58.042.653,00
R0 – external assigned revenue	EU budget – earmarked funds	715.199,58	0,00	715.199,58

At year end, the overall budget execution in terms of commitment appropriations reached 99.8%, equivalent to EUR 57.9 million. This is an increase of 1.8% compared to 2016, achieved by successful efforts to further strengthen the budget execution at ECDC.

Only 0.2% of the 2017 budget or EUR 127 000 remained unused in 2017, of which EUR 33 000 in Title 1, EUR 29 000 in Title 2 and EUR 65 000 in Title 3.

The overall budget execution in terms of payments also increased by 2.5% compared with 2016 and reached 81.7% of the total budget.

The payment execution for staff expenses in Title I increased by 3.7% and reached 98.1% while the payment execution for administrative expenses in Title II decreased by -11.4% compared with 2016 and reached 60%. The reason for the decrease in Title II is explained by the fact that new furniture and IT equipment were bought in 2017; these will be delivered and paid for in 2018 when ECDC moves to its new premises. The payment execution for operational expenses in Title III reached 64.2%, an increase of 6% compared with 2016. Below is an overview comparing 2017 with 2016 (current year C1 credits, % committed and % paid):

Title description	Commitments %				Payments %		
	2017	2016	Difference	2017	2016	Difference	
Title I. Staff expenses	99.89%	98.55%	+1.34%	98.11%	94.40%	+3.71%	
Title II. Administrative expenses	99.68%	95.94%	+3.74%	60.09%	71.48%	-11.39%	
Title III. Operational expenses	99.64%	97.94%	+1.70%	64.24%	58.24%	+6.00%	
Total Titles I + II + III	99.78%	98.02%	+1.76%	81.71%	79.26%	+2.45%	

The total number of commitments increased, while the number of payments processed in 2017 decreased. 1 257 commitments and 3 803 payment orders were initiated, verified and authorised by the Director and the Authorising Officers by Delegation during 2017, compared with 1 109 commitments and 3 838 payments in 2016.

In 2017, 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 programmes, already started in mid-2015. The Centre, started the implementation of the fifth IPA grant agreement in 2017 and continued with the further implementation of the IMI grant agreement. The ENPI grant agreement ended in 2017.

The 2017 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 2017	Executed commitment 2017	% committed	Executed payment in 2017	% paid	Carried over to 2018	Cancelled
C1 – Current year appropriations	58.042.653,00	57.914.767,73	99.78%	47.426.492,56	81.71%	10.488.275,17	127.885,27
C4 – Internal assigned revenue appropriations	73.446,90	3.434,02	4.68%	3.084,02	4.20%	70.362,88	0,00
C5 – Internal assigned revenue appropriations (carried over)	75.147,00	75.147,00	100%	75.147,00	100%	0,00	0,00
C8 – Carry-forward of 2015 appropriations	10.926.185,26			9.972.430,39	91.27%	0,00	953.754,87
R0 – External assigned revenue DG NEAR IPA Grant 4	157.334,55	154.914,16	98.46%	137.122,31	87.15%	20,212.24	0,00
R0 – External assigned revenue DG NEAR IPA Grant 5	310.000,00	79.737,72	25.72%	2.604,81	0.84%	307.395,19	0,00
R0 – External assigned revenue Advance Project – IMI Grant	174.710,79	95.959,26	54,92%	74.475,65	42,63%	100.235,14	0,00
R0 – External assigned revenue DG NEAR – ENPI GRANT	73.154,24	73.154,24	100%	28.674,00	39,20%	0,00	44.480,24

During the year, in order to improve the efficiency of the funds allocated to ECDC, the 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 net amount of EUR 985 480 (Title 1: EUR +921 100, Title 2: EUR +64 380, Title 3: EUR -985 480). An overview of the impact of the budget transfers in fund source 'C1 – current year appropriations' is provided below.

Budget 2017 – fund source C1 current year appropriations	Initial budget	MB amendments	Director – budget transfers	EFTA transfers	Final budget
Title 1 – Staff-related expenditure	30.115.000,00	0,00	+921.100,00	0,00	31.036.100,00
Title 2 – Administrative expenditure	8.941.653,00	0,00	+64.380,00	0,00	9.006.033,00
Title 3 – Operations	18.986.000,00	0,00	-985.480,00	0,00	18.000.520,00
Total budget	58.042.653,00	0,00	0,00	0,00	58.042.653,00

At year end, ECDC carried forward EUR 10.48 million to 2018, which is equivalent to 18% of the total budget. The carry-forward thus remains at the same level as in the previous year.

The Procurement section dealt with a significant number of procedures. Eighteen open calls for tenders were published along with one open call for proposals. In the context of the ECDC Fellowship Programmes, eight framework partnership agreements and 55 specific grant agreements were concluded. In addition, 83 negotiated procedures and 17 reopening procedures within ICT framework contracts were completed. Regular Committee on Procurement, Contracts and Grants (CPCG) meetings were held, resulting in the issuance of 36 CPCG Opinions.

6.4 Audit issues and internal control

Internal control standards

ECDC introduced internal control standards (ICS) in 2006. 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, which actions have to be taken, who the responsible person is, and when the deadline for entry into force has to be met.

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 followed up regularly and presented to the Audit Committee of the Management Board.

In 2017, the IAS did not perform a specific audit. Instead, it has developed a new IAS strategic internal audit plan covering 2018–2020, which will be put forward to the Management Board in March 2018.

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 opinion¹⁹ for 2016, indicating that the accounts are reliable and the transactions underlying the accounts are legal and regular.

Three comments were received in the final report from the ECA for 2016 (which do not call the Court's opinion into question): one related to interim arrangements, one to weaknesses in the procurement process, and one to high carry-overs of committed appropriations in operating expenditure (Title III). With regard to the first two comments, ECDC has already taken the appropriate actions; work is ongoing for the third comment.

The ECA audit of the 2017 annual accounts is ongoing. The first part of the audit was performed in September 2017. The audit will be finalised during spring 2018 and the draft report will be available by June 2018 at the latest.

Follow-up of recommendations and action plans for audits

At the end of 2017, seven very important IAS observations, and four important IAS observations were officially open (from the 2015 internal audit on data management in ECDC and the 2016 internal audit on the procurement process in ECDC). However, all of these observation have now been implemented by ECDC and reported to the IAS for review.

In addition, all outstanding actions to be implemented from the ECA's special report (no 12/2016) on 'Agencies' use of grants; not always appropriate or demonstrably effective' have also been implemented. This has not yet been confirmed by the ECA.

The only outstanding issue with the ECA is the one regarding the high carry-overs of committed appropriations in operating expenditure (Title III) mentioned above. ECDC is currently carefully analysing the advantages/disadvantages, in liaison with the ECA, of introducing differentiated budget appropriations, including the risk of added complexity and additional resources. A conclusion is planned to be reached by June 2018; changes can only be applied after 1 January 2019.

¹⁹ 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.

6.5 Human resources and staffing

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

The total number of temporary agents in place at the Centre as of 31 December 2017 was 166.

A total of 97 contract agents were in place at year end 2017.

The turnover rate for temporary agents and contract agents was 5.3 % in 2017²⁰.

Table 1. Number of staff and selection procedures

	2015	2016	2017
Total staff (TA, CA, SNE) on 31 December	260	260	266
Recruitments ²¹	15 ²²	27 ²³	39 ²⁴

Table 2. Staff (TA, CA, SNEs) by Unit

Number of temporary agents (TA), contract agents (CA) and seconded national experts (SNE) per unit (as of 31 December 2017)

	TA	CA	SNE	Total
DIR	9	7		16
OCS	20	10		30
SRS	53	15	1	69
PHC	25	18	2	45
RMC	37	38		75
ICT	22	9		31
Total	166	97	3	266

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

On 31 December 2017, ECDC employed staff from 26 Member States.

Nationality	AST/SC	AST	AD	TA Total	CA	SNE	ECDC total
Austria	0	0	1	1	1	0	2
Belgium	0	0	6	6	3	0	9
Bulgaria	0	0	5	5	3	0	8
Croatia	0	0	0	0	0	0	0
Cyprus	0	1	0	1	0	0	1
Czech Republic	0	0	2	2	1	0	3
Denmark	0	3	2	5	1	0	6
Estonia	0	0	1	1	2	0	3
Finland	0	1	9	10	3	0	13
France	0	3	15	18	9	0	27
Germany	0	6	14	20	6	0	26
Greece	0	0	3	3	2	1	6
Hungary	0	0	3	3	1	1	5
Ireland	0	1	1	2	0	0	2
Italy	0	2	10	12	6	1	19
Latvia	0	2	2	4	1	0	5
Lithuania	0	1	0	1	4	0	5
Luxembourg	0	0	0	0	0	0	0
Malta	0	0	2	2	0	0	2
Netherlands	0	2	3	5	2	0	7
Poland	1	2	1	4	6	0	10

²⁰ Excluding post cuts as per instruction by the Commission.

²¹ The number of recruitments 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 finalized in the specified year (including recruitments from reserve lists) and not those procedures still ongoing at the end of that year. It does not include unsuccessful/ cancelled selection procedures that did not lead to an appointment.

²² 20 % of vacant posts were filled by internal candidates who were successful in open competitions.

²³ 30 % of vacant posts were filled by internal candidates who were successful in open competitions.

²⁴ 44 % of vacant posts were filled by internal candidates who were successful in open competitions.

Nationality	AST/SC	AST	AD	TA Total	CA	SNE	ECDC total
Portugal	0	1	4	5	4	0	9
Romania	1	6	3	10	6	0	16
Slovakia	0	0	1	1	2	0	3
Slovenia	0	0	1	1	0	0	1
Spain	0	2	3	5	2	0	7
Sweden	0	11	16	27	27	0	54
United Kingdom	0	4	8	12	5	0	17
Total	2	48	116	166	97	3	266

6.6 Opinion of the Management Board on ECDC 2017 final accounts

ECDC Management Board Forty-third Meeting Stockholm, 19-20 June 2018



20 June 2018

Opinion of the Management Board on ECDC 2017 Final Accounts

Having regard to article 99.2 of the Financial Regulation of the European Centre for Disease Prevention and Control stating 'On receiving the Court of Auditors' observations on the provisional accounts of the Centre, the Accounting Officer shall draw up the final accounts of the Centre in accordance with Article 50. The Director shall send them to the management board, which shall give an opinion on these accounts'.

Having regard to article 108.1 of the Financial Regulation of the European Centre for Disease Prevention and Control stating: The European Parliament, upon a recommendation from the Council, shall, before 15 May of year n+2 give a discharge to the director in respect of the implementation of the budget for year n.

The Management Board has adopted the following opinion:

'The Management Board is assured and confident that the final accounts for the year 2017, as presented by the Director, form a correct basis for requesting the discharge of the Director to the European Parliament in respect of the implementation of the budget for year 2017.'

Stockholm, 20 June 2018

On behalf of the Management Board

Daniel Reynders

Chair of the ECDC Management Board

Annex 7. ECDC MB/AF/Coordinating Competent Bodies

Members and Alternates of the ECDC Management Board

Austria	Dr Berhard Benka ²⁵ Mag Martina Brix ²⁶	Member Alternate
Belgium	Dr Daniel Reynders (Chair)	Member
Delgiani	Dr Carole Schirvel	Alternate
Bulgaria	Dr Angel Kunchev	Member
3	Dr Galin Kamenov	Alternate
Croatia	Dr Bernard Kaić	Member
	Assistant Professor Krunoslav Capak	Alternate
Cyprus	Dr Irene Cotter	Member
	Ms Eleni Zannetou	Alternate
Czech Republic	Mgr Eva Gottvaldová ²⁷	Member
	Dr Jozef Dlhý	Alternate
Denmark	Ms Bolette Søborg ²⁸	Member
	Nomination pending	Alternate
Estonia	Ms Merike Jürilo ²⁹	Member
	Ms Kärt Sõber ³⁰	Alternate
Finland	Dr Anni-Riitta Virolainen-Julkunen	Member
	Dr Taneli Puumalainen	Alternate
France	Dr François Bourdillon	Member
	Ms Anne-Catherine Viso	Alternate
Germany	Ms Susanne Wald	Member
	Dr Gesa Lücking	Alternate
Greece	Professor Georgios Saroglou	Member
	Professor Panagiotis Panagiotopoulos ³¹	Alternate
Hungary	Ms Ágnes Dánielisz ³²	Member
	Ms Krisztina Biró ³³	Alternate
Ireland	Michael Smith ³⁴	Member
	Nomination pending	Alternate
Italy	Dr Raniero Guerra	Member
	Dr Francesco Maraglino	Alternate
Latvia	Ms Jana Feldmane	Member
	Professor Dzintars Mozgis	Alternate
Lithuania	Dr Audrius Sčeponavičius	Member
	Professor Saulius Caplinskas	Alternate
Luxembourg	Dr Jean-Claude Schmit	Member
	Dr Pierre Weicherding	Alternate
Malta	Dr Patricia Vella Bonanno ³⁵	Member
	Dr Mariella Borg Buontempo	Alternate
Netherlands	Ms Ciska Scheidel ³⁶	Member
D. L. J.	Ms Judith Elsinghorst ³⁷	Alternate
Poland	Mr Dariusz Poznański ³⁸ i	Member
Dartural	Mr Michał Ilnicki	Alternate
Portugal	Dr Maria da Graça Gregorio de Freitas	Member
Damania	Dr Paula Vasconcelos	Alternate
Romania	Dr Amalia Serban	Member
	Dr Adriana Pistol	Alternate

²⁵ Appointed Member in replacement of Dr Pamela Rendi-Wagner as of March 2017

²⁶ Appointed Alternate in replacement of Dr Bernhard Benka as of March 2017

²⁷ Appointed Member as of March 2017

²⁸ Appointed Member in replacement of Lisbeth Høeg-Jensen as of March 2017

²⁹ Appointed Member in replacement of Dr Tiiu Aro as of November 2017

³⁰ Appointed Alternate in replacement of Mr Martin Kadai as of November 2017

³¹ Alternate from January to November 2017, nomination pending

³² Appointed Member in replacement of Dr Hanna Páva as of December 2017

³³ Appointed Member in replacement of Dr Beatrix Oroszi as of December 2017

³⁴ Appointed Member as of March 2017

³⁵ Appointed Member in replacement of Dr Anthony Gatt as of March 2017

³⁶ Appointed Member in replacement of Ms Judith Elsinghorst as of September 2017

³⁷ Appointed Alternate in replacement of Mr Herbert Barnard as of September 2017

³⁸ Appointed Member in replacement of Dr hab Elzbieta Gołąb as of December 2017

Dr Ján Mikas Slovak Republic Member Ing Dagmar Nemethova Alternate Slovenia Dr Mojca Gobec Member Ms Maja Sočan³⁹ Alternate Dr Elena Andradas Aragones 40 Spain Member Dr Maria Araceli Arce Arnáez 41 Alternate Sweden Dr Johan Carlson Member Alternate Dr Mårten Kivi Ms Helen Shirley-Quirk⁴² United Kingdom Member Dr Ailsa Wight Alternate European Parliament Ms Zofiia Mazei Kukovič Member Ms Maria Eleni Koppa Member Mr Antonio Fernando Correia de Campos Alternate **European Commission** Mr Martin Sevchell Member Mr John F Ryan Member Ms Isabel de la Mata Barranco Alternate Mr Wolfgang Philipp⁴³ Alternate Ms Line Matthiessen-Guyader Member Ms Barbara Kerstiens Alternate Iceland (EEA/EFTA) Dr Sveinn Magnússon Member Ms Margrét Björnsdóttir Alternate Liechtenstein (EEA/EFTA) Dr Marina Jamnicki Abegg Member Dr Karl-Olaf Wathne Norway (EEA/EFTA) Member Mr Torstein Lindstad Alternate

Members and Alternates of the ECDC Advisory Forum

Austria Professor Dr Petra Apfalter Member Professor Dr Franz Allerberger Alternate Belgium Professor Dr Herman Van Oyen Member Dr Sophie Quoilin Alternate Bulgaria Nomination pending Member Dr Radosveta Filipova Alternate Dr Sanja Kurečić Filipović Croatia Member Dr Aleksandar Šimunović Alternate Cyprus Dr Linos Hadjihannas44 Member Dr Ioanna Gregoriou **Alternate** Czech Republic Dr Jan Kynčl Member Dr Kateřina Fabiánová Alternate Dr Kåre Mølbak Denmark Member Alternate Dr Tyra Grove Krause Estonia Dr Kuulo Kutsar Member Dr Natalia Kerbo Alternate **Finland** Dr Mika Salminen Member Dr Outi Lyytikäinen **Alternate** France Dr Jean-Claude Desenclos Member Dr Bruno Coignard Alternate Dr Osamah Hamouda Germany Member Dr Andreas Gilsdorf⁴⁵ Alternate Dr Sotirios Tsiodras Greece Member Dr Agoritsa Baka Alternate Hungary Dr Ágnes Csohán⁴⁶ Member Ms Emese Szilágyi **Alternate**

³⁹ Appointed Alternate in replacement of Ms Marija Magajne as of October 2017

⁴⁰ Appointed Member in replacement of Dr José Javier Castrodeza Sanz as of February 2017

⁴¹ Appointed Alternate in replacement of Dr Elena Andradas Aragones as of February 2017

⁴² Member from January to August 2017, nomination pending

⁴³ Appointed Alternate in replacement of Mr Michael Huebel as of January 2017

⁴⁴ Appointed Member as of May 2017 in replacement of Dr Niki Paphitou

⁴⁵ Alternate from January to December 2017, nomination pending

⁴⁶ Member from January to May 2017, nomination pending

Ireland	Dr Kevin Kelleher ⁴⁷	Member
	Dr Derval Igoe	Alternate
Italy	Dr Silvia Declich	Member
	Dr Giuseppe Ippolito	Alternate
Latvia	Dr Jurijs Perevoščikovs	Member
	Dr Irina Lucenko	Alternate
Lithuania	Dr Loreta Ašoklienė	Member
	Ms Nerija Kuprevičienė	Alternate
Luxembourg	Dr Isabel De La Fuente Garcia	Member
	Nomination pending	Alternate
Malta	Dr Charmaine Gauci	Member
	Dr Tanya Melillo Fenech	Alternate
Netherlands	Prof Dr Jaap van Dissel	Member
	Dr Marianne van der Sande ⁴⁸	Alternate
Poland	Dr Malgorzata Sadkowska-Todys	Member
	Dr Magdalena Rosińska	Alternate
Portugal	Mr Carlos Matias Dias	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
Spain	Dr Isabel Noguer	Alternate
Sweden	Dr Anders Tegnell	Member
Sweden	Dr Birgitta Lesko	Alternate
United Kingdom	Dr Paul Cosford	Member
Office Kingdom	Nomination pending	Alternate
Observers	Nonlination penaling	Alternate
Albania (Candidate Country)	Pending nomination	
Iceland (EEA/EFTA)	Dr Thorolfur Gudnason	Member
iceland (LLA/LITA)	Dr Guðrún Sigmundsdóttir	Alternate
Licentanetain (EEA/EETA)		Member
Liechtenstein (EEA/EFTA)	Dr Marina Jamnicki Abegg Dr Zoran Vratnica	
Montenegro (candidate country)		Observer
Norway (EEA/EFTA)	Dr Frode Forland ⁴⁹	Member
Carleta (and didata accordes)	Dr Hanne Nøkleby ⁵⁰	Alternate
Serbia (candidate country)	Nomination pending	
The former Yugoslav Republic of Macedonia	AL CONTRACTOR OF THE CONTRACTO	
(candidate country)	Nomination pending	0.1
Turkey (candidate country)	MD Gamze Aktuna ⁵¹	Observer
European Commission	Dr Frank Van Loock	Observer
WHO Regional Office for Europe	Dr Guénaël Rodier	Observer
	Mr Thomas Hofmann	Alternate
Non-governmental organisations		
Standing Committee of European Doctors	Nomination pending	Member
Pharmaceutical Group of European Union	Nomination pending	Alternate
European Public Health Association	Dr Aura Timen	Member
European Society of Clinical Microbiology and	Nomination pending	Alternate
Infectious Diseases		
European Patients' Forum	Ms Jana Petrenko	Member
European Federation of Allergy and Airways		
Diseases Patients' Associations	Professor Anna Doboszyńska ⁵²	Alternate

⁴⁷ Appointed Member as of April 2017

 $^{^{\}rm 48}$ Alternate from January to September 2017, nomination pending

⁴⁹ Appointed Member in replacement of Dr Hanne Nøkleby as of January 2017

 $^{^{\}rm 50}$ Appointed Alternate in replacement of Dr Frode Forland as of January 2017

 $^{^{\}rm 51}$ Appointed Member in replacement of Dr Canan Yilmaz as of November 2017

⁵² Member from January to August 2017, pending nomination

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 EU/EEA Member State.

Austria	Federal Ministry of Health Radetzkystrasse 2 1031 Vienna http://www.bmg.qv.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.ncipd.org + 35929442875
Croatia	Croatian Institute of Public Health Rockefellerova 7 10000 Zagreb http://www.hzjz.hr +38514683010
Cyprus	Ministry of Health Directorate Medical and Public Health Services 1 Prodromou 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	Deputy State Secretariat for Chief Medical Officer's Affairs Albert Flórián út 2-6 1097 Budapest http://www.antsz.hu/ +3614761221
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 Duntes 22 1005 Riga http://spkc.qov.lv +37167501590
Liechtenstein	Principality of Liechtenstein Äulestrasse 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 St Luke's Hospital, Pjazza San Luqa MRS9010 Pieta https://deputyprimeminister.gov.mt/en/sph/Pages/Superintendence-of-Public-Health.aspx +35623266109
Netherlands	National Institute for Public Health and the Environment Antonie van Leeuwenhoeklaan 9 3720 BA Bilthoven http://www.rivm.nl +31302742767
Norway	National 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.nijz.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.qov.uk/government/organisations/public-health-england +442082004400

Annex 8. ECDC outputs published in 2017

Risk assessments

January

Human infection with avian influenza A(H7N9) virus - fifth update

Rapid risk assessment - Increase in Salmonella Stourbridge infections in Germany during 2016 - 1st update

Outbreak of yellow fever in Brazil, 25 January 2017

Risk assessment update: seasonal influenza, EU/EEA, 2016-2017

February

Rapid risk assessment update: Hepatitis A outbreaks in the EU/EEA mostly affecting men who have sex with men - 1st update

Re-emerging multi-country WGS-defined outbreak of Salmonella Enteritidis, MLVA type 2-12-7-3-2 and 2-14-7-3-2

March

Multidrug-resistant tuberculosis in migrants, multi-country cluster - second update, 27 March 2017

Cluster of new Salmonella serotype cases with antigenic formula 11:z41:enz15 in four EU Member States

Yellow fever among travellers returning from South America

Genetic evolution of influenza A(H7N9) virus in China – implications for public health – sixth update, 9 March 2017

<u>Multi-country outbreak of Salmonella Enteritidis phage type 8, MLVA profile 2-9-7-3-2 and 2-9-6-3-2 infections – first update, 7 March 2017</u>

Ongoing outbreak of measles in Romania, risk of spread and epidemiological situation in EU/EEA countries

April

Outbreak of yellow fever in Brazil - first update, 13 April 2017

Multidrug-resistant tuberculosis in migrants, multi-country cluster - third update, 13 April 2017

Zika virus disease epidemic – tenth update, 4 April 2017

May

Risk related to the use of 'do-it-yourself' CRISPR-associated gene engineering kit contaminated with pathogenic bacteria

rapid risk assessment: Potential public health risks related to communicable diseases at the WorldPride festival in Madrid, 23 June–2 July 2017

rapid risk assessment: Outbreak of Ebola virus disease in Bas Uele province, Democratic Republic of the Congo; 8th update

Rapid risk assessment: Hepatitis A outbreaks in the EU/EEA mostly affecting men who have sex with men, 2nd update

Increase of cholera cases in the Horn of Africa and the Gulf of Aden - risk for EU/EEA citizens

June

Rapid risk assessment: Hepatitis A outbreak in the EU/EEA mostly affecting men who have sex with men, 3rd update

Multi-country outbreak of new Salmonella enterica 11:z41:e,n,z15 infections associated with sesame seeds

July

Influenza A(H7N9) virus in China – implications for public health, 7th update, 3 July 2017

Multi-country outbreak of Salmonella Enteritidis phage types 56 and 62, MLVA profile 2-11-3-3-2 and 2-12-3-3-2 infections

Cyclospora infections in European travellers returning from Mexico

August

<u>Public health risks related to communicable diseases during the Hajj 2017, Saudi Arabia, 30 August — 4 September 2017</u>

Cluster of autochthonous chikungunya cases in France

September

Hurricane Irma: risk of communicable diseases in the affected countries

Clusters of autochthonous chikungunya cases in Italy

Multiple reports of locally-acquired malaria infections in the EU

Increase of Legionnaires' disease in EU travellers returning from Dubai since October 2016

October

Outbreak of travel-associated Legionnaires' disease - Palmanova, Mallorca (Spain), September-October 2017

Outbreak of pneumonic plaque in Madagascar: recent introduction in the Seychelles

Outbreak of plague in Madagascar, 2017

Clusters of autochthonous chikungunya cases in Italy, first update

December

Multi-country outbreak of Salmonella Enteritidis infections linked to Polish eggs

Multi-country outbreak of Listeria monocytogenes PCR serogroup IVb, MLST ST6

Risk assessment for seasonal influenza, EU/EEA, 2017-2018

Technical reports

January

The status of the HIV response in the European Union/European Economic Area, 2016

February

A literature review on community and institutional preparedness synergies

Proposals for EU guidelines on the prudent use of antimicrobials in humans

<u>European Gonococcal Antimicrobial Surveillance Programme external quality assessment scheme for Neisseria gonorrhoeae antimicrobial susceptibility testing</u>

March

Effectiveness and cost-effectiveness of antenatal screening for HIV, hepatitis B, syphilis and rubella susceptibility

Antenatal screening approaches effective in preventing MTCT of HIV, HBV, syphilis and rubella in vulnerable populations

April

EU Laboratory Capability Monitoring System (EULabCap): report on 2015 survey of EU/EEA country capabilities and capacities

<u>Immunisation information systems in the EU and EEA – results of a survey on implementation and system characteristics</u>

Catalogue of interventions addressing vaccine hesitancy

Economic evaluations of interventions to prevent healthcare-associated infections – literature review

Monitoring implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2017 progress report

HIV and men who have sex with men, Continuum of HIV care, HIV testing, HIV and migrants, HIV treatment and care

May

Hepatitis B and C testing activities, needs, and priorities in the EU/EEA

June

Vaccine-preventable diseases and immunisation: Core competencies

<u>Euro-GASP external quality assessment (EQA) scheme for Neisseria gonorrhoeae antimicrobial susceptibility testing</u> 2016

A literature review of Training Needs Assessment (TRNA) methodology

July

Gap analysis on securing diphtheria diagnostic capacity antitoxin availability in the EU/EEA

<u>Seasonal influenza vaccination in Europe: vaccination recommendations and coverage rates in the EU Member States for eight influenza seasons, 2007–2008 to 2014–2015</u>

<u>Utilising social media to support HIV/STI prevention: evidence to inform a handbook for public health programme</u> managers

September

Assessment of infection control, hospital hygiene capacity and training needs in the European Union

October

Training needs assessment for EU/EEA countries: Assessment methodology and 2015 survey

ECDC, EFSA and EMA Joint Scientific Opinion on a list of outcome indicators as regards surveillance of antimicrobial resistance and antimicrobial consumption in humans and food-producing animals

Vector control with a focus on Aedes aegypti and Aedes albopictus mosquitoes - Literature review and analysis

Public health emergency preparedness: Core competencies for EU Member States

November

Guide to revision of national pandemic influenza preparedness plans: Lessons learned from the 2009 A(H1N1) pandemic

Technical documents

January

Catalogue of infection control and hospital hygiene courses in the European Union - 2016

March

ECDC study protocol for genomic-based surveillance of carbapenem-resistant and/or colistin-resistant Enterobacteriaceae at the EU level

April

<u>European surveillance of Clostridium difficile infections – surveillance protocol version 2.3</u>

May

Surveillance of surgical site infections and prevention indicators in European hospitals - HAISSI protocol

<u>Surveillance of healthcare-associated infections and prevention indicators in European intensive care units: HAI-Net ICU protocol, version 2.2</u>

August

ECDC tool for the prioritisation of infectious disease threats

Surveillance reports

January

Antimicrobial resistance surveillance in Europe 2015

February

The European Union summary report on antimicrobial resistance in zoonotic and indicator bacteria from humans, animals and food in 2015

March

Tuberculosis surveillance and monitoring in Europe, 2017

Molecular typing for surveillance of multi-drug resistant tuberculosis in the EU/EEA

June

Legionnaires' disease in Europe, 2015

July

Hepatitis E in the EU/EEA, 2005-2015

ECDC/EFSA/EMA second joint report on the integrated analysis of the consumption of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from humans and food-producing animals

August

Gonococcal antimicrobial susceptibility surveillance in Europe, 2015

October

ECDC/EFSA joint report: Avian influenza overview October 2016-August 2017

November

HIV/AIDS surveillance in Europe 2017 - 2016 data

Surveillance of antimicrobial resistance in Europe: 2017

December

The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2016

ECDC/EFSA joint report: Avian influenza overview September - November 2017

Throughout the year

Annual Epidemiological Report series on all diseases with an ECDC surveillance mandate

Guidance reports

July

<u>Utilising social media for HIV/STI prevention programmes among young people: a handbook for public health programme managers</u>

October

Guidance for the management of suspected bubonic plaque cases identified on aircraft and ships

<u>Guidance for healthcare workers on the use of personal protective equipment in the management of bubonic and pneumonic plague patients</u>

Guidance for the management of suspected pneumonic plague cases identified on aircraft and ships

Brochure: Information for travellers to Madagascar

December

Effective use of digital platforms for HIV prevention among men who have sex with men in the European Union/European Economic Area: An introduction to the ECDC guides

Use of smartphone application advertising for HIV prevention among men who have sex with men in the European Union/European Economic Area

<u>Use of YouTube for HIV prevention among men who have sex with men in the European Union/European Economic Area</u>

<u>Use of Google AdWords for HIV prevention among men who have sex with men in the European Union/European Economic Area</u>

<u>Use of online outreach for HIV prevention among men who have sex with men in the European Union/European Economic Area</u>

<u>Use of Facebook for HIV prevention among men who have sex with men in the European Union/European Economic Area</u>

Use of Twitter for HIV prevention among men who have sex with men in the European Union/European Economic Area

Evidence briefs

May

Monitoring implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia Impact of stigma and discrimination on access to HIV services in Europe, HIV and laws and policies in Europe

Mission reports

January

Exploring opportunities for support in healthcare-associated infections (HAI) - Romania, 4-7 July 2016

May

Technical mission: HIV, STI and viral hepatitis in Bulgaria. 19-21 September 2016 and 14-15 November 2016

November

ECDC country visit to Luxembourg to discuss antimicrobial resistance issues

December

ECDC country visit to Italy to discuss antimicrobial resistance issues

Corporate publications

July

Annual Report of the Director - 2016

Achievements, challenges and major outputs 2016: highlights from the Annual Report of the Director

October

Evaluation of ECDC Ebola deployment in Guinea

Scientific advice

March

Antenatal screening for HIV, hepatitis B, syphilis and rubella susceptibility in the EU/EEA – addressing the vulnerable populations

May

Systematic review on the diagnosis, treatment, care and prevention of tuberculosis in prison settings

August

Expert opinion on neuraminidase inhibitors for the prevention and treatment of influenza - review of recent systematic reviews and meta-analyses

Zika virus and safety of substances of human origin: a guide for preparedness activities in Europe- first update

September

Expert opinion on rotavirus vaccination in infancy

November

Systematic review on active case finding of communicable diseases in prison settings

December

Expert opinion on the introduction of the meningococcal B (4CMenB) vaccine in the EU/EEA

Regular publications

<u>Influenza virus characterisation, summary Europe</u> (four issues in 2017)

Measles and rubella monitoring (10 issues in 2017)

Communicable disease threats report (49 issues in 2017)

Annex 9. Exceptional negotiated procedures conducted in 2017

Reference	Title	Type of procedure RAP art. 134(1)	Amount	Contractor	Contract reference
NP/2017/OCS/9247	WHONET support for EARS-Net participants	(b)	120 000	Sustainable Health Services Ltd.	ECDC/2017/017
NP/2017/DIR/6567	ECDC lunch workshop session, European Health Forum Gastein 2017	(b)	20 000	European Health Forum Gastein	ECD.7413

European Centre for Disease Prevention and Control (ECDC)

Gustav III:s Boulevard 40 169 73 Solna, Sweden

Tel. +46 858 60 1000 Fax +46 858 60 1001 www.ecdc.europa.eu

An agency of the European Union www.europa.eu

Subscribe to our publications www.ecdc.europa.eu/en/publications

Contact us publications@ecdc.europa.eu

Follow us on Twitter @ECDC_EU

f Like our Facebook page www.facebook.com/ECDC.EU

ECDC is committed to ensuring the transparency and independence of its work

In accordance with the Staff Regulations for Officials and Conditions of Employment of Other Servants of the European Union and the ECDC Independence Policy, ECDC staff members shall not, in the performance of their duties, deal with a matter in which, directly or indirectly, they have any personal interest such as to impair their independence. Declarations of interest must be received from any prospective contractor(s) before any contract can be awarded. www.ecdc.europa.eu/en/about-us/transparency

HOW TO OBTAIN EU PUBLICATIONS

Free publications:

- one copy:
 via EU Bookshop (http://bookshop.europa.eu);
- more than one copy or posters/maps:
 from the European Union's representations (http://ec.europa.eu/represent_en.htm);
 from the delegations in non-EU countries (http://eeas.europa.eu/delegations/index_en.htm)
 by contacting the Europe Direct service (http://europa.eu/europedirect/index_en.htm) or
 calling on 800.6.7.8.9.10.11 (freephone number from anywhere in the FLI) (*)

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

Priced publications:

• via EU Bookshop (http://bookshop.europa.eu).

