ecdc
EUROPEAN CENTRE FOR
DISEASE PREVENTION
AND CONTROL

ECDC **CORPORATE**

Single Programming Document

2020–2022

www.ecdc.europa.eu

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Contents

Abbreviations

ABAC	Accrual-Based Accounting, the EC 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
CDTR	Communicable disease threats reports
CPCG	Committee on procurement, contracts and grants
CPDP	ECDC Continuous Professional Development Programme
CRM	Customer Relationship Management
DMS	Document Management System
DPO	Data protection officer
CONT	Committee for Budgetary Control of the European Parliament
EA	Enterprise Architecture
ECED	ECDC Candidate Expert Directory
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
EID	Emerging infectious diseases
eIIS	Electronic Immunisation Information Systems
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
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
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
ETMS	Event and Threat Management Solution
EU	European Union
E0UCAST	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
FWD-Net	European Food- and Waterborne Diseases and zoonoses network
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
IRIS	Issue-Resources-Impact-Solidarity, decision-making and prioritisation tool
IRV	Influenza and other respiratory viruses
MediPIET	Mediterranean Programme for Intervention Epidemiology Training
MERS-CoV	Middle East respiratory syndrome coronavirus

MMR	Measles, mumps and rubella
MRSA	Meticillin-resistant Staphylococcus aureus
NFP	National Focal Point
NMFPs	National Microbiology Focal Points
OCP	Operational Contact Points
OCS	Office of the Chief Scientist
RRA	Rapid Risk Assessment
SARMS	Scientific Advice Repository and Management System
SLA	Service level agreement
SMAP	Strategic multiannual work programme
SRM	Stakeholder Relationship Management System
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.
VENICE	Vaccine European New Integrated Collaboration Effort
VPD	Vaccine-preventable diseases
VTEC	Verocytotoxin-producing Escherichia coli
WGS	Whole Genome Sequencing
WHO	World Health Organization
WHO Europe	World Health Organization, Regional Office for Europe

ECDC IT systems

System/application	Description
Early Warning and Response System (EWRS)	Supports critical communication about serious cross border health threats, in accordance with decision 1082, through a platform between the Member States, the European Commission, other EU agencies and WHO.
Epidemic Intelligence Information 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 Legionnaires' Disease Surveillance Network, the platform for food- and waterborne diseases and zoonoses (EPIS-FWD), and others)
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.
Event and Threat Management Solution (ETMS)	Aims to transform the areas of Epidemic Intelligence and Response activities in ECDC, providing a new tool for detecting and managing events and threats. The new tool will replace the current TTT and EPIS applications. Significant changes are expected concerning existing processes, data, and technology, including revised concepts for signal, event and threat.
Emergency Operations Centre Intranet (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 website	Supports the submission, edition and publication of Eurosurveillance, a European journal on communicable diseases ranking among the top-10 journals in its field. A modern publication platform, with some interactive features was launched in September 2017.
ECDC Extranets	Support collaboration of public health networks, working groups and institutional bodies (MB and AF). Currently ECDC manages >20 extranets. In 2016, a major migration to an updated platform took place, making new functionalities available and bringing improvements to the user interface.
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)	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 using electronic workflows.
ECED	ECDC Candidate Expert Directory is a roster of potential external experts that allows ECDC - when determined necessary by the Centre - to widen 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 users to benefit using shared professional vocabularies in order to improve transparency and consistency of the language used in ECDC documents as well as to ensure consistent metadata-tagging.
Enterprise Search (ES)	Enterprise Search is single, unified search interface to find all kind of ECDC information, sitting 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 profiles, on a voluntary basis.
Management Information System (MIS)	Internal system used to plan and monitor the implementation of the annual work programme of ECDC

Foreword

2020 will be a year of preparation for the future, after 2019, being a year of transformation, with the election of a new European Parliament, a new European Commission and the preparation for the Brexit, all having a major influence on ECDC.

In 2020, ECDC will set the ground for the implementation of its long-term strategy 2021-2027, address the recommendations stemming from its third five-year independent external evaluation, and embark on two major transversal projects that will shape ECDC and Member States' future in the area of communicable diseases. These are based on feedback received during the Annual meeting of the Directors of the ECDC Coordinating Competent Bodies in April 2018.

The two projects for which ECDC will dedicate efforts from 2020 onwards aim at pulling together sets of planned or new activities and resources in a structured way across the Centre to achieve greater impact and break internal silos. They will be coordinated centrally, to avoid discrepancies or redundancies and to optimise the efficiency and impact of ECDC, in coordination with the European Commission, Member States and other ECDC partners. These projects are:

- ECDC Foresight: ECDC will develop an Integrated ECDC 'Foresight' Study for the detection and identification of threats from emerging infectious diseases, in order to prepare for the future. By identifying risks from emerging infectious diseases, taking into account a vast range of factors and determinants, intervention strategies can be devised and technologies can be deployed to reduce the risk to public health. Based on forecasting, ECDC could provide options for prevention and control of communicable diseases in the EU and in Member States for decision makers to consider.
- E-health in the area of communicable diseases: With the proliferation of new IT technologies, there are new opportunities to effectively tackle the spread of communicable diseases and to provide effective and qualitative responses to new threats in shorter time. Based on its unique experience in managing and analysing cross-border public health data, ECDC will explore the challenges and opportunities offered by these new technologies in order to facilitate the exchange and consolidation, in real time, of data for infectious diseases that need to be understandable and interoperable.

I am fully aware of the complexity and ambition of these two projects but as the Chinese philosopher Lao Tzu once said, 'the journey of a thousand miles begins with one step. So ECDC will work gradually, through pilots and in full discussion and cooperation with the Member States and the Commission, to build upon existing initiatives at EU and Member State level.

ECDC will also continue working on a number of other important priorities. These include in particular, addressing antimicrobial resistance and promoting the prudent use of antibiotics in a 'One Health[1]' spirit, addressing vaccine hesitancy in Europe; further supporting the European Commission and Member States in strengthening the preparedness and response for cross-border health threats; and addressing the Sustainable Development Goals[2] in the area of HIV, TB and hepatitis.

More than ever in 2020 and beyond, ECDC will continue to work to improve lives in Europe and globally in close cooperation with its partners.

Andrea Ammon,

Director

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[1] Seen as a collaborative effort to attain optimal health for people, animals and the environment.

[2] http://www.un.org/sustainabledevelopment/

Mission statement

The Centre's mission is laid down in Article 3 of the Founding Regulations,[1] which states that:

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

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

Key tasks of ECDC include:

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

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

ECDC vision

ECDC is a strong and trusted partner who enables and supports 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.
- **Support the strengthening of public health systems**: We are strengthening European capacities and capabilities to effectively prevent and control 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 through 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.

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[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.
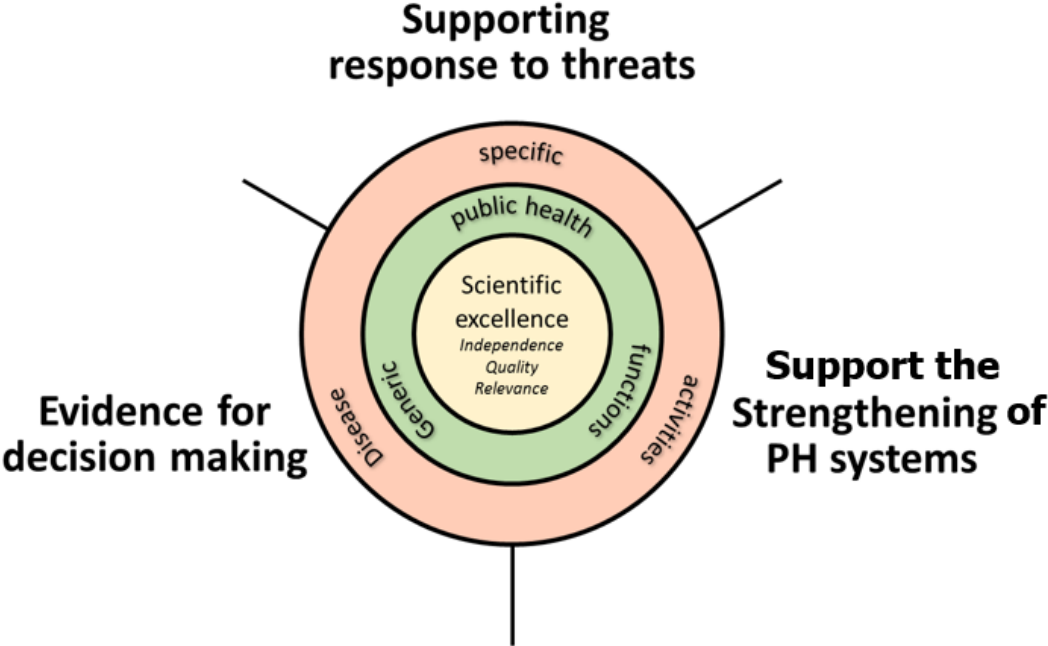
1. General context

Recent examples show that despite increased scientific knowledge, there is no absolute certainty that humankind can predict pandemics and completely prevent them. Horizon scanning is slower than the speed of hidden mutations and adaptations of pathogens. Although the threats might not disappear, our preparedness can increase our ability to prevent and our response might improve and counteract massive damage.

The global dimensions of communicable diseases put pressure on all EU countries to have ready their defence systems and public health infrastructure and to cooperate globally. While the threats and determinants remain the same, more limited resources require prioritisation and better efficiency both at national and EU level.

In the light of the 2017 Rome declaration for a stronger and secure Europe in the world[1], and the European Treaty that institutes a shared competence between the EU and the Member States to protect and improve human health against major cross-border threats[2], ECDC's role and contribution becomes even more essential.

ECDC will focus on the following strategic objectives *t*o fulfil its mandate and be a strong and trusted partner, creating and supporting the Member States and the European Commission in protecting everyone in the EU equitably from communicable diseases (see detail page 17):

- Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission;
- Support efficient decision-making by enabling the sharing of evidence and expertise;
- Strengthen public health infrastructure and processes;
- Strengthen public health workforce capacity and capability;
- Timely detection of serious cross border health threats;
- Coordinate and support the rapid assessment of risks and the identification of options for response;
- Support national and international field response;
- Prepare for the future by assessing and analysing the potential impact and benefits brought by technical and scientific advances[3].

In a context where ECDC, as all EU agencies, is asked to further demonstrate its efficiency as well as its usefulness and added value for the daily life of the people in Europe, many factors remain uncertain. In addition, there are technological changes that will change the way we work at EU and Member State level, like big data and e-health, or that have already started to do so, like next generation sequencing and social media.

In 2021, ECDC will start the implementation of its **long term strategy 2021–2027**, expected for adoption by the Management Board in March 2020. This will structure the way ahead for the future to shape a 'new generation ECDC'.

The long-term strategy will be fed, among other inputs, by the results of the five years' external evaluation of ECDC (for the years 2013–2017) launched in June 2018 and for which conclusions and recommendations are expected by March 2020, and the expected outcome of other evaluations, such as the ECDC surveillance systems evaluations (EPHESUS project), Disease Programmes evaluations and the Fellowship programme evaluation.

Priorities

In 2020, ECDC will contribute to greater health security in Europe giving particular attention to the following areas:

- Tackle antimicrobial resistance; ECDC will tackle antimicrobial resistance, particularly by supporting the European One Health Action Plan against Antimicrobial Resistance. Antimicrobial resistance poses increasing threats to our healthcare achievements. It gained wider recognition by the adoption of a Global Action Plan on Antimicrobial Resistance (WHO). ECDC will also continue and intensify the wider cooperation and support with a wide variety of stakeholders. The coordinated approach will aim towards increased awareness and behavioural change. Increased synergy with other EU agencies and other international agencies will be further explored, particularly further alignment with EFSA and other stakeholders in the 'one health' approach.

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[1] http://www.consilium.europa.eu/en/press/press-releases/2017/03/25-rome-declaration/

[2] Art. 168-5 of the Treaty on the Functioning of the European Union (TFEU) on the role of the EU "*in the area of major cross-border health scourges, measures concerning monitoring, early warning of and combating serious cross-border threats to health*".

[3] e.g. the whole genome sequencing (WGS), genetic engineering for new vaccines, e-health, metagenomics, IT technologies for citizen-based surveillance, big data, use of social media for surveillance, e-learning

- Improve vaccine coverage in the EU; The level of vaccine hesitancy in Europe from the general public and healthcare professionals in a 'post factual' era[1] is worrying, when there is ample evidence that vaccines have been for decades one of the strongest protection measures and a safeguard to citizen health in Europe. ECDC will continue to develop initiatives and tools to improve vaccination coverage in Europe and tackle hesitancy by increasing awareness.
- Support the European Commission and Member States in addressing the Sustainable Development Goals[2] in the area of HIV, TB and hepatitis; The Sustainable Development Goals (goal 3.3) target by 2030, to 'end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases'. ECDC will put particular emphasis on the area of HIV, TB and hepatitis by working closely with the European Commission and Member States to tackle the three diseases and contribute to reduce their incidence.
- Further support the European Commission and Member States in strengthening the preparedness and response for cross-border health threats; Preparedness planning, the identification of current gaps in preparedness and capacity, and capacity building are critical for the EU and its Member States to respond effectively to major epidemics and other serious cross-border health threats, including those generated by intentional or accidental use of biological agents and hybrid threats. ECDC will continue to provide technical support to the European Commission and Member States, based on Article 4 of Decision 1082/2013/EU on serious cross-border threats to health, to further improve preparedness and ensure interoperability of preparedness plans between countries and sectors.
- Focus on strategic partnerships to create synergy and avoid duplication of work; ECDC will in particular actively support Member States through ECDC's Country Support Strategy mechanism that allows assessing and targeting the countries' needs. In addition, the Centre will further strengthen its relationships with external partners such as relevant EU agencies, the WHO, and other Centers for Disease Control (CDCs) globally.
- Further enhance ECDC's performance and monitoring; ECDC shall further enhance its internal performance and monitoring. This relies in particular on well-structured, transparent, efficient, and aligned internal procedures and processes for administration and operations, with clear roles definition, and electronic workflows that empower ECDC staff. ECDC will aim towards a lean and paperless organisation.
- Gradually assess and integrate innovative technological and scientific advances; ECDC will prepare for the future by assessing, analysing the potential impact and benefits brought by technical and scientific advances in the field of communicable diseases. This includes developments in the areas of the whole genome sequencing (WGS), e-health, big data, and use of social media for surveillance. Based on these analyses, ECDC will gradually develop guidance to integrate these developments into routine work in Member States and at EU level.

The present work programme includes a particular focus on these priorities for 2020.

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[1] 'Post-factual' refers to current evolutions such as the dissemination of fake news or the spread of non-scientific news on media and social media

[2] http://www.un.org/sustainabledevelopment/

2. Multi-annual programming 2020–2022

2.1. Multi-annual objectives

Providing evidence for effective and efficient decision-making

- **Strategic objective 1:** Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission.[1]
- **Strategic objective 2:** Support efficient decision-making by enabling the sharing of evidence and expertise.[2]

ECDC will continue to produce evidence-based, scientifically sound and independent assessments, guidance and advice. There will be a stronger focus on the usability of ECDC outputs for decision makers and presenting the science to inform politicians at various levels to strengthen public health, increase health security and tackle inequalities.

Support the strengthening of public health systems

- **Strategic objective 3:** Support the strengthening of public health infrastructure and processes.[3]
- **Strategic objective 4:** Support the strengthening of public health workforce capacity and capability.[4]

ECDC will better tailor capacity-building and other support activities to the needs of the countries. To meet these challenges, ECDC will invest even more in strategic partnerships and ensure collaboration with all actors in the field; these coordination of activities will result in synergies.

Supporting the response to threats

- **Strategic objective 5:** Timely detection of serious cross-border health threats[5].
- **Strategic objective 6:** Coordinate and support the rapid assessment of risks and the identification of options for response.
- **Strategic objective 7:** Support national and international response in the field.

ECDC will continue providing epidemic intelligence on serious cross border threats to EU populations, and produce timely rapid risk assessments including options for response. Upon request, ECDC will continue providing technical support to affected countries, in the EU and beyond when relevant.

- Cross-cutting objective 8: To further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery. This approach must focus on the way that information is managed. It will also create opportunities for both scientific and non-scientific staff to develop and utilise their skills in the most effective ways.
- Cross-cutting objective 9: Prepare for future external challenges through assessment and analysis of the potential impact and benefits brought by technological and scientific advances[6] and their implementation in the field of communicable disease prevention and control.

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[1] This includes: generic and disease-specific epidemiological and microbiological guidance, systematic reviews and expert opinions on the control and prevention of infectious diseases; surveillance reports; health communication materials and advice; gap analyses to inform the setting of research priorities; methodological guidance and toolkits.

[2] This includes: the publication of *Eurosurveillance*; the organisation of ESCAIDE; convening expert and advisory meetings (e.g. Disease and Public Health Network meetings, ECDC Advisory Forum meetings); supporting communities of practice.

[3] This includes: preparedness guidance and toolkits, needs assessments, generic and disease-specific country peer review visits, simulation exercises, laboratory support and support to implementation of Decision 1082/2013/EU and IHR. It also includes the cooperation and coordination with WHO, other agencies and institutions in third countries as well as the cooperation with enlargement and neighbourhood countries.

[4] This includes: the ECDC Fellowship Programme (EPIET/EUPHEM), the ECDC Continuous Professional Development Programme (CPDP), the ECDC Virtual Academy (EVA), *ad hoc* training requested by the MS, twinning, expert exchange and collaboration with other training partners across Europe. All these training activities seek to develop workforce competences, necessary to strengthening capacities and capabilities of public health systems.

[5] This includes: all epidemic intelligence activities, EPIS, molecular cluster detection, EWRS operation,

[6] such as Whole Genome Sequencing, e-health, metagenomics, big data, IT technologies for citizen-based surveillance of communicable diseases and use of social media (crowdsourcing) for epidemic intelligence, apps, e-learning, genetic engineering for the development of new vaccines, climate change.

Multi-annual indicators

Nb.	Multi-annual objective	Indicator	Baseline 2018	Target 2022	Verification
1	**Strategic objective 1** Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Proportion of on-going and completed ECDC scientific outputs, available on the ECDC website	93%	At least 90% of the ECDC scientific outputs planned	Annual plan of scientific outputs
2		Use of the surveillance Atlas by external users

Use of surveillance reports | 27 448 users and 96,900 page views

35 863 downloads* (+18%)

* Downloads from users who did not accept the cookie consent are not counted | +10% per year

+10% per year | Web statistics

Downloads of surveillance reports and number of citations of annual epidemiological report and enhanced surveillance reports |
3	**Strategic objective 2** Support efficient decision-making by enabling the sharing of evidence and expertise	Impact factor of *Eurosurveillance*	7.1	>5	Journal Citation Reports, , SCImago
4	**Strategic objective 3** Strengthen public health infrastructure and processes	Proportion of Member States finding Eulabcap country reports useful for their lab infrastructures and processes improvement	77% (23/30) Member States finding EULabCap reports useful	70 % response of Member States; satisfaction >70% of respondents	Report from annual survey on Competent Bodies' feedback on usefulness of EULabCap report
5	**Strategic objective 4** Strengthen public health workforce capacity and capability	Proportion of target population of professionals (NFPs and OCPs) trained on cross-border threats prevention and control	n/a	30% of target population trained	Target based on the ongoing training needs assessment conducted with MS, CRM
6	**Strategic objective 5** Timely detect serious cross border health threats	Number of connections on CDTR	348 websites/social media sites linked to the CDTR issues	At least +10% per year	ECDC website statistics
7	**Strategic objective 6** Coordinate and support the rapid assessment of risks and the identification of options for response	Average number of PDF downloads for a RRA	On average, an RRA was downloaded by 35 persons in 2018 (Total 9 376 downloads) +16.5%	At least +10% per year	ECDC website statistics
8	**Strategic objective 7** Support national and international field response in the field	Proportion of field response requests positively replied by ECDC	100%	100% of requests positively replied	SRS Unit statistics
9	**Strategic objective 8** Further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery.	Proportion of activities implementation of the Annual Work programme

Timeliness of digitalised key processes

Percentage of budget committed (C1) and percentage of payments executed (C1) in the same year as the commitment | 89.1%

4 electronic workflows available. 1 used in 2018 (request for service/ procurement) Average process time divided by two after digitalisation. 99.8% committed 81.7 paid | >85%

80% processes on time

100% committed minimum; 80% paid minimum | Management Information System

As per list of key processes (covers processes for which digitalisation has been completed)

Monthly monitoring report |

2.2. Strategic areas of operation

Cross-organisational initiatives

In line with these priorities, two cross-organisation projects have been identified where ECDC will dedicate particular efforts from 2020 onwards, in line with feedback received during the Annual meeting of the Directors of the ECDC Coordinating Competent Bodies (CCBs) in April 2018.

The two proposed projects aim at pulling together sets of planned or new ECDC activities and resources in a structured way across the organisation to achieve greater impact and break internal silos within the Centre. They will be coordinated centrally in order to reach common objectives and results, avoid discrepancies and optimise the efficiency and impact of ECDC, in coordination with the European Commission, the Member States and other ECDC partners.

The proposed cross-organisational projects are:

1. E-health and digitalisation

With the proliferation of the new IT technologies there are new opportunities to effectively tackle the spread of communicable diseases and to be able to provide effective and qualitative response to new threats in shorter time. The majority of the EU Member States are currently in the process of healthcare digitalisation. However, future information and data needs of public health are not the primary focus in the ongoing developments. The cross-border nature of infectious diseases means that information also needs to be exchanged and consolidated in real-time and it must be understandable by other countries, which requires interoperability of public health data. The biggest challenge at the moment is the different data exchange formats used which limit Member States interoperability and wider usage for scientific analysis.

The newly published Commission Recommendation on a European Electronic Health Record exchange format[1], aims at addressing this challenge by defining a common data exchange format for several health information domains, including laboratory and vaccination data. ECDC will build on this Recommendation, engaging Member States in proof-of-concept studies that require exchanging a subset of laboratory and clinical data for EU/EEA surveillance purposes. Through these studies, ECDC and Member States will gain a deeper understanding of possible technical, epidemiological, and legal obstacles, when attempting to extract and analyse healthcare data from electronic health information systems. The issues identified will be shared with the eHealth Network to inform further eHealth developments for supporting infectious disease surveillance.

Based on the unique experience in managing and analysing public health data pertaining to cross-border disease surveillance, ECDC will explore the challenges and opportunities offered by these new technologies. One example is the design and implementation of Electronic Immunisation Information Systems (eIIS) at national and subnational levels, which can strengthen the performance of immunisation programs, enable or facilitate monitoring in real time of vaccine coverage, track immunisation history, identify under-immunised individuals, monitor safety signals, estimate vaccine effectiveness, document vaccine shortages and track product-specific information. Other examples are the development of minimum common standards for exchange of surveillance data, electronic reporting of laboratory data to surveillance and alert systems, automation, support to modernise national systems for cross-border surveillance in partnership with EU e-health initiatives, in collaboration with the European Commission and the Member States. To empower citizens and build a healthier society, the Centre will also explore the digitalisation of data collection and the prediction of epidemics with big data, with a pilot in 2020 for automatic screening of big data from social media for event detection.

The Directorate-General for Health and Food Safety (DG SANTE) and the Directorate-General for Informatics (DG DIGIT) recently launched an initiative to collaborate on IT projects with five decentralised agencies in the health and food safety area, including ECDC, which should be operational in 2020. Four IT projects addressing common business requirements have been prioritised and endorsed by the IT and Cybersecurity Board of the Commission. This joint approach improves the chances of success of these stakeholders on the use of innovative technologies such as artificial intelligence for the automation of systematic reviews, whole genome sequencing, electronic health records or the constitution of a catalogue of assets and reusable services.

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[1] [Commission Recommendation on a European Electronic Health Record exchange format (C(2019)800) of 6 February 2019](#)

2. ECDC Foresight Programme

A number of drivers contribute to the (re-)emergence of infectious diseases and reduce the effectiveness of prevention and control measures; they include global and environmental change, social, behavioural and demographic change (including inequalities), (public) health systems change and technological advances.

Two prominent infectious disease challenges for Europe, antimicrobial resistance (AMR) and vaccine-preventable disease (VPD), are heavily affected by these drivers and need particular attention as they have the potential to affect vast swathes of the European population.

'Foresight' provides a structured approach for assessing future trends and threats and can be applied to AMR and VPD. 'Foresight' is based on a combination of quantitative (e.g. modelling) and qualitative (e.g. expert consultation, scenario development) methods, which can assist in identifying major trends, defining strategic work plan priorities, and projecting the likely workforce skills required in the medium to long term and Member State preparedness measures.

In many settings, 'Foresight' has proven to be successful, but has not yet been systematically applied to AMR or VPD at the EU level. This implementation gap can be filled by ECDC.

The main purpose of the Foresight Programme is to assess, prioritise and prepare for threats from AMR and VPD. The overall result will be the establishment of a permanent Foresight Programme at ECDC. It will comprehensively assess drivers of AMR and VPD and their likely impact on infectious disease threats over a three to eight-year period. Measures which might reduce such risks in the future, including public health interventions, research and development, and technological advances will be identified and evaluated.

The scope of the ECDC Foresight Programme is to institutionalise a process of systematic and collective reflection on the medium to long-term future of AMR and VPD threats in Europe and to identify and assess the development of their underlying drivers. Scenario methods will be applied to these drivers to assess their interactions. Insights from different scenarios will be used for preparedness, planning and decision-making. The intent is to build a network of stakeholders in AMR and VPD and bring together experts from different sectors and institutions. After mapping an inventory of existing foresight studies and analysis of key drivers and scenarios, the Centre will map the landscape, identify the major drivers of AMR and VPD, and assess their relative contribution in the European context, using a broad range of methods, including time series analysis, predictive modelling and machine learning. Simulation models will be developed for VPD and AMR drivers and determinants. Interventions will be simulated to assess their potential impact on disease incidence and inequality. The relative effectiveness of these different measures will be evaluated, allowing for discussions on policy options and anticipatory thinking. By 2023, a synthesis of the 'Foresight' Programme will be produced to guide public health interventions and EU preparedness for major AMR and VPD threats. This approach could then be applied to a number of other disease programmes at ECDC.

2.2.1 Surveillance and epidemic intelligence

Surveillance
By the end of 2022, the following objectives will be achieved:

1. **ECDC surveillance platforms support the timely detection of threats and the steering of EU/EEA and Member State prevention and control programmes. [Strategic objective 3]**

By the end of 2022, the surveillance reengineering programme (SSR) will be finalised and should result in:

- A less burdensome surveillance data collection process for Member States, based on a simplified data validation process, the interoperability between surveillance tools, and the development of a surveillance portal which will act as a single entry point for carrying out all surveillance activities;
- A more effective Events and Threats management tool replacing EPIS and integrating all the current EPIS modules and the travel-associated Legionnaires' disease process;
- Enhanced and more timely surveillance outputs through the disease atlas, business intelligence platform, and R applications;
- More informative reports taking advantage of complementary data adding value to surveillance (e.g. disease determinants data);
- A technical solution for reporting, storing, analysing and visualising whole genome sequencing data in conjunction with epidemiological data.

2. **Minimum standards are defined for each surveillance system and monitored in regular intervals to optimise surveillance operations while minimising the burden on Member States. [Strategic objective 3]**

ECDC and the Member States have agreed on minimum standards and monitoring indicators for each EU/EEA surveillance system. ECDC assesses compliance with these standards at least every other year.

3. The inclusion of molecular typing and sequencing into surveillance has been consolidated for the diseases prioritised at European level [Strategic objective 5]

The surveillance systems for which molecular typing and sequencing information has been incorporated run smoothly and meet their objectives. A generic system for sequence data sharing, analysis and visualisation has been implemented and results are routinely integrated into ECDC outputs. Typing and sequencing data for additional diseases have been included as per the molecular typing roadmap. All these systems are regularly evaluated for their performance and impact against agreed indicators, and improved or discontinued if not delivering useful information.

ECDC has strengthened the visualisation and epidemiological integration of WGS across disease programmes by evaluating, implementing and customising data visualisation software for the needs of ECDC and offers a package of tools to ECDC staff and Member States.

The EU-wide WGS capacity across the priority diseases of the molecular typing roadmap is reinforced by offering need-based sequencing support to Member States that have not yet fully transitioned to WGS-based surveillance.

Timely and secure WGS data sharing and storage are secured by customising protected workspaces for WGS data management to fulfil the needs of a range of priority diseases as defined by the molecular surveillance roadmap.

A series of workshops, providing basic bioinformatics and WGS data management, visualisation and interpretation examples based on multinational outbreak experiences, contribute to the integration and use of the WGS component of EU level surveillance. The workshops will be arranged and open for ECDC staff as well as colleagues in Member States.

4. ECDC supports Member States in retrieving relevant public health information from their electronic healthcare systems according to minimum common standards, allowing comparable and enhanced public health surveillance information to be shared automatically with minimal effort. [Cross-cutting objective 9]

Most Member States are digitalising healthcare information and some are already using it for public health surveillance purposes. Through a few proof-of-concept studies with selected countries, ECDC will identify the main technical, data, and legal requirements for utilising healthcare data for EU surveillance. Through a close collaboration with the e-health Network and building on the European Commission Recommendation on a European Electronic Health Record exchange format, ECDC will assess whether further technical standards should be agreed and implemented in Member States, to allow cross-border data transfer for supporting cross-border surveillance. Complementing traditional surveillance systems with data from electronic medical records and laboratory information management systems could lead to more comprehensive, complete and timely data, which in turn will result in better value for Member States.

Epidemic intelligence

By the end of 2022 the following objectives will be achieved:

1. The Event Threat Management Solution (ETMS), one of the components of the Surveillance System Reengineering (SSR) programme will be fully operational, integrating the functionalities required for indicator event surveillance. [Strategic objective 5]

With the implementation of Decision 1082/2013/EU, the chain of communication and responsibilities has been extended to the health security committee (HSC). The supporting tools for threat detection and assessment will be adjusted to ensure appropriate escalation of events at each level, from technical issues up to the political and decision-making level.

The ETMS will replace the current EPIS platforms and Threat Tracking Tool under one integrated environment. This system will be interoperable with the remodelled EWRS and with the indicator based surveillance systems (TESSy, ATLAS, Business intelligence tools), providing an integrated set of platforms supporting the Member States and the European Commission in implementing Decision 1082/2013/EU, in the field of threat detection and assessment. The Event Threat Management System (ETMS) includes the development of platforms for disease programs that currently do not benefit from this tool.

As the operator of the ETMS and EWRS platform, ECDC will steer this adjustment process in close cooperation with Member States and the European Commission.

2. Threat detection as per event-based surveillance has been continually improved. [Strategic objective 5]

The daily screening of different information sources is continuously performed and updated in ECDC. The platforms and tools used by the Epidemic Intelligence will be improved with the integration of the EIOS (Epidemic Intelligence for Opens Sources) steered by WHO, in close cooperation with ECDC and partners included in the Global Health Security Agency Consortium (GHSAC). The surveillance system reengineering programme (SSR) will

allow the integration of the surveillance and epidemic intelligence tools, enhancing the detection and validation of signals.

The aggregators routinely used in epidemic intelligence are continuously evaluated and modified to enhance the quality and significance of the signal detection. The update and further development of mobile applications like the ECDC Threat Reports will continue to improve the availability and dissemination of outputs.

2.2.2 Scientific advice and microbiology

Scientific advice

Independence, scientific quality and transparency are essential for maintaining trust and ensuring EU benefit from work performed under the responsibility of ECDC. ECDC scientific outputs, including ECDC scientific advice, should be based on the principles of scientific independence and quality, transparency and efficiency, and aim to provide the best available evidence and expertise to support informed decisions and actions taken by policy makers, public health professionals, and other stakeholders at EU and Member State level.

By the end of 2022 the following objectives will be achieved:

1. **ECDC has consolidated its position as a primary source of transparent, high-quality and useful scientific opinions and advice on infectious diseases. [Strategic objective 1 and 2]**

ECDC will continue to increase scientific excellence, integrity, transparency and the application of evidence-based principles and methods, as well as good scientific practice for the development of all its scientific outputs, including scientific advice.

The Centre actively involves key stakeholders, in particular the European Commission and the Member States in the identification and prioritisation of the areas, which would benefit from ECDC scientific work and advice and add value. ECDC will do it by collaborating, commissioning and coordinating efficiently with scientific and public health partners in the Member States, investing appropriate resources, using validated standards and approaches for conducting, analysing and reporting the results of the scientific work. All ECDC scientific outputs will comply with ECDC policies on independence, open access and authorship and follow recognised reporting standards as well as consider remaining areas of uncertainty and knowledge gaps.

In addition, ECDC will work to promote its scientific outputs *via* various adapted communication channels, including the ECDC annual scientific conference on Applied Infectious Disease Epidemiology (ESCAIDE), and efficiently reach out to clearly defined target audiences (see chapter II.2.5- communication) to support informed decisions and actions for strengthening Europe's defences against infectious diseases. One additional channel will be the ECDC Institutional Repository providing a citeable and referable source of ECDC scientific outputs for the research community.

2. **ECDC's responsiveness to scientific advice requests is systematically monitored for efficiency. [Strategic objective 1 and 2]**

Responsiveness to stakeholders' scientific advice requests should be proportionate to the identified and prioritised public health needs, the public health urgency and availability of resources. ECDC monitors its responsiveness to scientific advice requests through the ECDC Scientific Advice Repository and Management System (SARMS) and ensures that all requests are addressed and answered appropriately within a mutually agreed timeframe.

Microbiology

In accordance with the ECDC public health microbiology strategy 2018–2022, by the end of 2022 the following objectives will be achieved:

1. **ECDC has regularly assessed and reported on the progress of the capacity level of the EU public health microbiology system for EU-wide surveillance of communicable diseases and epidemic preparedness, using indicators jointly developed and monitored with Member States, and has reviewed the validity and usefulness of the information for improvement with the Member States and the European Commission. [Strategic objective 3]**

By 2022, the EU laboratory capacity monitoring (EULabCap) system has assessed that the critical laboratory capacities and capabilities in Member States and at the EU level are in line with existing EU guidance and regulations. The trend since 2013 has shown progress in capacities across the EU with 19 countries having achieved in 2016 'sufficient' levels of laboratory services for the public health surveillance, threat detection, risk assessment, and support to outbreak response. In the remaining period up to 2022, the next capacity level of surveillance and broader epidemic preparedness for emerging threats could be achieved, assuming that sufficient support and resources are made available to take the necessary actions, including collaborations between Member States.

2. **Well administered and effective External Quality Assessments (EQA) schemes complement the capacity and quality improvement efforts performed by Member States, WHO and the European Commission and are accompanied by technical guidance and expert training. [Strategic objective 3]**

The coordination of EQA schemes by ECDC is much valued and opens opportunities for improvement and mutual exchange. ECDC's EQA's focus on strengthening public health surveillance and threat detection testing. They are run by Disease Programmes as fully complementary efforts to other activities driven by the Member States, WHO and the European Commission. In 2022 the EQA schemes will include developing techniques in molecular typing, most notably the whole genome sequencing (WGS). This brings challenges and opportunities, which ECDC addresses through technical guidance, the ECDC fellowship programme and expert training, twinning and exchange programmes within Disease Networks that facilitate the adoption of new techniques. Use by participants of their EQA results for quality assurance is captured by feedback surveys and EQA impact indicator on an annual basis.

3. **The strategic roadmap for integration of molecular and genomic typing data into surveillance has guided the collaborative efforts with Member States to optimise the efficiency of EU-wide surveillance of high priority diseases and antimicrobial resistance issues. [Strategic objective 2]**

Rapid developments in molecular typing affect the approved roadmap. Whole Genome Sequencing (WGS) offers significant potential gains in cost-efficiency, as a transforming, multi-purpose technology for pathogen identification and characterisation. ECDC National Focal Points for Microbiology and Surveillance regularly provide advice on the application of genomic typing for surveillance and multi-country outbreak investigations. This includes advice and support on the revision of epidemiological investigation methods, (e.g. epidemic case-definition, exposure questionnaire design and integrated genomic epidemiology analytical methods).

Technological advances also deepen the risk of inequities between Member States and raise question on where to best use available resources. Molecular typing is useful for outbreak alert and investigations, and for monitoring dissemination of antimicrobial resistance (AMR) and vaccine effectiveness. In the coming years, ECDC will continue to monitor and support the development of national genomic-based surveillance capacities and promote their harmonisation jointly with the Member States, to ensure that integration of genomic typing data into surveillance addresses the most important priorities, adding EU wide value within available resources.

4. **The further integration of EU clinical laboratories, public health and veterinary laboratories has resulted in a joint, integrated One Health reporting format for human and zoonotic pathogens. [Strategic objective 3]**

Over recent years, the joint reporting with EFSA on zoonotic diseases and antimicrobial resistance made major progress. Cooperation will improve further through harmonisation of surveillance methodology from the human and veterinary sector, to strengthen integration of data and joint-analysis through common surveillance systems. This will lead to more compatible and powerful information, and open new perspectives for decision makers. Using harmonised methodologies and inter-operative databases for typing strains and characterising antimicrobial resistance will bring consistent information to a 'One health' approach for risk assessment.

2.2.3 Preparedness and response

Preparedness

By the end of 2022 the following objectives will be achieved:

1. **ECDC has enhanced country capacities and capabilities through technical support based on Regulation (EC) 851/2004 and Decision 1082/2013/EU, to ensure timely, efficient and effective response to events including local and national outbreaks of communicable diseases, especially those with a potential to cross borders. [Strategic objective 3]**

ECDC will support the implementation of Decision 1082/2013/EU to enhance preparedness for serious cross-border threats to health, through strategic planning and analytical tools. ECDC will develop and update the reporting mechanisms and analyse information provided by Member States to the European Commission on preparedness and response planning (as stated in Article 4).

ECDC will support Member States and Commission with guidance and toolkits for preparedness, needs assessments, country preparedness peer-review visits, analysis of Member States reporting on preparedness and response planning.

ECDC will provide technical support through: preparedness monitoring, evaluation frameworks and indicators; self-assessments and external evaluations (health emergency preparedness self-assessment tool - HEPSA) in line with the IHR monitoring indicators; training modules and workshops to address capacity and/or capability gaps; regional workshops on emerging risks; dissemination and update of the ECDC handbook and tools for the prioritisation of infectious diseases threats; simulation exercises at EU, regional, and national levels, including cross-sectoral

coordination. Microbiology/laboratory preparedness will be more systematically integrated into all preparedness outputs.

ECDC will also strengthen cooperation with ongoing EU Joint Actions in the field of Preparedness and IHR. All activities will be done in close collaboration with WHO and in synergy with IHR requirements, referenced in Decision 1082/2013/EU.

2. Exchange of knowledge and good practices among relevant professionals and organisations further strengthen and keep up-to-date European Union competences and capabilities for health security. [Strategic objective 2]

ECDC aims to ensure the exchange of good practices and experiences in public health emergency and pandemic preparedness, which was repeatedly requested by Member States. ECDC can add value through developing and reinforcing the shared understanding of good practices in public health emergency and pandemic preparedness across its stakeholders.

ECDC will work closely with key international and European stakeholders and academics working in public health emergency preparedness, civil protection, law enforcement and disaster risk management.

ECDC will provide competency-based trainings, simulation exercises, National Focal Points networking, scientific and technical guidance and publications, expert workshops and conferences, coordination with international public health organisations in ongoing threats, to align risk classification and response measures.

ECDC will have established an outbreak response support working group to increase shared knowledge on epidemiological and microbiological methods for outbreak investigations, and to strengthen links with key partners at national and EU levels.

Exchanges of good practices will take place through technical workshops bridging various sectors and stakeholders and conferences, capacity building and exchange of expertise across Member States for crisis communication, literature reviews and scientific studies on the impacts of key cross-sectoral disease determinants and bio-risk awareness through regional workshops.

Response

Response to serious cross border events is a responsibility of Member States that ECDC activities aim at supporting. By the end of 2022 the following objectives will be achieved:

1. ECDC has strengthened the production of rapid risk assessments (RRA) for emerging threats, by cooperating at an early stage with Member States, WHO and other stakeholders through a dedicated platform developed within SARMS[1]. Improved guidelines and templates for assessments will further strengthen the RRAs. [Strategic objective 6]

The rapid risk assessments for emerging threats to the EU are valued by Member States for their timeliness and scientific soundness. They allow Member States to rapidly access the latest information on emerging threats and provide options for their prevention and control, based on the most updated available evidence. Their production process will be further enhanced: Member States, WHO and other stakeholders will directly access and contribute to draft RRAs. The contribution of external and Member States experts will follow the procedure for the 'Selection of experts for ECDC Rapid Risk Assessments' approved at the 43rd ECDC Management Board meeting.

2. ECDC has improved the functionalities of EWRS and operates its remodelled version. [Strategic objective 5]

The remodelled EWRS, with seven integrated modules, has been further improved in 2020, following agreements between ECDC and DG SANTE. Due of their external dependencies, module 2 "interlinking with other Rapid Alert and Information Systems (RAIS)" EU and module 3 "situation awareness" finalised in 2019 will be monitored in 2020, with further implementation envisaged for 2020. Systems to be linked in 2020 are still under discussion, depending on the developments and availabilities from the relevant RAIS. EWRS is ready for the manual linking. The remodelled EWRS will include an improved section for communications from Member States to WHO under the International Health regulation (IHR 2005).

3. The ECDC response support function has been strengthened on the basis of lessons learnt during the Ebola outbreak, in the EU/EEA countries, as well as beyond the EU. [Strategic Objective 6]

The experience gained during from the Ebola outbreaks in West Africa has been essential to the development of the new Health Emergencies Program of WHO and the cooperation between ECDC, DG SANTE and the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) through the European Medical Teams (EMT). By 2022 clear standard operating procedures (SOPs) and memoranda of understanding (MOUs) will

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[1] ECDC Scientific Advice Management System

improve the coordination and interoperability between the different mechanisms, platforms and systems integrated in the response for international health threats.

4. **The ECDC Emergency Operation Centre (EOC) will have strengthened capabilities to support ECDC coordination role for response support during public health emergencies. [Strategic objective 5]**

The ECDC Emergency Operations Centre (EOC) regularly updates the Public Health Emergencies plan (PHE), integrating the recommendations included in the evaluation reports issued every time Public Health levels 1 or 2 are raised. A new training plan and the update of the SOPs and templates facilitate the proper activation and operation of the PHE in ECDC. The EOC in ECDC new premises facilitates the organisation of coordinating sessions with the Health Security Committee (HSC) and stakeholders involved in the response support for EU chemical and biological threats to health and international Public Health Crisis. By the end of 2021, the PHE tutorial will be reviewed and updated.

5. **ECDC will have strengthened Member States and Commission support in maintaining the safety of substances of human origin (SoHO). [Strategic objective 1, 2 and 6]**

ECDC will continue supporting Member States by providing scientific advice on the risk and prevention of communicable disease transmission through transfusion and transplantation, developing ad hoc expert opinions on open questions related to the safety of SoHO, including regular briefings at the meetings of the National Competent Authorities for SoHO and contributing to the EU joint actions. The Centre will also assist the Member States in developing preparedness plans for the prevention of emerging infections transmitted through transfusion and transplantation. In collaboration with the Commission, the Centre will continue to assess the value of introducing new regulations (e.g. on the prevention of sexually transmitted infections through SoHO). ECDC will also conduct biannual evaluations of national policies on testing and screening of donated blood, tissues and cells.

2.2.4 Training and capacity building

Training
By the end of 2022 the following objectives will be achieved:

1. **The Continuous Professional Development Portfolio (CPDP) for Member States provides a wide range of opportunities for Member State professionals engaged in communicable disease control with cross-border relevance. [Strategic objective 4]**

ECDC will focus on continuous professional development on competencies considered as priorities by Member States, targeting public health professionals working with communicable disease control across borders. The National Focal Points will prioritise and help shape the contents. The CPDP aims to develop a competent workforce, skilled to work and interact with experts in ECDC, other countries and other international organisations at the EU-level, to address cross-border health threats. It offers a wide range of opportunities: face-to-face and distance learning, exchange of professional experiences, training resources and tools to support evidence-based practice. The CPDP (Summer School, Winter Workshop, ECDC Senior Exchange Visits and training courses offered in disease areas and public health), covers a broad range of generic competences for experts working in communicable diseases, to ensure effective preparedness, prevention, detection, assessment and control of threats with cross-border dimensions. E-learning will offer easier access and a greater outreach. The ECDC training offer is included in an annual online Catalogue, to provide information to Member States for planning and identifying professionals who can benefit most.

2. **The ECDC fellowship programme (EPIET/EUPHEM) is the main training effort, with an in-service and learning-by-doing format, targeting junior and mid-career professionals, with special focus on countries that previously benefited less from the programme. [Strategic objective 4]**

The Fellowship programme is joint-collaborative effort between ECDC and the participating Member States, targeting experts in the early stages of their career, with a focus on surveillance and outbreak detection and control. The epidemiology (EPIET) and public health microbiology (EUPHEM) pathways have been harmonised under the ECDC fellowship programme. They aim to respond to EU and Member State's needs, with different options based on the trainees' background and competency profiles by discipline. An external evaluation of the programme in 2018–2019 provided input on expected needs, emerging skills and competencies to be part of the curriculum. Multidisciplinary investigations will be encouraged, including partnerships with other EU agencies (e.g. EFSA fellowship programme for food risks assessors). More effort will be spent in training fellows from countries which have not benefited much from EPIET/EUPHEM.

3. **The ECDC Virtual Academy is fully operational, making distance learning courses freely available for all public health staff in the EU, and offering a blended learning approach for all ECDC trainings for its primary target group. [Strategic objective 4]**

Capacity building and training will gradually offer both standalone and blended learning (mixed face-to-face and e-learning) for the primary target group of ECDC's Public Health Training strategy: national experts from the ECDC Coordinating Competent Bodies network (national focal points, operational contact points, national coordinators, and their alternates). E-learning can extend this primary target audience and offers new opportunities for more personally targeted training.

ECDC will let Member States access the e-learning platforms to translate courses and materials in order to facilitate the cascading of training in countries. ECDC contributes through the platform, and Member States share responsibility for the modules and adaptation of the contents. National public health institutes should benefit most, particularly when also involved in the CPDP. Developing a network of online expert moderators, and course managers is key to the success of ECDC distance learning.

4. **A network of trainers, provision of training tools and materials will facilitate knowledge transfer and cascading[1] of training, in coordination with National Focal Points and in collaboration with other training providers. [Strategic objective 4]**

By 2022, ECDC will provide access to training resources and materials. CPDP and the Fellowship Programme participants will commit to conduct knowledge transfer. ECDC will facilitate the creation of a 'faculty of online moderators and facilitators', primarily from participants to the training programmes and supervisors of the Fellowship Programme. Collaboration with external stakeholders (e.g. the Association of Schools of Public Health in the European Region - ASPHER) will allow outreach expansion for the CPDP and Fellowship Programme, and to ensure ECDC training efforts complement existing initiatives, such as the creation of communities of practice and the exchange of experience and tools among trainers.

5. **All trainings will be based on needs assessments through annual consultations and regular surveys at the EU level, and the development of tools for countries to manage them nationally and sub-nationally. [Strategic objective 4]**

Assessment of the countries capacity, training resources and needs is key for capacity building. Annual consultations with the National Focal Points for Training (NFPT) will align EU and national training strategies and identify needs. The NFPT's Training Site Forum[2] will be consulted. ECDC will organise surveys of its Coordinating Competent Bodies on capacity, training resources and needs, and gap analyses. Taking into account the health systems diversity and multiple professional disciplines, the methodology and assessment tools will be aligned with other international partners (i.e. WHO) and administered at national and sub-national level.

Coordinated country support

By the end of 2022 the following objective will be achieved:

1. **ECDC ensures integrated, coordinated and sustainable capacity support to Member States based on expressed needs and available resources. [Strategic objective 3]**

The third ECDC external evaluation explicitly recommends to 'get closer to the countries'. A better understanding of the variety of public health systems and a systematic assessment of the Member States' vulnerabilities and needs will allow a more strategic investment of ECDC resources, to decrease the capacity and capability gaps across the EU. This is in line with the Commission's 'State of Health in the EU' initiative, aiming at strengthening country and EU-wide knowledge on health, to better support EU Member States and Commission services in their evidence-based policy making and to boost analytical capacity, that ECDC will support.

Based on the annual calls launched in 2017, 2018 and their evaluation, ECDC proposes a more streamlined approach, as discussed with the National Coordinators (NC) of the Coordinating Competent Bodies (CCBs). In 2020 ECDC will analyse all existing incoming data and information (quantitative and qualitative) from Member States to identify the countries' vulnerabilities and needs. The results will be discussed during the Joint Stakeholders Meeting (JSM) in May 2020, and by the end of 2020, a mechanism will be proposed to the CCBs on how to identify the vulnerabilities and needs and prioritise them. Synergy will be ensured with other external tools and mechanisms, available to identify public health system vulnerabilities in countries.

Internally, ECDC will ensure that:

- Procurement solutions are identified to promptly facilitate response to countries' needs;
- A harmonised corporate approach is applied to country visits, to best harvest information for country support;
- A harmonised corporate approach is applied to network meetings and interactions with countries, to harvest the potential for information relevant to country support work.

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[1] Cascading: Transferring acquired knowledge and skills to others.

[2] Operational contact points for public health microbiology and field epidemiology training

The link will be strengthened with ECDC activities on the various diseases and technical areas.

International relations

The ECDC International Relations Policy 2020, approved by the Management Board in November 2017, is fully aligned with the relevant EU external policy frameworks. The implementation of priorities and strategic objectives relies on guiding principles for coordination and partnership, particularly the coordination of activities with relevant Commission services and the European External Action Service through DG SANTE.

In accordance with the priorities identified in the ECDC International Relations Policy 2020, by the end of 2022 the following objectives will be achieved:

1. **The capacities of EU pre-accession countries to prevent and control communicable diseases, and their progress to implement the EU acquis has been assessed. Technical collaboration with ECDC progressively increases their involvement in the Centre's activities and strengthens their communicable disease prevention and control systems. [Strategic objective 3 and 4]**

ECDC will finalise the assessment of the EU pre-accession countries. Based on the recommendations, the Centre will support the strengthening of their systems, by supporting the preparation of action plans, EU assistance programming, and contribute to planned events. ECDC will assist the Commission in following-up pre–accession countries progress.

Subject to availability of EU external financial assistance, ECDC will further support the EU pre-accession countries' preparation to fully participate in EU communicable disease surveillance activities and ECDC work. ECDC will further assist their integration into ECDC surveillance systems (data reporting to TESSy, participation in EPIS-FWD and EPIS-ELDSNet and future ETMS) and intensify cooperation against AMR, in accordance with the One Health approach and the EU acquis. ECDC will continue to support the strengthening of their public health microbiology system capacities and capabilities using the annual monitoring tool (EULabCap) adjusted for EU pre-accession countries (ENLabCap) to further support their EU accession process. ECDC will assist national competent authorities to participate in ECDC NFP networks and activities to foster exchange of best practices, regional dialogue and advocacy on communicable disease surveillance, detection, preparedness, and response to current and emerging threats.

Based on the results achieved, ECDC will initiate a new EU-funded technical assistance project to support the implementation of activities with EU pre-accession countries.

2. **ECDC has contributed to enhance health security in EU neighbouring partner countries (ENP) by strengthening their capacity to respond effectively to communicable diseases threats and supported their progressive integration into ECDC activities (subject to availability of EU financial assistance). [Strategic objectives 3 and 4]**

Subject to availability of EU financial assistance, ECDC will deepen its technical cooperation with ENP partner countries to strengthen their capacity to respond to communicable diseases threats, particularly by:

• Strengthening preparedness, prevention and control, threat detection, and assessment capacities;
• Continuing their progressive integration into ECDC networks, activities, and systems;
• Supporting the approximation of EU standards and best practices.

This cooperation will be broadened to new areas of common interest and EU public health priorities (e.g. public health microbiology, antimicrobial resistance, vaccine preventable diseases)

Subject to the availability of external EU funding, ECDC will support the European Commission to implement Association Agreements between the EU and three Eastern Partnership countries (i.e. Georgia, Moldova and Ukraine). Upon request, and based on the assessments of their communicable disease prevention and control systems, ECDC will support assessing their capacities, developing action plans, and support the European Commission in monitoring its implementation.

Based on the result of the discussions with the Commission for a long-term mechanism for the sustainable funding of the MediPIET programme, ECDC will remain a close partner of the MediPIET network undertaking a leading and scientific advisory role on the training programme.

3. **ECDC has strengthened its cooperation and developed a mutually beneficial bilateral partnership with major centres for disease prevention and control across the globe. [Strategic objective 5]**

To support the continuous improvement of threat detection and assessment through international cooperation, ECDC will prioritise and streamline its technical cooperation with WHO Europe and other key international partners and with the major non-EU/EEA CDCs and national public health institutes that have formalised bilateral

partnership with the Centre (e.g. US CDC, Public Health Agency of Canada, China CDC, Israel CDC, and African CDC).

This cooperation aims at bringing added value to ECDC activities for the prevention and control of communicable diseases through strategic coordination, exchange of information and best practices, and joint activities on threats of common interest. This partnership will be monitored, and evaluated to assess its added value, potential gaps and need for new cooperation arrangements.

ECDC will explore the benefit of arrangements with new partners, depending on the existing interactions (e.g. joint activities, number of threats, participation and/or integration in existing ECDC platforms), expected added value to ECDC's mission, and EU external policies.

2.2.5 Communication

By the end of 2022 the following objectives will be achieved:

1. **ECDC has efficiently reached out to it's target audiences with timely, easily available, impactful, re-usable scientific and technical outputs that provide more value for decision makers, and adjusted to their needs. [Strategic objective 1 and 2]**

ECDC uses a broad mix of communication channels, with digital and web at the core of its communication activities. The new version of ECDC's web portal is focused on the needs of the users and adaptable to technological developments and trends. It is easily searchable and fully supports audio-visual content, from maps, infographics and data visualisations to contemporary video and audio formats. ECDC is generating appropriate web-based content, easily used by the media. Media outreach and social media outreach are integrated. ECDC has produced a significant volume of scientific and technical content available and useful for experts around Europe. Improving the awareness and availability of this content is critical.

ECDC's products are of more direct value to decision makers, and the communication section has a particular role in delivering reusable and impactful outputs to all target audiences. For other types of communication, ECDC aims to develop new formats, suited to its mix of target audiences, without compromising on the scientific quality or national responsibilities. Development of new outputs and evolution of existing ones will be a gradual process which incorporates feedback. Specific communications to support the new Council Recommendation (see below under III 6.7 VPD) will be developed to support specific priorities such as vaccine hesitancy

2. **ECDC's visibility has increased as an independent, transparent agency that produces and disseminates high quality scientific content. [Strategic objective 1 and 2]**

The visibility of ECDC's scientific content among public health experts and policy makers will increase for all content produced by ECDC experts, irrespective of the communication channel.

ECDC will continue its strong corporate branding as 'One ECDC' that will help to convey its corporate identity, and will apply it consistently in all its communications, with a limited set of associated sub-brands, for example, the annual scientific conference on Applied Infectious Disease Epidemiology ESCAIDE, the editorially independent scientific journal *Eurosurveillance*, and the ECDC Fellowship programme. The brands ESCAIDE and *Eurosurveillance* provide professional well-recognised fora for infectious disease/public health experts in Europe (and beyond) to present, discuss and disseminate their scientific work. The ECDC Director and Chief Scientist, supported by experts in infectious diseases and public health functions, are the main corporate key figureheads in reinforcing ECDC messages and public image.

ECDC has defined clear rules when engaging in joint and supportive activities with stakeholders and partners in ways that respect its independence and strengthen its scientific reputation.

2.2.6 Areas of work - Diseases

By the end of 2022 the following objectives will be achieved, following the ECDC Disease Programmes' Strategy (2018):

1. **ECDC has driven scientific excellence to inform public health decision-making, by contributing to scientific agendas at the EU and Member State levels and translating scientific findings into user-friendly tools and methods for the use by Member States. [SPD Strategic objective 1 and 6]**

The specific actions are performed by the Disease Programmes (see annual programme in part III below).

2. **ECDC has identified and addressed Member State[1] gaps and needs in the area of (groups of) diseases or health issues. [SPD Strategic objective 1, 3 and 4]**

Gap/needs identification is conducted through interactions with ECDC Disease Networks and their Coordination Committees, using the IRIS[2] tool, and through other channels. The Disease Programmes will address the identified public health needs at EU level, individual countries or group of countries.

3. **ECDC will have further enabled communicable disease prevention and control through networking with external disease experts. [SPD Strategic objective 2, 3, 4 and 7]**

ECDC has brought together the best scientific experts in many disease areas, either in disease networks, as part of the Coordinating Competent Bodies structure or in *ad hoc* scientific panels. ECDC-driven EU networks will contribute to public health system capacity building and the adoption of EU harmonised surveillance and detection methods to improve EU epidemic preparedness. Since 2017, a systematic evaluation of all Disease Programmes, following a common protocol, has started and will continue. The results of these evaluations, alongside the results of the surveillance network evaluation (the EPHESUS project) will contribute to the consolidation of the work of ECDC disease networks.

4. **ECDC will have assisted Member States in evaluating the progress towards reaching public health objectives through monitoring. [SPD Strategic objective 1.]**

ECDC monitors the progress towards reaching public health objectives based on EU legislation or other international commitments (e.g. those of WHO, UNAIDS, and other organisations).

5. **ECDC will have conducted expert analysis and interpretation of surveillance data to inform public health policy and practice. [SPD Strategic objective 1]**

This includes identifying and prioritising needs for analyses of surveillance data from TESSy and other data sources to generate results to answer important public health questions.

6. **ECDC will have detected outbreaks and emerging issues to ensure prompt assessment and response. [Strategic objective 5.]**

This includes contribution to rapid risk assessments and support to response by Member States.

2.2.7 Management

General management

1. **By 2022, an organisation-wide integrated management framework is in place.**

In order to have a continuum and a greater coherence between ECDC's vision, strategy and day-to-day activities, a strategic, integrated and structured approach for the whole organisation is adopted. The ultimate goal is to align the ECDC strategy with operational excellence, align organisational behaviour to the strategy, increase the effective and efficient use of resources in the Centre, and continuously improve ECDC's efficiency and performance. Key elements of this framework include the organisation's vision, the governance and monitoring models, the policies, planning and execution processes including skills, roles and responsibilities, information management and how IT as an enabler supports the organisation. With this coherent set of principles, methods and models, synergies within the organisation can be developed and economies of scale can be implemented.

Establishment of the Executive Office in 2019 will provide the corporate framework for the effective and efficient functioning of the Centre. The development and implementation of the ECDC Integrated Management Framework will be one of the main elements of work in the coming years. The optimisation of defined key processes, the development of intervention logic for the implementation of ECDC strategy 2021–2027 and key performance indicators for its monitoring will be an important part of this system. The quality management approach for ECDC will be assessed, defined, and implemented to increase the effectiveness and efficiency of the Centre's work practices.

Collaborations

By the end of 2022, the following objectives have been achieved:

1. **ECDC has strengthened its capacity and role as the EU technical reference point on issues related to communicable diseases for international and multinational organisations as well as public health players involved in public and global health. [Strategic objective 1]**

ECDC will coordinate its international activities with the European Commission (e.g. DG SANTE, DG ECHO, the Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR) and the Directorate-General for

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[1] Also at the EU level.

[2] ECDC tool for the prioritisation of scientific outputs

Research and Innovation (DG RTD)) as well as with other services e.g. EEAS, CHAFEA. Based on its technical mandate as well as the lessons learned from its support to the response to Ebola in West Africa, ECDC will strengthen the EU response support in humanitarian crises, through existing European Commission structures, including the European Medical Corps.

ECDC will continue the coordinate its technical work with the WHO Regional Office for Europe (WHO Europe), through regular coordination meetings. The Management Board of ECDC will be kept informed about the joint work plans which may be published on both websites. The collaboration will be intensified in two areas: preparedness/IHR (International Health Regulation) core capacities and work with the EU enlargement countries. Strengthened collaboration will benefit the countries concerned.

Cooperation with the major Centers for Disease Control (CDCs) across the globe will be strengthened, including building relations with new partners.

2. **ECDC will have intensified its collaboration with other EU agencies and bodies. [Cross cutting strategic objective]**

Existing collaboration agreements with EMA, EFSA, and EMCDDA are strengthened. Annual meetings at the Director level will ensure strategic liaison, and further areas for increased synergies will be explored. ECDC will also investigate the potential of intensified collaboration with other agencies (e.g. EEA, FRONTEX, FRA).

As an Agency funded from the EU budget, ECDC is subject to scrutiny by the European Parliament, in the context of the EU budgetary process. The Parliament can request scientific opinions from ECDC, and the ECDC's Director appears to Parliamentary committees when requested.

ECDC consolidates a positive and sustained working relationship with the European Parliament committee for public health (ENVI) and works with Parliament's Budgetary Control Committee. Maintaining and further developing contacts with the European Parliament will continue to be a key priority for ECDC during this period.

3. **ECDC has developed credible collaboration with its key stakeholders. [Cross cutting strategic objective 8]**

The efficiency of existing cooperation is improved and strengthened with the relevant stakeholders assuring the quality and service provided. A sophisticated cooperation with ECDC stakeholders, facilitated by the CRM system, will be further developed as a user-friendly one-stop-shop - the unique central repository of information about ECDC's internal and external stakeholders, tracking and monitoring key stakeholders' activities and communications, and streamlining the meetings management process. The CRM system will be further expanded into a Stakeholder Relationship Management system (SRM) that will keep track of all relations between ECDC and its stakeholders, allowing for more tailored interactions.

Independence policy
1. **By 2022, established electronic support tools and ongoing training by ECDC have assured a solid implementation of the Independence Policy. [Strategic objective 1]**

The Independence Policy, in place since 2013 was revised in 2016. A system of electronic submission of declarations of interest was established. Further development of the system is key to reducing the amount of errors, facilitating the publication of the submitted Declarations of Independence and enabling faster and more rigorous checks for conflicts of interests, as well as checks for veracity. Experience from other agencies shows that an Independence Policy needs constant adjustment and refinement, which is foreseen in the flexibility of the electronic submission system and the establishment of repeated training of those applying the policy in practice. In addition, further internal guidelines for practicalities of the check will be developed.

Resource management
By the end of 2022, the following objectives will be achieved:

1. **Results and EU added value. [Cross cutting strategic objective]**

ECDC will maintain a high level of reliability of its accounts and of the underlying transactions; maintain the high level of budget execution, low vacancy rate and compliance with rules and regulations that apply to ECDC activities as a publicly funded independent agency of the European Union.

2. **Continuous improvement, efficiency and effectiveness. [Cross cutting strategic objective]**

ECDC will aim towards a lean and paperless organisation. All areas of resource management will continue to be scrutinised for simplification and effective support to the Centre's operations. This relies in particular on well-structured, clear, efficient, and aligned internal procedures and processes for administration, with clear role definition, and electronic workflows that empower ECDC staff, as well as improve ECDC wide content and knowledge management (governed by a consistent set of information policies - ensuring transparency, consistency and interoperability).

3. **Staff resilience and wellbeing. [Cross cutting strategic objective]**

ECDC will make sure it has the relevant competencies to address public health challenges. The Centre will therefore further strengthen its ability to adapt to evolving EU challenges and priorities, including BREXIT. This will allow the Centre to better support and complement the European Commission and the Member States while remaining an attractive place to work.

4. **Crisis management and business continuity. [Cross cutting strategic objective]**

ECDC will explore new ways of working and collaborating, offered by its new and modern premises to make the Centre more efficient and effective. It will shape the way the Centre works on a day to day basis; for example, moving towards e-administration and full electronic workflow, document and records management will help reduce paper-based administrative tasks, improve internal routines and clarify areas of responsibilities for all actors; it will impact the Centre's culture and increase ECDC's contribution in terms of corporate and social responsibility. ECDC will continue to focus on strengthening the security of its staff and visitors against threats, including its ability to manage any emergency and ensure the continuity of its operations at all time.

Information and communication technologies

By the end of 2022, the following objectives have been achieved:

1. **ECDC IT services are fit for purpose, interoperable and innovative. [Cross cutting strategic objective]**

IT products are increasingly using common platforms and shared services. ECDC is proactively looking for, experimenting and implementing new technologies that enable better communicable disease prevention and control. Business applications are developed and maintained according to the nature of their functions.

2. **ECDC IT services are reliable, sustainable and best value for the money. [Cross cutting strategic objective]**

Cloud-based solutions (SaaS, PaaS, IaaS) are increasingly used. ECDC benefits from the common services provided by the European Commission and other EU Institutions and Agencies. The Centre ensures that IT services and data, with their constituting business and economic high value, are secured in terms of availability, integrity, confidentiality and traceability;

3. **ECDC IT services are quantitatively managed. [Strategic objective 9]**

The usage of IT solutions and services is measured and monitored, and decision- making in the IT area is based on performance indicators and measurements. IT services are delivered according to Service Level Agreements (SLA). Continuous improvement of services and process is applied, based on the measurements.

4. **ECDC IT services are delivered in partnership with external service providers with efficiency and quality. [Cross-cutting objective 8]**

After the implementation of the IT Target Operating Model, external service providers are responsible for a significant part of the operational IT services. ECDC has good contract management capabilities and works closely together with the suppliers to continuously improve quality and cost effectiveness of the IT services.

3. Human and financial resources - outlook 2020–2022

3.1. Overview of the past and current situation

- Staff population overview 2018. See Annex 3 - Table 1
- Expenditure for N-1. See Annex 2: Table 1: Expenditure.

3.2. Resource programming 2020–2022

3.2.1 Financial resources

Justification

- **Revenue:** detailed data provided in Table 2 in Annex 2
- **Expenditure:** (detailed data provided in Table 1 in Annex 2)

Title 1. The budget 2020 is forecast to accommodate the salaries and salary related costs of the implemented establishment plan and the Centre's contract staff. A decrease of the Swedish exchange rate in 2018 impacted the weighting factor for Sweden. The budget for salary related expenditures was estimated considering the 2019 implementation. As we have seen in 2018, the impact on the budget line of the weighting remains an unknown and unpredictable macro-economic part of the ECDC's budget planning and its execution. This is due to the fact that the correction coefficient applied to the salaries in Sweden, and is driven, to a large extent, by the fluctuations of the Swedish krona.

Title 2. In 2020 the total budget of Title II remains at the same level as in 2019, based on the budget execution in 2018 and following the move of ECDC to a new premises.

Title 3. The amount of Title 3 for 2020 provided in Annex 2 – Table 1 will increase by 3.9% compared with 2019. The 2020 budget is forecasted to reach EUR 21 262 000. This increase originates in the heightened EU contribution for ECDC, as determined by the Commission Communication COM(2013)519 on human and financial resources for decentralised agencies 2014–2020. The Title 3 budgets for 2021 and 2022 are envisaged at the same level as in 2020.

Title 3 will be used to implement ECDC work programme activities through external procurements, grants and meetings. The detail of the expected outputs is given in part 3 of the present document.

Budget Outturn and cancellation of appropriations

Information is provided in Table 3 with short descriptive information and justification. See Annex 2.

3.2.2 Human resources

Overview of the situation over the years 2020–2022

New tasks

The Centre has not been entrusted with any new tasks requiring the extension of the agency mandate.

Growth of existing tasks

A number of tasks have been added and more are expected to be added within ECDC's current mandate in the implementation of Decision No 1082/2013/EU. The Council recommendation on strengthened cooperation on vaccine preventable diseases as well as recent year's discussions on ECDC's support to unusual outbreaks may lead to an increased workload.

Efficiency gains

ECDC continues its efforts towards delivering efficiency gains. The development of its foreseen 'integrated management framework' and a review of its Quality Management system will contribute to increased efficiency at all levels of the organisation. The introduction of new methodologies, including the automation of administrative and operational processes are critical aspects to reach and sustain further efficiency gains, promote a paperless environment and reinforce compliance. For example, in 2018 four administrative processes were automated (electronic work flows) and another three processes are being automated in 2019. A first analysis of their use, conducted by mid-2019 already showed a significant adoption by users and a clear reduction in the timeliness of the process, due to the elimination of unnecessary steps or waits, while ensuring legal compliance. This effort will be continued and by 2021 ECDC will automate all internal procurement preparation steps in an integrated procurement portal, to guide internal staff and facilitate the timely, compliant and efficient preparation of

procurements, in a shorter time. In the area of staff's travel, an electronic mission tool has been launched in 2019 as part of the HR system. The full impact of these automations are expected in 2020 and 2021. In the area of project management, the Centre has had a common methodology in place since 2018 which allows for a consistent approach and better optimisation of resources for projects. ECDC is also engaged in a number of joint procurements with other EU agencies and is using shared IT services (such as the disaster recovery centre of EUIPO).

As mentioned in this document, ECDC is also implementing a number of actions to gain efficiency such as:

- The reengineering of its surveillance systems, for increased efficiency (see 1.1 Surveillance, obj. 1 p.39);
- An evaluation of the surveillance systems in Europe (EPHESUS) (see 1.1 Surveillance, obj. 2, p.40);
- An IT transformation programme, with the outsourcing of some of its IT activities with the objective to make efficiency gains (see 7.3 ICT – obj. 3, p.99).

Finally, a number of external or internal evaluations took place in 2018 and 2019 and they will result in a number of action plans to strengthen the efficiency of the Centre and its operations.

Negative priorities/decrease of existing tasks

In the Centre's Strategic Multi-Annual Plan 2014–2020 it is stated that following post cuts (which was completed in 2018), the portfolio of activities may need to be reduced. Furthermore, the recent period of reduction of staff focused on posts in administration and support (50 % of the reduced temporary agent posts were in that area), and efforts will continue to look into process efficiency in order to facilitate the best use of the Centre's staff.

Redeployment of resources in view of budgetary constraints

While the Centre acknowledges the request by the European Commission and the budgetary authorities of 5% staff cuts (on head counts) over five years, and the additional request for 5% staff reduction for the agency re-deployment pool (which was finalised in 2018), the work load of the Centre has increased (not least in view of Decision 1082/2013/EU as well as an increase in activities in recent years particularly in the VPD area), and the Centre's staff surveys show that staff feel overwhelmed by their work load.

Conclusion on evolution of resources compared to the European Commission Communication 2014-2020

The Centre concludes that although there was a growth in the existing tasks of the Centre, the required staff reduction was achieved. However, it needs to be reiterated that prioritisation of activities is crucial to avoid increased stress levels among staff. The continuous efforts to achieve further efficiency gains related to the Centre's processes will continue to remain of key importance for the future.

4. Work programming 2020 Priorities

Executive summary

The work programme 2020 is based on ECDC's strategic work areas, providing evidence for decision-making, strengthening public health systems, and supporting response to threats, as well as its multi-annual objectives (see p.17).

Surveillance and epidemic intelligence

In 2020, ECDC will have its remaining epidemiological surveillance systems externally evaluated. It will continue implementing the Surveillance Systems Reengineering roadmap to reinforce its technical surveillance platforms and processes.

Scientific support

ECDC will improve its prioritisation tool and repository for scientific advice. It will further improve the quality of the scientific outputs delivered. ECDC will continue to organise the ESCAIDE conference and ECDC engagement with EU funders and ongoing research projects will be investigated further. Training on evidence-based practice and decision-making will be organised. On microbiology, ECDC will continue supporting and monitoring the capacities and capabilities for essential microbiology services of Member States for surveillance, prevention and control of infectious diseases. Studies will be performed as part of implementing the molecular typing strategic roadmap.

Preparedness and response

ECDC will continue to support the Commission and Member States in monitoring the implementation of Decision 1082/2013/EU in the area of preparedness, and support country preparedness capacities and capabilities regarding communicable diseases through technical guidance, simulation exercises, tools, and technical support to the Health Security Committee. Further implementation of tools, such as the outbreak questionnaire investigation will improve ECDC's capabilities of response support to Member States.

The ECDC Emergency Operation Centre will be further strengthened, the Public Health Event plan updated and mobilisation mechanisms for public health response teams further developed. ECDC will continue to provide rapid risk assessments to Member States and the Commission and develop new tools for rapid investigation and analysis of multi-country outbreaks. Rapid risk assessments will be developed as live documents with a quick and easy access to new data and updated information.

ECDC will continue supporting Member States by providing scientific advice on the risk and prevention of communicable disease transmission through transfusion and transplantation, developing ad hoc expert opinions on open questions related to the safety of SoHO, including regular briefings at the meetings of the National Competent Authorities for SoHO and contributing to the EU joint actions. The Centre will also assist Member States in developing preparedness plans for the prevention of emerging infections transmitted through transfusion and transplantation. In collaboration with the Commission, the Centre will continue to assess the value of introducing new regulations. ECDC will also conduct biannual evaluations of national policies on testing and screening of donated blood, tissues and cells.

Training, capacity building, and international relations

The EU Fellowship Programme (EPIET and EUPHEM), and its underlying competencies and curricula will be further developed based on the outcome of an external evaluation in 2018/19. The Continuous Professional Development Programme (CPDP) will meet the training needs of the ECDC/CCB networks with a focus on competencies needed for efficient work on cross-border health threats. Additional courses, notably e-learning modules are being gradually added. A new mechanism for supporting countries based on requests for support is being fully implemented. Discussions are ongoing to find long-term sustainable funding of the MediPIET training programme. ECDC will continue providing scientific leadership of MediPIET, proactively supporting the sustainability of the MediPIET training network and fostering its links with the Fellowship Programme (EPIET and EUPHEM).

In terms of international relations and cooperation with EU pre-accession and ENP partner countries, ECDC will monitor and deliver regular progress reports on the participation of these countries in ECDC activities and their use of existing ECDC tools in accordance with the EU policy priorities and ECDC International Relations Policy. ECDC will finalise its assessment of EU pre-accession countries and assist them and the Commission in strengthening capacities. ECDC will continue gradual integration of EU pre-accession countries into ECDC activities and systems

focusing on priorities of the countries and EU added value. Depending on availability of external financial assistance from the European Commission, ECDC will provide technical support to strengthen the countries of the Western Balkan region. In addition, subject to availability of EU funding, ECDC will continue its cooperation with ENP partner countries to bring these countries closer to EU standards and foster health security by strengthening country capacities to respond effectively to health threats related to communicable diseases. ECDC will further enhance its cooperation with major global centres for disease prevention and control as well as with WHO.

Communication

ECDC will continue to publish timely scientific and technical content to its target audiences, through a variety of communication channels. Technical support will be provided to national health communication campaigns, with a focus on antimicrobial resistance (European Antibiotic Awareness Day) and vaccinations. Transition to a new content management system is foreseen, significantly improving the searchability and navigation structure of the ECDC website. Further efforts will be made to increase the visibility of the Centre to its key target audiences with a focus on the added value of our work.

The journal *Eurosurveillance* will continue to be widely known by public health experts/scientists and policy makers and be recognised as source of high quality, open access relevant information and data for (timely) public health action. The journal will support capacity building activities in the field of communicable diseases and publication ethics. Social media and scientific gatherings will be used to support dissemination of content and interact with a variety of stakeholders. Content and educational activities will support development of experts' critical appraisal skills and awareness of research integrity, in particular publication ethical matters. *Eurosurveillance* continues to rank among the leading journals in its field.

Disease work carried out by disease programmes

From 1st January 2020, ECDC disease work will be organised in a new Disease Programme Unit with four Disease Programmes (merged from presently seven programmes: Antimicrobial resistance and healthcare-associated infections programme (ARHAI), Emerging-, zoonotic, vector-, food-, and water- borne diseases programme (EZVEF), Sexually transmitted infections, blood-borne viruses and TB programme (SBT), and Vaccine preventable diseases and immunisation disease programme (VPI). The order below follows the previous structure.

Antimicrobial resistance and healthcare-associated infections

ECDC will further develop key outputs on antimicrobial resistance (AMR) and healthcare-associated infections (HAIs). The data from the surveillance networks will be available on the ECDC Surveillance Atlas of Infectious Diseases, and the role of ECDC as a hub of harmonised European surveillance systems for AMR, antimicrobial consumption (AMC) and HAIs, including molecular surveillance, will be further consolidated. Moreover, ECDC will provide an Expert Opinion on the usefulness and applicability of electronic surveillance of HAIs, and start the preparation of the next point prevalence surveys of HAIs in acute care hospitals and long-term care facilities in the EU/EEA. ECDC will support the Commission in the implementation of the European One Health Action Plan against AMR with dedicated initiatives to prevent and control AMR and HAI. In addition, through collaboration with EFSA and EMA, more synergies will be developed with the veterinary sector as part of the 'One health' approach. ECDC will collaborate closely with Member States on their Joint Action on AMR and HAIs. Finally, ECDC will continue supporting WHO in the implementation of the Global Action Plan on AMR and contributing in international initiatives such as the Transatlantic Task Force of AMR (TATFAR).

Emerging and vector-borne diseases

ECDC will continue to support country preparedness and response in the field of emerging and vector-borne diseases by providing risks assessments and scientific advice on emerging and vector-borne diseases, as well as modelling tools to support decision-making for vector surveillance and control. ECDC will further strengthen their surveillance through the implementation of notifiable vector-borne diseases, the monitoring of vector distribution and the timely reporting of EVD epidemic-prone diseases. The programme will work on increasing laboratory capacity building for early detection and surveillance of EVD through an outsourced laboratory network in close collaboration with other EU initiatives. The programme will promote multidisciplinary networking and partnerships with international stakeholders to improve inter-sectoral collaboration and countries' capacity and capability building.

Food and waterborne diseases

ECDC will continue to deliver fit for purpose surveillance, the production of reports, the conduct of external quality assessments for laboratory services, and the organisation of network meetings. Similar to listeriosis, an analytical and epidemiological validation of the whole genome sequencing (WGS) data use for salmonellosis and STEC/VTEC

surveillance at the EU level is foreseen. Multi-centre studies will be initiated on the reasons for the persistence of some major clonal strains of *Listeria monocytogenes* and *Salmonella* in the food chain, leading to recurrent human infections and thus, being preventable. The scenarios on the integration of WGS into the joint ECDC-EFSA molecular typing activities will be finalised by April 2019 with a collaborative effort in implementing the agreed scenario. Close collaboration with PulseNet International is foreseen to ensure linkage to the global surveillance of FWDs and with the comparable support of WGS. Surveillance of human transmissible spongiform encephalopathies (TSEs) will be updated according to the agreed strategy. International and cross-sectorial collaboration will be strengthened under the 'One Health' principle.

HIV, sexually transmitted infections and viral hepatitis

ECDC will continue to improve surveillance and programme monitoring and support countries in stepping up their efforts to reach the new Sustainable Development Goals (SDGs). There will be more emphasis on the production of high quality reports and scientific articles. ECDC will continue to provide scientific advice on HIV and hepatitis prevention and control in the EU, and support to the Commission and Member States in their response to these threats. International collaboration will continue to be strengthened, in particular with WHO, EMCDDA and specific clinical networks and learned societies relevant to these diseases. Member States will also be supported through ad hoc country visits.

Influenza and other respiratory viruses

ECDC will continue to provide (jointly with WHO) surveillance outputs and weekly surveillance reports, during the influenza season, timely rapid risk assessments (incl. joint ECDC/EFSA Avian influenza overviews) and scientific advice in the area of respiratory pathogens. Timely vaccine effectiveness estimates will be made available to stakeholders.

Tuberculosis

ECDC will strengthen tuberculosis (TB) surveillance at the national and EU level to reach adequate coverage and completeness, strengthen TB laboratory services for improving early and quality management of TB, and support TB prevention and control, especially in Member States that have notification rates > 10 per 100 000 population. ECDC will support the achievement of the Sustainable Development Goals (SDGs) in the field of TB. ECDC will continue to provide scientific advice on TB prevention and control in the EU and technical support to the Commission.

Vaccine preventable diseases

ECDC will develop with its partners and stakeholders and in close alignment with the future vaccination policy of the European Commission and WHO Action Plans, a structure to support Member States in sharing the evidence basis for vaccine programmes, continue to assess and provide advice on addressing vaccine hesitancy and vaccine shortage, provide technical guidance to set up electronic registries in Member States, as well as a structure to monitor the impact and effectiveness of priority vaccines.

Management

General management

The Executive Office, established in 2019, provides the corporate framework for the efficient functioning of the Centre, and ensures that ECDC fulfils its mission and vision. The Executive Office supports the Director in managing the Centre in a coherent, effective, and efficient way. The development of an integrated management framework will continue through review and optimisation of key processes, including their digitalisation and continuous improvements in the project management methodologies. Furthermore, the quality management system, as well as the framework for internal controls will be reviewed and revised to be fit for the Centre.

Collaboration and cooperation

ECDC will continue to ensure continuous and smooth relationships with the European Commission, the EU Parliament and other EU agencies. Relationships will be further consolidated with the Member States through the Competent Bodies and our host country, Sweden.

Resource management

ECDC will continue to ensure effective and compliant operational support to its activities. It will continue to address the needs to further strengthen its operations and respond to the changing environment in which it operates, in the most efficient way. The main objective is to address challenges, and propose when appropriate best practices to solve them. This will support further efficiency gains, effectiveness improvements and reduce workload.

ICT

All IT applications and infrastructure will be maintained, hosted and secured. New systems will be developed to support the Work Programme commitments. The implementation of the IT strategy will continue with all IT development externalised. A technology watch report will be published and new IT technologies will be piloted and assessed.

<u>N.B</u>: Key outputs that might be considered for de-prioritisation, in case of an emergency (Public Health Emergency) or budget reductions are marked with a blue asterisk * in the list of activities below.

4.1. Surveillance and epidemic intelligence

4.1.1 Surveillance

Context

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

ECDC's overarching priorities are to add value to the data it gathers by making them available in user-friendly formats in as timely manner as possible; to analyse and interpret the data to inform public health action; to take advantage of the possibilities offered by molecular and eHealth technologies; and to decrease the administrative burden on data providers in Member States.

In 2020, ECDC will have its last surveillance systems evaluated, continue to develop EU standards for surveillance, as part of the reengineering of its surveillance platforms, launch the new application for events and threats monitoring and assessment (replacing EPIS) and a surveillance portal allowing Member States to carry out all surveillance operation through one single entry point; and further develop molecular surveillance while refining data analysis and dissemination. In addition, ECDC will play a proactive role in the field of exploiting eHealth for infectious disease surveillance. In 2020, ECDC will map the technical and data features in Member States eHealth surveillance systems in order to identify minimum common data and technical requirements for cross-border analyses.

As part of the Surveillance Systems Reengineering project ECDC will finalise, deploy and further develop an updated and fully integrated molecular typing platform. The platform will offer tools and services for joint analysis of WGS and epidemiological data. Implementation of specific diseases will follow the agreed Strategic Framework for the integration of molecular and genomic typing into European surveillance and multi-country outbreak investigations, 2019–2021.

Furthermore, event-based and indicator-based surveillance data will be enriched with data on disease determinants.

Objectives, key outputs 2020, and expected results

ECDC strategic objective	Strategic objective 3
Objective 2020 - 1	**Complete the optimisation of the technical surveillance platforms and processes as identified through the 'Surveillance Systems Reengineering' (SSR) project in the years 2015–2017.**
Key outputs 2020	New application for events and threats monitoring and assessment (replacing EPIS). New surveillance portal giving access to all surveillance applications.
Expected results	A new tool for the integrated (e.g. across diseases) monitoring and assessment of events and threats is available for ECDC and its stakeholders. All events and threats are described by a meta-dataset and data are stored in a common warehouse. A new surveillance portal offers a single entry point for carrying out all surveillance activities and accessing all surveillance applications. The portal is powered with an electronic workflow and a task manager. It includes a dashboard for monitoring the status and gaps of Commission Implementing Decision 2018/945.

ECDC strategic objective	Strategic objective 3
Objective 2020 - 2	**Evaluate EU/EEA-level surveillance systems as per project plan.**
Key outputs 2020	Surveillance system evaluation reports as per project plan.
Expected results	EU/EEA surveillance system weaknesses have been corrected.

ECDC strategic objective	Strategic objective 3
Objective 2020 - 3	Use the EU/EEA surveillance system evaluations to define EU/EEA and national minimum surveillance standards and their monitoring indicators.
Key outputs 2020	EU/EEA surveillance standards and monitoring indicators for surveillance systems evaluated in 2018/19.
Expected results	Surveillance system improved over time.

ECDC strategic objective	Strategic objective 1
Objective 2020 - 6	**Publish in-depth surveillance data analyses in peer-reviewed open access scientific journals.**
Key outputs 2020	Peer-reviewed scientific articles, analysing surveillance data in depth.
Expected results	Deeper EU/EEA surveillance data analysis and interpretation and wider and more effective dissemination of findings.

ECDC strategic objective	Strategic objective 5
Objective 2020 - 7	**Consolidate and further develop molecular surveillance at EU/EEA level as per revised ECDC strategy and roadmap.**
Key outputs 2020	Molecular surveillance data analysis integrated in surveillance outputs.
Expected results	Molecular surveillance data enrich traditional surveillance and provide additional information for action.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
1	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Ensure the timely processing and availability of surveillance data	**Time from the closure of Member State data collection to the publication of the results in the Surveillance Atlas**	n/a	3 months	Surveillance systems data monitoring
2	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Evaluate EU/EEA-level surveillance systems as per EPHESUS project plan and define EU/EEA and national minimum surveillance standards and monitoring indicators	**- Number of surveillance systems evaluated (as per milestones' in EPHESUS project plan)** **- Surveillance standards and monitoring indicators for each enhanced surveillance system are published on ECDC website within one year after sharing the evaluation report with the relevant network.**	11 surveillance systems evaluated HIV and AMR surveillance standards in progress	11 surveillance systems evaluated. Surveillance standards and monitoring indicators published on ECDC website for	Monitoring of milestones and quality indicators
3	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Publish in-depth surveillance data analyses in peer-reviewed scientific journals	**Manuscripts accepted for publication in peer-reviewed scientific journals with open access**	13	≥ five manuscripts with in-depth surveillance data analyses accepted for publication in peer-reviewed scientific journals with open access	Acceptance letters from journals received by first authors

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
4	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Consolidate and further develop molecular surveillance at EU/EEA level	**Completion of milestones as per revised molecular surveillance roadmap**	All milestones completed as per roadmap	All milestones completed as per roadmap	Monitoring of milestones against roadmap

4.1.2 Epidemic intelligence

Context

Monitoring and assessing threats to public health in Europe from infectious diseases are core tasks for ECDC, as is providing technical support to the EU-level response to such threats.

ECDC's partners in the European Commission and Member States rely on ECDC's epidemic intelligence and response support activities, which are core services the Centre provides. Many of the activities and outputs planned for 2020 are the continuation and improvement of services provided in previous years.

The regular monitoring of social media will continue to be improved. In 2020, ECDC will develop and pilot a tool for automatic signal detection from social media (Twitter, Facebook) and generation of automated alerts. The sensitivity and specificity of the system will be validated against tools currently in use.

Objectives, key outputs 2020, and expected results

ECDC strategic objective	Strategic objective 5
Objective 2020 - 1	**Ensure timely and effective monitoring of potential threats from infectious diseases.**
Key outputs 2020	Daily Round Table report and weekly Communicable Diseases Threat Report (CDTR) made available through the situation awareness module of the updated EWRS.
Expected results	Any serious cross-border health threat to Europe and the rest of the world is quickly detected and communicated to the Commission and Member States to allow for rapid action. Epidemic intelligence team works proactively.

ECDC strategic objective (p.17)	Strategic objective 5
Objective 2020 - 2	**Ensure proper coordination with the National Focal Points for threat detection (NFP).**
Key outputs 2020	Annual meeting of the NFPs for threat detection jointly organised with the NFPs for preparedness and response.
Expected results	Proper communication and exchange on threat detection with Member States.

ECDC strategic objective (p.17)	Strategic objective 5
Objective 2020 - 3	**Improve threat detection through epidemic intelligence screening**
Key outputs 2020	Contribute to the operation and improvement of epidemic intelligence from the Open Sources (EIOS) tool, in collaboration with WHO. Pilot study to assess the benefits of trend analysis of social media sources for epidemic intelligence.
Expected results	Improved epidemic intelligence capacity and sensitivity for threat detection in ECDC, with a potential impact in Europe and beyond when fully implemented.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
6	Coordinate and support the rapid assessment of risks and the identification of options for response	Provision of relevant, and timely updates on threats to Member States and the European Commission	**Provision of regular epidemiological updates for threats under mid (1—6 months) and long term monitoring (>6 months)**	100%	Update provided for 100% of threats under mid-term (1—6 months) and long term monitoring (>6 months)	CDTR, epidemiological updates available on ECDC website

Total Resources surveillance and epidemic intelligence in 2020:

Surveillance and epidemic intelligence	Operational staff and budget	Horizontal FTE[1] admin support	Total staff and budget
Total FTEs for this activity	22.6	7.7	30.3
Total operational budget title 3	€1 343 619	-	€4 656 266

4.2. Scientific support

4.2.1 Scientific advice

Context

One of ECDC's core functions is the provision of high quality scientific advice relevant for the EU and Member States. ECDC remains highly committed to scientific excellence, independence and transparency.

From 2020 onwards, policies and processes implemented over the last few years will fully support the development of scientifically sound evidence and advice, ultimately increasing and maintaining public trust and confidence in the Centre's scientific integrity and independence.

The ECDC Scientific Advice Repository and Management System (SARMS) incorporates all scientific requests, outputs and scientific work produced by the Centre. It allows for proper and complete follow up for management, administrative and auditing purposes, from the submission of a request to the formal clearance and dissemination. SARMS is also a searchable repository.

ECDC aims to increase consistency, transparency and brand recognition of all its scientific outputs, help the user to identify ECDC scientific advice and understand the underlying evidence base.

ECDC continues to explore and develop opportunities for scientific collaboration and continued mutual learning and capacity building in cooperation with its stakeholders. To further strengthen collaboration within the public health community, ECDC will support two-way communication with its established public health and disease networks, and engage with other EU institutions responsible for risk assessment, policy and research, and EU networks. This collaborative and networking approach also includes international partners and research bodies working on infectious diseases epidemiology, prevention and control. Existing and future scientific collaboration will support the identification of public health knowledge gaps and needs within the Centre's remit that could benefit from ECDC scientific work and advice to avoid duplication of efforts.

ECDC will continue to follow research and methodology developments on a global scale, to ensure that its work stays relevant, scientifically sound and meets international standards.

The proposed objectives require a strong corporate cross-unit effort internally, and close exchange and collaboration with the Centre's key stakeholders.

Objectives, key outputs 2020, and expected results

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[1] In this column (as indicated in the ABB on p. 105-106) we added the support staff (management, administration, ICT) that, according to the benchmarking methodology used by all agencies and agreed with the European Commission, which are directly contributing to the operational work of ECDC (e.g. development of operational IT system, procurement of operation...). They have been added proportionally to the operational FTE.

ECDC strategic objective	Strategic objective 1 and 2
Objective 2020 - 1	**Produce consistently high quality scientific work and advice within agreed deadlines.**
Key outputs 2020	ECDC scientific outputs clearly categorised, following a structured format and providing sufficient information on rationale, applied methods, evidence base, analysis, as well as limitations and remaining uncertainties to allow informed decision-making on EU and Member State level. High quality ECDC scientific outputs published on the Centre's website and/or as gold standard open access publication in peer-review scientific journals.
Expected results	Scientific advice and authoritative information provided by ECDC follow the best scientific practices and evidence-based principles and aim at consistency and transparency. They are available immediately at publication and at no cost to the reader on the Centre's website and/or as open access in peer-reviewed scientific journals. They enable effective decision-making at EU and Member State level.

ECDC strategic objective	Strategic objective 1 and 2
Objective 2020 - 2	**Develop, implement and assess processes that support the transparent, consistent and efficient production and clearance of scientific work and advice.**
Key outputs 2020	The ECDC Scientific Advice Repository and Management System (SARMS) is the sole support platform for the production and the clearance of all scientific outputs of the Centre. SARMS contains templates and guidelines for the production of scientific outputs and supports the production and clearance process with e-workflows. SARMS provides a comprehensive overview of the Centre's scientific outputs, supports peer-review and quality assurance, ensures compliance with ECDC policies and processes/procedures and monitors responsiveness to external requests to the Centre.
Expected results	Consistency and compliance of ECDC scientific work and advice with internal policies (e.g. ECDC independence policy, ECDC open access policy) and processes/procedures, and timely response to external requests.

ECDC strategic objective	Strategic objective 1, 2, 8 and 9
Objective 2020 - 3	**Build and strengthen strategic alliances, to identify and prioritise public health research needs, to increase and improve the evidence base for ECDC scientific advice, making the best use of scientific and technological developments in the fields of the Centre's remit.**
Key outputs 2020	Collaborative agreements and discussions with key partners (e.g., networks, EU-ANSA, learned scientific societies, EU research funders) to identify research needs and strengthen the take-up of tailored research efforts to close identified knowledge gaps. Strengthened understanding of scientific and technological developments and their possible impact on communicable disease prevention and control, and better use of scientific and technological developments to further strengthen public health capacities.
Expected results	Create synergies to further widen and improve the evidence base for scientific advice and the scientific capacity and expertise of the Centre, taking into consideration scientific and technological developments.

ECDC strategic objective	Strategic objective 1, 2 and 3
Objective 2020 - 4	**Increase transparency of decision-making and prioritisation processes.**
Key outputs 2020	ECDC prioritisation tool, IRIS, is available as an easy-to-apply version for use at different levels of decision-making and priority setting at ECDC and is available to Member States and other stakeholders.

Expected results	Transparency of decision-making and clarity of priority setting involving stakeholders, to support the efficient allocation of the Centre's resources and ensure relevance of the Centre's work to its stakeholders.

ECDC strategic objective	**Strategic objective 1, 2 and 3**
Objective 2020 - 5	**Strengthen knowledge and skills needed for evidence-based practice and decision-making in the area of communicable diseases epidemiology, prevention and control, supporting continuous professional development.**
Key outputs 2020	Workshops on methods and tools for evidence-based practice and decision-making for ECDC staff and ECDC partners at EU and country level.
Expected results	Knowledge of the principles, methods and tools for evidence-based practice and decision-making for the public health workforce in Member States to improve advice and guidance.

ECDC strategic objective	**Strategic objectives 2 and 4**
Objective 2020 - 6	**Organise the European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE), in cooperation with Member States, European Commission services (including SANTE, CHAFEA, JRC) and other EU agencies.**
Key outputs 2020	2020 edition of ESCAIDE hosted in Warsaw, Poland.
Expected results	Dissemination and sharing of scientific knowledge for communicable disease epidemiology, prevention and control and complementary disciplines (e.g. health economics, mathematical modelling, new technologies).

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
7	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Ensure integrity of ECDC's scientific activities in relation to technical and scientific content, methods, and internal policies and processes. Ensure that the Centre's scientific activities are published, disseminated and easily accessible to all.	**Proportion of ECDC scientific outputs processed through SARMS[1], following the respective workflows and template**	60%	At least 90%	SARMS
			Proportion of ongoing and completed ECDC scientific outputs, available on the ECDC website	93%	At least 90% of the ECDC scientific outputs planned	List of planned scientific outputs on the ECDC web portal. This excludes articles in peer review journals.
			Proportion of ECDC peer-reviewed articles, published as gold standard open access[2] in scientific journals	85%	100%	ECDC Library services.
			Uptake of selected ECDC outputs by target audience in the Commission and Member States	n/a	At least 70% of uptake	ECDC website statistics and surveys, dedicated meetings (e.g. AF); rating of ECDC publications on the web portal
8	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Promote the Centre's scientific work through outreach to the scientific and public health communities.	**5-year impact factor[3] of ECDC peer-reviewed publications**	7.36	> 5	ECDC library services
			Average number of citations per publication[4]	30.55	> 15 in the 5 years following publication	ECDC library services
			Proportion of abstracts submission and participants from EU/EEA at ESCAIDE	87% of participants from EU/EEA countries	At least 70%	ESCAIDE registrations, abstract database and evaluation and work plan
			Rating evaluations of ESCAIDE as « excellent » or « good »	87%	> 75% of respondents	e.g. EU-ANSA, JRC etc.
			Meeting with EU key partners in public health research and risk assessment	n/a	At least one per year	
9	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	High responsiveness to requests by providing authoritative and reliable scientific opinions and evidence-based guidance to Member States, European Commission and Parliament	**Proportion of requests answered within agreed deadlines:** • • European Parliament; • European Commission; • Member States; • Others.	96.5%	At least 95% of requests answered within agreed deadlines	SARMS

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1 SARMS: ECDC Scientific Advice Repository and Management System

2 Gold standard' open access is defined in the 'Internal Policy on open access publication of scientific content, including articles submitted to peer review journals ECDC/IP/105' as a principle all ECDC publications, including articles published in peer review journals, arising from work produced or contracted by the Centre should be published as open access, with no embargo period before access is granted.

3 The 5-year impact factor for X is calculated using the formula, where X is year:

Impact factor (Y) = Citations in Y to articles published in Y-5 to Y-1 / Articles published in Y-5 to Y-1

4 The 5-year average citation per article is calculated based on Y-1 to Y-5, where Y is year

4.2.2 Microbiology

Context

According to the EU Health Strategy, every Member State should have access routine and emergency diagnostic and reference laboratory services to detect, identify, characterise and subtype human pathogens of public health significance. This relies on sufficient laboratory capability and capacity at clinical, national and supranational levels. ECDC will continue supporting Member States to foster the capacity of the EU public health microbiology system, based on gaps identified by monitoring EULabCap indicators, and the results of external quality assessments.

Decision 1082/2013/EU gives the European Commission and Member States a robust legal basis for cooperation against infectious diseases and other serious cross-border health threats. The European Commission strengthens the EU network of reference laboratories in the area of human pathogens, through Joint Actions that operate in synergy with ECDC-supported laboratory capacity building activities, across its EU disease networks.

ECDC implements its Public Health Microbiology Strategy 2018–2022 to provide technical support to public health reference laboratory networks across the EU, EEA and enlargement countries, taking into account the reference laboratory activities of the WHO networks. The Centre will benchmark country microbiological capacities and facilitate the development of rapid e-communication of laboratory-based information for public health surveillance and alert.

Innovative biotechnology, including molecular diagnostic tools and whole genome sequencing are transforming microbiological practice as well as surveillance and epidemiological investigation methods. ECDC provides up-to-date technical guidance on their accuracy and public health usefulness, and implements solutions for sequence data sharing, together with Member States experts and disease networks.

In addition, ECDC will work with Member States' experts to help national reference laboratories build their staff skills in bio-informatics, harmonised protocols and nomenclature, and to ensure the comparability of laboratory-based surveillance data. In accordance with the ECDC roadmap for integration of molecular and genomic typing into EU-wide surveillance, ECDC will offer scientific guidance on the added value of WGS, and integrate under EU surveillance, the WGS data for pathogens and antimicrobial resistance threats. The Centre will continue to support Member States' access to urgent WGS in response to cross-border outbreaks. ECDC and EFSA will establish a joint molecular typing database to exchange WGS-based typing data on foodborne pathogens. The partnership with academic leaders will continue by advising DG RTD projects, the Horizon 2020 COMPARE project and One Health European Joint Programme. This work will foster collaboration between microbiologists, clinicians, epidemiologists and veterinarians, in a 'One-Health' approach.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 3
Objective 2020 - 1	**Support the further strengthening and coordination of essential microbiology capabilities in Member States for surveillance, prevention and control of infectious diseases and antimicrobial resistance, informed by the EULabCap performance indicator monitoring.**
Key outputs 2020	Disease specific and generic laboratory and interdisciplinary capacity building activities, including EQA schemes and contribution to the standardisation of antimicrobial susceptibility testing (AST) and reporting of AST results.
Expected results	Improved laboratory capacities at country and EU levels, for the surveillance, prevention and control of infectious diseases.

ECDC Strategic objective	Strategic objective 1
Objective 2020 - 2	**Provide technical support to the European Commission on public health reference laboratory networks for human pathogens.**
Key outputs 2020	Technical support provided to the European Commission on public health reference laboratory networks.
Expected results	Improved laboratory capacities and efficiency of microbiology services, at country and EU levels, for the surveillance, prevention and control of infectious diseases.

ECDC Strategic objective	Strategic objective 2
Objective 2020 - 3	**Provide technical advice on public health microbiology methods and disseminate information to stakeholders and the public about the Centre's microbiology support activities.**
Key outputs 2020	Technical advice provided and disseminated on Public Health Microbiology methods and applications.
Expected results	ECDC established as source of information and technical standards for in the area of public health microbiology.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
10	Strengthen public health infrastructure and processes	Implementation of the ECDC microbiology strategy to support the development of sufficient microbiology capacity within the EU, to detect, prevent and manage infectious threats.	**Proportion of Member States finding EULabCap country reports useful for their laboratory infrastructures and processes improvement**	77% *(=23/30 EU/EEA Member States)*	At least 70% of Member States reporting practical use of EULabCap report	Report from survey on Competent Bodies' feedback on usefulness of EULabCap report

Total resources scientific support (including microbiology) in 2020:

Resources allocation:

Scientific support (including microbiology)	Operational staff and budget	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	14.6	5	19.6
Total operational budget title 3	€1 093 000	-	€3 362 045

4.3. Emergency preparedness and response

4.3.1 EU and country preparedness support

Context

Article 4 of Decision 1082/2013/EU establishes an ambitious agenda for full implementation by Member States of the legal provisions, especially in regards to enhanced capacities to prepare for and respond to emerging threats. Providing technical support to that agenda is one of ECDC's top priorities for 2020 and beyond.

Health emergency preparedness planning, including identification of gaps, and building system capacities and capabilities is critical for the EU and its Member States to respond effectively to major epidemics, and other serious cross-border health threats, including those caused by deliberate or accidental use of biological agents and hybrid threats. Recent international events have increased the awareness of public health emergency practitioners of the importance of basing their response on good scientific evidence, effective collaboration with critical sectors, and shared concepts of good practice across countries.

By 2022, strengthened cooperation is foreseen between preparedness support and capacity building to support countries' efforts to improve their readiness to respond to public health emergencies. From 2013–2019, ECDC strengthened the evidence base, and developed instruments and guidance to support countries in identification of gaps and needs in their emergency response systems (including tools for risk categorisation, self-assessment, and case studies). Since 2016, ECDC has provided direct support, by reinforcing capacity in specific areas, such as testing and proofing effectiveness of public health readiness and strengthening core capabilities in critical preparedness areas. To develop closer links with countries, efforts in 2020 will focus increasingly on sub-regional groups of countries, addressing different needs of countries, and prioritising those with the greatest needs. Activities will be coordinated with the ECDC National Focal Points for Preparedness and Response, to ensure alignment with priorities set by the Health Security Committee.

ECDC activities to support national health emergency preparedness planning will be harmonised with WHO's efforts to support the full implementation of emergency preparedness by countries under the International Health regulations (IHR, 2005). From 2019, ECDC will increasingly coordinate activities with ongoing and planned Joint Actions with Member States in the area of preparedness, for the implementation of the International Health Regulations (IHR, 2005), laboratory strengthening, points of entry, and health preparedness for terrorist attacks.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 3
Objective 2020 -1	**Support the European Commission in monitoring the implementation of Decision 1082/2013/EU (in particular Art. 4 – preparedness) by strengthening the scientific evidence base, conducting gap analysis of the Public Health emergency preparedness of individual Member States, and identifying areas for enhanced support**
Key outputs 2020	Technical assistance for the development and analysis of the new reporting cycle for art.4 for the HSC (gap analysis of the Member States' preparedness), including the identification of indicators to monitor progresses.
Expected results	Identification of strengths and gaps in the implementation of the IHR core capacities and cross-sectoral preparedness planning; Good practice and lesson learning opportunities on emerging cross-border threats provided as guidance for improved response planning; Agreed set of standard metrics for monitoring preparedness and response planning at national level.

ECDC Strategic objective	Strategic objective 2
Objective 2020 – 2	**Support the exchange of knowledge and good practice among professionals and organisations at EU and regional[1] levels, to further strengthen country response system capacities and capabilities, and promote applied research to reinforce the effectiveness of public health emergency preparedness in EU [2]**
Key outputs 2020	Annual 'National Focal Points for Preparedness and Response' meeting with simulation exercise and competency-based training. National preparedness plans reviewed through simulation exercises and/or country peer reviews in at least six countries, identified through needs assessments and analysis of surveys.
Expected results	Countries better equipped to implement national public health emergency preparedness planning. Timely, efficient and effective response to events including local and national outbreaks of communicable diseases, especially with a potential to cross borders. Strengthened interoperability and cross-sectoral linkages in preparedness planning across Europe. Strengthened ECDC's capacities to maintain a high level of resilience and preparedness.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
12	Strengthen public health infrastructure and processes	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 public health preparedness of individual Member States and identification of areas for enhanced support.	**Annual monitoring report on analysis of Member States progress plans, as mentioned in article 4 of decision 1082, submitted to the European Commission**	Report submitted to the European Commission in March 2018 and endorsed by the Health Security Committee in June 2018	Monitoring report submitted to European Commission and endorsed by HSC	Agenda of HSC
13	Strengthen preparedness in countries by gaps in preparedness plans and providing action plan.	Strengthen preparedness in countries by identification of gaps in preparedness and response plans for specific cross-border threats, and provision of options for an action plan.	**Number of review of Member States preparedness plans**	7	5 EU/enlargement countries preparedness plans reviewed by ECDC	Technical reports published on ECDC website

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[1] In the sense of 'multi-country'

[2] including: Competency based training, simulation exercises, NFP networking, scientific and technical guidance and publications, expert workshops and conferences, regular coordination with international public health organisations in ongoing threats to align risk classification and response measures;

4.3.2. Response

Context

ECDC will continue supporting the coordination of the investigations of multi-country outbreaks, facilitating information and tools for outbreak investigation and after-action reviews, by deploying experts on request of affected countries and as regular follow-up of published Rapid Risk Assessments.

Since 2006, ECDC maintains and invests in the EOC infrastructure. ECDC continuously improves its processes based on lessons learnt during exercises and real life Public Health Emergencies. ECDC continuously reviews and updates its Public Health Event (PHE) plans. A mechanism to mobilise relevant health expertise to respond to communicable disease emergencies will be implemented, in collaboration with the WHO Health Emergencies Program, the Global Outbreak Alert and Response Network (GOARN) and EU Medical Corps (EMC), to contribute more efficiently to international response missions.

By the end of 2021, the new version of the EWRS will be fully operational with the implementation of all planned modules.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 6
Objective 2020- 1	**Ensure timely and quality provision of rapid risk assessments requested by the Commission and Member States, or internally agreed during the daily ECDC round table; Member States will be involved in their production**.
Key outputs 2020	Timely Rapid Risk Assessments for specific threats, according to the criteria defined in the decision 1082/2013/EU, on request from the Round Table, the European Commission and Member States, with early participation of Member States in their production.
Expected results	Any serious cross border health threat in Europe is quickly detected and communicated to the Commission and Member States to allow for rapid action, and to WHO and other relevant stakeholders. RRAs produced with the participation of Member States, ensuring transparency and involvement. Assessment of key events that led to a RRA, through coordinated After Action Reviews.

ECDC Strategic objective (p.17)	Strategic objective 6 and 7
Objective 2020 - 2	**Reinforce ECDC experts' involvement in the response and recovery support activities for Member States and EU neighbouring countries facing infectious diseases outbreaks and crises.**
Key outputs 2020	ECDC teams to support Member States and neighbouring countries in response and recovery phases of infectious diseases outbreaks and epidemics.
Expected results	Support the response capacity of Member States to respond and learn from outbreaks and health crises.

ECDC Strategic objective	Strategic objective 6 and 7
Objective 2020 - 3	**Ensure the participation of ECDC experts in international response missions, in cooperation with DG ECHO.**
Key outputs 2020	Validate the mechanism through which ECDC and Member States' public health experts, actively participate in international missions, together with DG ECHO.
	Joint international missions co-organised with DG ECHO under the civil protection mechanism, and with the participation of experts from Member States.

ECDC strategic objective	Strategic objective 6
Objective 2020- 4	**Improve the functionalities and operation of the remodelled EWRS, after release**
Key outputs 2020	All modules of the remodelled EWRS fully operational, with the integration of new Rapid Alert and Information systems into module 2 of the new EWRS, according to the agreement. Corrective maintenance carried out.
Expected results	Commission and Member States better equipped to respond to threats according to Decision 1082/2013/EC.

ECDC strategic objective	Strategic objective 1, 2 and 6
Objective 2020- 5	Ensure the continuous support to Member States in risk assessment, response and preparedness to infectious diseases outbreaks, to maintain the safety of substances of human origin (SoHO).
Key outputs 2020	• Assessment of fungal and parasitic safety of SoHO. • Organise an expert meeting on malaria and SoHO safety. • Perform biannual assessments of national donor testing and screening measures for blood, tissues and cells. • Assess risks of infections transmission through SoHO in the ECDC rapid risk assessments.
Expected results	Enhance the capacity of Member States to respond to threats from SoHO.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
14	Coordinate and support the rapid assessment of risks and the identification of options for response	Provision of relevant, timely and quality rapid risk assessment to support the risk management carried out by the Member States and the European Commission	**Average number of downloads per RRA** **Level of satisfaction of the RRA by ECDC stakeholders**	35 persons on average downloaded a RRA in 2018; 9 376downloads total Survey conducted among HSC members in 2018.: • Timeliness: 93% • Independence of judgment: 93% • Completeness: 93% • Readability: 93% • Layout: 87%	+ 10% increase >75% satisfaction on usefulness and impact	Source SARMS (ECDC Scientific Advice Repository and Management System) ECDC stakeholder survey, external evaluation, dedicated evaluations
15	Coordinate and support the rapid assessment of risks and the identification of options for response	Mobilisation mechanisms for public health response teams developed	**Provision of support teams upon request from Member States**	100%	100% requests for response support from Member States honoured	List of requests from Member States Repository of support teams to be set up (DMS)

Total Resources Preparedness and Response in 2020:

Preparedness and response	Operational staff and budget	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	14.4[1]	4.9	19.4
Total operational budget title 3	€755 181	-	€3 037 632

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[1] The FTEs for the preparation for rapid risks assessments can not easily be planned, as the skills requested depend on the nature of the threat that cannot be anticipated. In addition to the 14.4 FTEs, it is estimated that on average an another 5.5 experts FTE are mobilised yearly for the preparation of the RRA content (taken from their unplanned buffer time).

4.4. Training and capacity building

4.1. Training

Context

The 2015 'ECDC strategy for Public Health Training' outlines the training role of ECDC in Europe, as complementary and a support to national actors, including institutes of public health, universities and schools of public health, and adding European values to their effort. Member States and Community experts in charge of dealing with communicable diseases cross-border threats (mostly the members of ECDC networks) constitute the primary target audience of ECDC. By supporting knowledge transfer within countries and making e-learning accessible to all disease prevention and control professionals, ECDC supports training programs and assist Member States to train other professionals at local, sub-national and national levels involved in infectious diseases preparedness, prevention, detection, assessment and control. The strategy emphasises competency-based training in a needs-based approach. A comprehensive training needs assessment carried out in 2015 will be repeated periodically.

The key objectives of ECDC's Public Health Training activities defined in the strategy are to:

- Strengthen and maintain the workforce in Member States and at Community level: relevant training of key national experts, to ensure the adequate performance of communicable disease preparedness, prevention, detection, assessment and control nationally and across borders.
- Strengthen and maintain a network of European and global training partners, to train to the workforce at EU at local, sub-national, national and Community levels.
- Support knowledge transfer within Member States, through a virtual training infrastructure providing access to training material, e-learning and platforms for communities of practice.

To meet these strategic objectives, ECDC initiated a new Continuous Professional Development Portfolio (CPDP) supporting professional development in the ECDC networks within the Coordinating Competent Bodies, through continuous education (life-long-learning). These senior public health professionals are expected to develop initiatives within their countries to transfer knowledge using as a resource the ECDC's common virtual training infrastructure (ECDC Virtual Academy, EVA) with access to training material, e-learning courses and platforms for communities of practice.

Following the integration of the former EPIET and EUPHEM programmes as paths of the Fellowship programme, an external evaluation of the programme in 2018–2019 will guide further improvements.

ECDC will continue looking for synergies and sharing of experiences with its partners, mainly the Association of Schools of Public Health in the European Region (ASPHER).

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 4
Objective 2020 - 1	**Manage the 'ECDC Fellowship Programme' (with EPIET and EUPHEM paths) incorporating recommendations from the 2018–2019 external evaluation, and applying continuous quality improvement.**
Key outputs 2020	Efficient integrated administrative routines, enhanced use of human resources and cross-discipline collaboration. Strengthened collaboration with other Fellowship Programmes, relevant to ECDC mandate in a One-Health and All-Hazards approach (e.g. EFSA, WHO, FAO, TEPHINET).
Expected results	Improved performance of the new programme; Format, curriculum and administrative mechanisms updated based on the external evaluation 2018–2019.

ECDC Strategic objective	Strategic objective 4
Objective 2020 - 2	**Offer a Continuous Professional Development Portfolio (CPDP) to professionals in the CCB Networks aiming at strengthening countries' and EU capacity to address cross-border health threats.**
Key outputs 2020	Provision of a coherent CPDP offer to Member States, tailored to the competency-based training needs assessments conducted with the CCBs. The training offer includes: • The ECDC summer school; • The Winter Workshop; • Specific courses defined by the CCB networks to address emerging skills and competencies to address cross-border health threats; • Senior exchange visits; • Simulation exercises; • E-learning courses, webinars and other distance learnings provided to reach broader audiences, and adapt to modern ways of learning (new technologies). Support the training of healthcare workers on the prevention and control of healthcare-associated infections (HAI), and the control of multidrug-resistant micro-organisms in healthcare settings that represent a cross-border threat (two short courses in 2020). Pilot blended courses on motivational interviewing techniques for vaccine hesitancy, targeting General Practitioners and primary healthcare professionals, at the request of Member States and to be rolled out in more countries in future.
Expected results	The Portfolio of CPD activities supports the training needs of the Member States.
ECDC Strategic objective	**Strategic objective 5**
Objective 2020 - 3	**Manage MediPIET, the Regional programme in intervention epidemiology training in the Mediterranean and Black Sea Countries**
Key outputs 2020	Governance and Scientific Coordination in place implementing the MediPIET Guide, following needs and priorities in the region, in synergy with the ECDC Fellowship Programme (EPIET/EUPHEM). • Fellows recruited for the 2020 Cohort. • Introductory course and first modules. • Scientific event for MediPIET held at ESCAIDE.
Expected results	Performant new programme in place.

ECDC Strategic objective	Strategic objective 6
Objective 2020 - 4	**Continue implementing the collaboration agreement with ASPHER.**
Key outputs 2020	Network of ASPHER schools of public health with a training on communicable diseases control established and working closely with ECDC and National Focal Points for Training. Core competencies defined and curricula developed by joint ECDC/CCB/ASPHER working groups.
Expected results	Exchange of experience with public health schools; partnerships for exchange of methodologies, training materials and trainers, joint training activities, including online courses.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
16	Strengthen public health workforce capacity and capability	Strengthen and maintain the workforce in 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 preparedness, prevention, detection, assessment and control nationally and cross-border.	**a. Number of people trained, per Member State, per ECDC Public Health core function** **b. Participant satisfaction with ECDC training activities.** **c. Number of scientific articles of public health relevance by ECDC fellowship programme (EPIET/EUPHEM) during and two years after graduation.** **d. Number of Fellowship graduates working in Public Health per Member State, per discipline (absolute and proportional)**	a. 37 fellows graduated in ECDC Fellowship Programme; 434 external experts trained in the CPDP (incl. 138 online courses, and 24 in exchange visits) b. Fellowship programme: n/a; CPDP: 86% c. +350% (from 2.3 to 7.8 publication per fellow) d. n/a	a. >40 fellows in two cohorts included in ECDC fellowship, >300 participants to CPDP training activities (short courses, e-learning and senior exchange) b. >75% satisfaction c. > 50% increase compared to the two-year period before entering the programme. d. Reduction of the gaps identified by the Training Needs Assessment	a. From ECDC training database (CRM): number of trained people b. Course evaluation c. Database + ECDC Virtual Academy (EVA) platform, Bibliometrics (PubMED, Scopus) d. ECDC Virtual Academy (EVA): follow up of graduates (profile updates), LinkedIn, Pubmed, CCB
17	Strengthen public health workforce capacity and capability	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	**Perceived added value of ECDC Public Health Training activities by training stakeholders.**	n/a (88% EPIET; 75% EUPHEM; 84% short courses; 76% summer school; 78% e-learning) – *source stakeholder survey 2015*	> 75%	Annual consultation with NFP for Training

4.4.2 Coordinated country support

Context

ECDC has provided capacity building support to Member States since its establishment through training, assessments/peer reviews, facilitation of sharing of experiences and good practices, development of toolkits and guidance, and laboratory support.

The different external evaluations of ECDC explicitly recommend that ECDC 'get closer to the countries'. A better understanding of the variety of public health systems, and a systematic assessment of Member States' vulnerabilities and needs will allow a more strategic investment of ECDC resources, to decrease the capacity and capability gaps across the EU.

Based on the annual calls launched in 2017 and 2018 and their evaluation, ECDC proposes a more streamlined approach as discussed with the National Coordinators (NC) of the Coordinating Competent Bodies (CCBs). In 2020, ECDC will analyse all existing incoming data and information (quantitative and qualitative) from Member States to identify their vulnerabilities and needs. The results will be discussed at the Joint Stakeholders Meeting (JSM) in May 2020 and at the end of 2020, a mechanism will be proposed to the CCBs on how to identify vulnerabilities and needs and prioritise the support. ECDC will ensure synergy with external tools and mechanisms available to identify public health system vulnerabilities in countries.

Proposed activities for 2020 are:

- To integrate the CCB requests for mid-term strategic country support into the ECDC work programme;
- To enhance the knowledge and understanding of how communicable disease prevention and control systems work in different national contexts, and the main strengths and challenges faced by Member States, to implement evidence-based policies and guidance in practice;
- To identify vulnerabilities and needs in Member States, with the CCBs;
- To identify the internal (ECDC staff and procurement) and external (Member States expertise and various EU funding instruments) resources to support country capacity building.

Internally, ECDC will ensure that:

- procurement solutions are identified to facilitate promptly response to countries' needs;
- a harmonised corporate approach is applied to country visits, to best harvest information for country support;
- a harmonised corporate approach is applied to network meetings and interactions with countries, to harvest the potential for information relevant to country support work.

ECDC will further strengthen the link with its activities in the various disease and technical areas.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 3
Objective 2020 - 1	**Set up internal tools and mechanisms to facilitate increased knowledge and follow-up of Member States vulnerabilities and needs**
Key outputs 2020	System for Member States to express their needs, as part of the work programme preparation Internal mechanism to identify vulnerabilities and needs in Member States Appropriate internal procurement solutions to address the identified vulnerabilities and needs
Expected results	Better respond to the needs of countries in the area of communicable diseases.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
18	Further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery.	Provide coordinated support to Member States	**Level of satisfaction of countries receiving support from ECDC**	80%	>75% of the countries satisfied	Survey with recipients of the support mechanism

4.4.3 International relations

Context

The ECDC International Relations Policy 2020, approved by the ECDC Management Board in November 2017, is fully aligned with the relevant EU external policy frameworks. The implementation of the identified strategic objectives and priorities relies on a set of coordination and partnership guiding principles, primarily the coordination of activities with relevant European Commission services and the European External Action Service.

ECDC's international relations activities will keep focusing on capacity strengthening initiatives with EU pre-accession and European Neighbourhood Policy (ENP) partner countries, enhanced cooperation with ECDC international partners, in particular the World Health Organisation (WHO) and major centres for disease prevention and control.

ECDC support to the EU enlargement policy implementation with EU pre-accession countries will be guided by the principle of co-responsibility. ECDC will finalise the assessment of EU pre-accession countries' communicable diseases prevention and control systems, following the invitation from the European Commission. ECDC will support countries to develop action plans and pre-accession assistance addressing the assessment recommendations, and follow-up their implementation by providing advice and evidence to the Commission. ECDC will continue to support countries integration into ECDC structures and activities, including through possible ECDC pre-accession technical cooperation activities supported by external financial assistance from the European Commission. In coordination with the European Commission services, subject to relevant programming of regional actions under regulation establishing IPA III 2021–2027, ECDC will consider broadening this technical cooperation to specific areas of common interest and EU public health priorities, such as public health microbiology systems, surveillance of communicable diseases, preparedness capabilities, and 'One Health' approach against antimicrobial resistance.

The level of ECDC activities with ENP partner countries in 2020 and beyond will depend on the availability and sustainability of the external EU financial assistance. Upon availability of EU funding for the EU Initiative on Health Security under the 2019 Security Package, ECDC will continue its support to bring ENP partner countries closer to EU standards and foster health security, by strengthening country capacities to respond effectively to communicable diseases threats. This cooperation could be broadened to new areas of common interest and EU public health priorities (e.g. public health microbiology, antimicrobial resistance, vaccine preventable diseases), including the assessment of ENP partner countries' capacities in communicable disease surveillance and control.

Particular attention will be given to further support the European Commission in implementing the new Association Agreements between Eastern ENP partner countries and the EU. Upon request and based on the assessment of communicable disease prevention and control systems in these countries, ECDC will support the countries in developing an action plan, and the Commission in monitoring its implementation with international partners.

Building upon existing bilateral agreements with key international partners (e.g. WHO Europe) and other centres for disease prevention and control (CDCs) in non-EU countries, ECDC will further implement aligned collaborative actions and look at opportunities for new initiatives among major CDCs and other international partners, as appropriate.

Under the health security component of the EU Intra- African, Caribbean, 'Pacific Health Systems Strengthening Programme', the European Commission and ECDC will develop a technical partnership between ECDC and the Africa CDC, to contribute to improve health security in Africa, by sharing EU practices and strengthening Africa CDC capacities in preparedness, surveillance, and response to health threats.

Finally, ECDC will provide technical support to the European Commission for its regional initiatives and dialogues with international partners and other non-EU countries. This will be undertaken within the framework of relevant EU external policies and coordinated at operational level via the Directorate General responsible for Health with other DGs of the European Commission and the European External Action Service.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 3 and 4
Objective 2020 − 1	**Following the request from the European Commission, finalise and follow-up the assessment of EU pre-accession countries**
Key outputs 2020	Technical assessment reports and initiation of national post-assessment action plans
Expected results	Effective assistance provided for implementing the post-assessment action plans adopted by countries, to further develop their capacities in surveillance, detection and reporting on communicable diseases.

ECDC Strategic objective	Strategic objective 3 and 4
Objective 2020 - 1	**Further implement technical cooperation activities with pre-accession countries:** • prepare for the participation of EU pre-accession countries in ECDC • support the advancement of One Health approaches against AMR in Western Balkan region *(initiation of ECDC-IPA6 project, subject to award decision by the Commission)*
Key outputs 2020	Pre-accession assistance activities to prepare Western Balkan countries and Turkey for their participation in ECDC Initiate technical cooperation activities on One-Health approach against AMR.
Expected results	Enhanced communicable disease surveillance and control capacities, and improved preparedness capabilities as per EU-level requirements and standards Increased technical communication and networking among EU pre-accession countries, EU Member States and ECDC

ECDC strategic objective	Strategic objective 3 and 4
Objective 2020 - 2	*(Upon availability of EU financial assistance)* **Support the strengthening of communicable disease surveillance and control systems in Ukraine, Moldova, and Georgia.** (*Upon request from the European Commission, and in coordination with international partners*)
Key outputs 2020	Monitoring of post-assessment action plans and upon request technical cooperation activities implemented with these countries.
Expected results	Post-assessment phase up and running. Strengthened countries capacities in surveillance, detection and reporting on communicable diseases through the implementation of post-assessment action plans.

ECDC strategic objective	Strategic objective 3 and 4
Objective 2020 - 3	*(Providing availability of EU financial assistance for EU Initiative on Health Security to ECDC under 2019 Security Package)* **Further support the progressive integration of ENP partner countries into ECDC activities and enhance health security to strengthen the countries closest to EU borders' capacities to respond to health threats related to communicable diseases.**
Key outputs 2020	Follow-up of project under the European Neighbourhood Instrument (ENI) or other financial instruments initiated and implementation started. Sustainable capacity building initiative implemented in ENP partner countries and continuation of technical cooperation with ENP partners under ENI or other financial instruments.
Expected results	Increased capacity to respond effectively to heath threats in countries closest to the EU borders.

ECDC strategic objective	Strategic objective 5, 6 and 7
Objective 2020 - 4	**Strengthen and deepen ECDC cooperation with the major centres for disease prevention and control (CDCs) across the globe.**
Key outputs 2020	Regular interaction with the contact points in other CDCs to coordinate, support and promote bilateral partnership. Monitoring and evaluation on the implementation of the Memorandum of Understandings/Administrative agreements.
Expected results	Improved capacity to detect threats through cooperation with other partners. ECDC established as a trusted provider of data and scientific evidence with the capacity to mobilise EU expertise to provide technical assistance and support.

ECDC strategic objective	Strategic objective 5, 6 and 7
Objective 2020 - 4	*(Providing support and availability of EU financial assistance)* **Initiate technical partnership project 'ECDC4Africa CDC' to contribute to health security in Africa, by sharing EU practices and strengthening Africa CDC capacities in preparedness, surveillance, and response to health threats**
Key outputs 2020	Cooperation framework agreed between ECDC and Africa CDC to implement the technical partnership
Expected results	Strengthened capacities of Africa CDC for preparedness, risk assessment, rapid response, and emergency operations, and support to continental harmonised indicator-based and event-based surveillance for infectious diseases.

ECDC Strategic objective	Strategic objective 3 and 7
Objective 2020 - 5	**Enhance the collaboration with WHO Europe and further implement the bilateral Administrative Arrangement (25 March 2011) and the General Principles of Collaboration (15 January 2018)**
Key outputs 2020	Reviewed set of processes for joint activities (e.g. joint reports, coordinated surveillance) under the collaboration framework with WHO Europe.
Expected results	Collaborative efforts between ECDC and WHO Europe experts add value and decrease the burden for Member States (avoid double reporting).

Indicators

Nb.	Multi-annual strategic Objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
19	Strengthen public health infrastructure and processes	Assess the capacities of EU pre-accession countries in the area of prevention and control of communicable diseases, and their progress in the implementation of the EU acquis	**Proportion of pre-accession countries for which progress is monitored annually**	100%	Annual update sent to the Commission for 100% of countries assessed	Survey with recipients of the support mechanism
20	Strengthen public health infrastructure and processes	Support the progressive integration of EU pre-accession and European Neighbourhood Policy partner countries into ECDC activities, funded through external EU financial assistance	**Average annual attendance rate to ECDC events by EU pre-accession and ENP partner countries** **Level of satisfaction from EU pre-accession and ENP partner countries on ECDC support for their progressive integration into ECDC**	85% 82%	75% 75% of respondents satisfied	Meeting attendance lists = total number of national experts attending ECDC meetings/total invited Bi-annual survey with all experts of pre-accession and ENP partners countries
21	Strengthen public health infrastructure and processes	Strengthen the cooperation and partnership with the major CDC-s across the globe through formal bilateral agreements with ECDC	**Proportion of partner CDCs for which Focal Points have been designated** **Proportion of partnership agreements for which evaluations are conducted**	100% n/a	100% 75% of MoUs/ partnerships evaluated	CRM, International Relations Section statistics
22	Strengthen public health infrastructure and processes	Enhance the collaboration with WHO/Europe and revitalise the existing Memoranda of Understanding with CDC's in non-EU countries	**Level of satisfaction from EU/EEA Member States on ECDC collaboration with WHO/Europe**	n/a	75% of EU/EEA countries satisfied	ECDC Stakeholder satisfaction survey includes the question to measure satisfaction of countries on ECDC/WHO collaboration and joint outputs

Total Resources Training and capacity building in 2020:

Training and capacity building	Operational staff and budget	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	22.9	7.8	30.7
Total operational budget title 3	€4 400 500	-	€7 761 462

4.5. Communication

4.5.1 Health communication

Context

ECDC, as the main European agency for risk assessment of communicable diseases, has an important role to ensure that health professionals and policymakers across Europe act on the best information and evidence available, generated by the Centre and its networks or by partners in countries, academia or WHO.

Content generated by ECDC is disseminated through an array of communication channels, including social media, in close partnership with communication experts across Europe. Content from other parties may be disseminated through communities of practice supported by ECDC.

The ECDC Communication Strategy stipulates that the four main target groups ECDC serves are: health professionals, policy-makers, the media, and health communicators. ECDC publishes information about its work transparently to maintain its reputation and build visibility, and supports efforts from national authorities and other stakeholders to reach their citizens.

Risk communication is considered an essential part of risk management, and is the prime responsibility of Member States and the Commission. To support this, the role of ECDC is to facilitate the identification of shared priorities, provide data and analysis, and share best practice with risk communicators in the countries, for example, by supporting European Antibiotic Awareness Day, or addressing vaccine hesitancy.

ECDC works closely with the Commission to ensure consistency, synergy and alignment of activities and health area priorities, and supports the Commission coordinating role for serious cross-border health threats.

ECDC also has an important role in supporting Member States to build and reinforce their emergency risk communication capacities as part of their national preparedness planning. In all relevant communication activities, the Centre works closely with WHO.

Objectives, key outputs, and expected results

ECDC Strategic objective	Strategic objective 1
Objective 2020 - 1	**Ensure timely, easily available, impactful, reusable ECDC scientific, technical and corporate outputs that are adjusted to the needs of our target audiences.**
Key outputs 2020	Timely communications of ECDC scientific, technical and corporate content adapted to its main target audiences through an array of communication channels, including the website and social media.
Expected results	ECDC scientific and technical content available to those who need it, when they require it and in an appropriate format. The corporate outputs enhance ECDC visibility, including among policy makers.

ECDC Strategic objective	Strategic objective 2
Objective 2020 - 2	Enhance ECDC's visibility as an independent, transparent agency that produces high quality scientific content.
Key outputs 2020	• Media coverage of ECDC in (public health) European media. • Communication support from ECDC experts' output in scientific publications, including peer reviewed journals. • Active presence in ESCAIDE and other key public health conferences and meetings. • Proactive presence in social media. • Development and execution of corporate brand strategy.
Expected results	Increased awareness, use of and references to ECDC's brand, key experts and outputs among its target audiences.

ECDC Strategic objective	Strategic objective 3
Objective 2020 - 3	**Support sharing of knowledge, information and analysis among stakeholders, with a focus on strengthening communication capacity and preparedness in EU Member States.**
Key outputs 2020	Capacity building activities (e.g. participating in country visits, ECDC materials, workshops) in the area of emergency risk communication.
	Support and joint activities with the communication working group of the Health Security Committee.
	Support to national health communication campaign activities, notably for the European Antibiotic Awareness Day (18 November 2020), in partnership with the WHO World Antibiotic Awareness Week, to raise awareness and change behaviour on prudent use of antibiotics and for the European Immunisation Week.
	Active collaboration and sharing of information across communities of risk and crisis communicators in Europe.
Expected results	Emergency risk communication better integrated in national preparedness planning.
	Increased public awareness of risks linked to AMR.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
23	Support efficient decision-making by enabling the sharing of evidence and expertise	Ensure that ECDC scientific and technical outputs are timely, easily available, impactful, reusable and adjusted to the needs of our target audiences	**Usage of the ECDC web portal and social media channels**	638 713 website sessions +51% Twitter followers (ECDC corporate Twitter account)	+5% page views on web portal; +10% followers on Twitter	Web and social metrics used for verification
			Perception of timeliness, usability and usefulness of ECDC output	n/a	Favourable perception of at least 75% respondents	Stakeholder survey and feedback collected through annual NFP meeting for communication
24	Support efficient decision-making by enabling the sharing of evidence and expertise	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**	+21%	+5% compared to previous year	Media monitoring *(Indicators are aligned with Communication Strategy)*
25	Support efficient decision-making by enabling the sharing of evidence and expertise	Support sharing of knowledge, data and analysis among stakeholders with a focus on strengthening communication capacity and preparedness in EU Member States	**Favourable perception of ECDC communication capacity support activities by NFPs (materials, workshops, meetings, country visits, training activities) in the area of risk and crisis communication.**	n/a	Favourable perception of at least 75% respondents	Stakeholder survey and feedback collected through annual NFP meeting for communication - Indicators are aligned with Communication Strategy

4.5.2 Eurosurveillance

Context

ECDC became the publisher of *Eurosurveillance* in 2007. Since then, the journal has gained a reputation as a credible source of scientific and public-health-relevant information for the prevention and control of communicable diseases in Europe (and beyond). The second ECDC external evaluation confirmed that public health experts and policy makers in the EU deem the journal highly valuable and useful for their work. The journal metrics (a proxy measure of scientific importance/relevance) have been favourable; *Eurosurveillance* has been ranked among the leading journals in its field for over five years and is known worldwide.

For the years ahead, *Eurosurveillance* will continue to facilitate sharing of open-access, timely, regular information and data for public health action. The new publication platform launched in 2017 will support transparent workflows that ease the publication and retrieval of the scientific articles. Where appropriate and possible, supplementary materials including data sets are made available.

Contribution to broadening the scientific evidence-base of epidemiology, surveillance, prevention and control of infectious diseases will be achieved through the publication of methodological and conceptual articles and articles presenting results generated through evidence-based methods. Principles of publication ethics and research integrity will be applied and promoted among colleagues, contributors and the journal's audience.

A number of initiatives will support the interaction with stakeholders; a wide and proactive dissemination of the journal's content will be promoted though presence and presentations at scientific meetings, a scientific seminar on the margins of an international conference (preferably ESCAIDE), and strategic use of social media (and audio-visual materials) using opportunities offered by the new publication platform.

In 2020, *Eurosurveillance* editors will continue to engage in training around the generation of scientific publications/articles and supporting development of critical appraisal skills and awareness of matters pertaining to research integrity, in particular publication ethics. Scholarly scientific and methodology articles will complement respective ECDC activities.

In its activities, the editorial team will continue to proactively expand its well-established networks among experts in Europe and beyond. The board meeting, taking place in every second year, will give important strategic input for the journal policy and reinforce ties with experts in the national institutes in the Member States.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 1 and 4
Objective 2020 – 1	**Continue production of *Eurosurveillance* as an attractive and informative journal, with good visibility and reputation**
Key outputs 2020	Fifty issues published. Regular provision of information through social media. Educational article series/materials published and courses held. Provision of articles with data/evidence from at least 15 different European countries.
Expected results	Timely provision of relevant public health rapid communication supports public health action and facilitates scientific debate. Journal remains attractive for authors through ranking in the first quartile of journals in its field in relevant metrics and an Impact Factor above five. Enhanced reputation as authoritative and credible source of information in our field. Support to ECDC capacity building activities and contribution to closing the gap in the available evidence-base in international scientific databases for the prevention and control of communicable disease in Europe. Journal serves as educational source for public health experts in EU/EEA countries and fosters awareness of matters pertaining to research integrity in particular publication ethics.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
26	Support efficient decision-making by enabling the sharing of evidence and expertise	Consolidate the high level profile and attractiveness of Eurosurveillance	**Impact factor for** *Eurosurveillance* **and journal rank positioning in first quartile** **Articles accepted for publication from countries represented on the** *Eurosurveillance* **board**	7.1 31	IF >5 Articles received from authors of at least 15 countries	Journal Citation Reports, SCImago EU/EEA and candidate countries

Total resources communication and *Eurosurveillance* in 2020:

Communication and *Eurosurveillance*	Operational staff and budget	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	24.2	8.2	32.5
Total operational budget title 3	€705 400	-	€3 792 124

4.6. Disease work

4.6.1 Antimicrobial resistance and healthcare-associated infections

Context

The issues of antimicrobial resistance (AMR) and healthcare-associated infections (HAIs) are high on the EU and global agenda, as the various AMR threats keep increasing. Infection prevention and control, prudent use of available antimicrobials, and the need for new antimicrobial agents will continue to be the focus of European initiatives. The trend of increasing resistance to last-line antimicrobial agents such as carbapenems and polymyxins in Gram-negative bacteria, as reported by EARS-Net and the EuSCAPE project in 2013-2015 is especially alarming and requires close surveillance and concerted efforts in the EU and international level, and this will continue in 2020.

Despite recent efforts and successes at Member State, EU and the global level, poor awareness among healthcare professionals and among the general public about the need for prudent use of antibiotics and for infection prevention and control measures is still present. Moreover, national guidance documents, examples of best practice such as compliance with infection prevention and control measures, and success stories in preventing and controlling AMR and HAI are rarely shared between Member States.

Since 2014, ECDC stakeholders have asked for intensified efforts on the surveillance, prevention and control of AMR and HAIs. During the EPHESUS evaluation, Member States reemphasised the importance and EU-added value of AMR and HAI surveillance while identifying several areas for improvement. The high priority of AMR and HAIs on the European and global agenda is likely to continue in 2020 and the following years.

Since the adoption of the Global Action Plan on AMR in May 2015, WHO has launched its Global Antimicrobial Resistance Surveillance System (GLASS) as well as global surveillance of antimicrobial consumption.

On 29 June 2017, the European Commission adopted a European One Health Action Plan against AMR, which contains concrete actions with EU-added value with the objective of making the EU a best practice region, boosting research, development and innovation, and shaping the global agenda on AMR.

In addition, by 2020:

- the Transatlantic Task Force on AMR (TATFAR) would have completed the implementation and possibly discussed a new set of actions to be implemented 2021 onwards,
- WHO would have followed-up with the implementation of the Global Action Plan on AMR;
- the Global Health Security Agenda (GHSA) will continue the implementation of its AMR Action Package;
- the Northern Dimension Partnership on Public Health and Social Well-being (NDPHS) will continue the implementation of its action plan, including on AMR.

Objectives, key outputs 2020, and expected results

The objectives of the ARHAI disease programme on AMR are:

ECDC Strategic objective (p.17)	Strategic objective 1 and 2
Objective 2020 – 1	**Improve the quality, sustainability and comparability of data of the surveillance systems for AMR and antimicrobial consumption at EU level.**
Key outputs 2020	Comprehensive surveillance of AMR, including the first ECDC-WHO/Europe joint report on AMR surveillance in Europe in collaboration with the WHO Global Antimicrobial Resistance Surveillance System (GLASS), and assessment of the quality and timeliness of AMR surveillance data provided to ECDC in line with Decision 1082/2013/EU.
	Updated estimates of the number of deaths and disability-adjusted life years (DALYs) attributable to infections with antimicrobial-resistant bacteria.
	Comprehensive surveillance of antimicrobial consumption, with the introduction of hospital-based surveillance of antimicrobial consumption.
	Joint analyses and harmonisation of surveillance of AMR and antimicrobial consumption with EFSA and EMA, including publication of the third report on the Joint Interagency Antimicrobial Consumption and Resistance Analysis (JIACRA).
Expected results	Better understanding of AMR, antimicrobial consumption and HAIs with higher accessibility and quality of ECDC consolidated surveillance data.
	Member States can inform policy-making based on improved EU-wide data.

ECDC Strategic objective	Strategic objective 1 and 3
Objective 2020 – 2	**Provide advice, guidance, training and country support, to support activities on AMR in cooperation with the European Commission and Member States**
Key outputs 2020	Joint Country visits (five) with DG SANTE, to discuss and assess the level of implementation of the EU legislation on AMR and HAIs in a one-health perspective, in Member States and Western Balkans.
	Expert meeting on country visits to discuss AMR issues (update and revision of the assessment tool).
	Support to the European Commission on the implementation of the European One Health Action Plan against AMR, and close collaboration with Member States on the EU Joint Action on AMR and HAIs (EU-JAMRAI).
Expected results	Increased capacity and capability of Member States to prevent and control AMR.
ECDC Strategic objective	**Strategic objective 4, 5 and 6**
Objective 2020 – 3	**Improve the detection, reporting and assessment of AMR- and HAI-related threats to health through increased epidemic intelligence, molecular typing surveillance and risk assessments**
Key outputs 2020	European AMR Genes Surveillance Network (EurGen-Net) established, following completion of the centralised WGS-based surveillance of carbapenem- and/or colistin-resistant *Enterobacteriaceae*.
	EPIS AMR-HAI platform to report cross-border health threats and outbreaks of AMR and HAIs and support risk assessments.
Expected results	Increased capacity for the detection, surveillance and molecular typing of carbapenem-resistant and/or colistin-resistant *Enterobacteriaceae* in the EU.
	Increased reporting of cross-border health threats, including outbreaks, related to AMR and HAIs.
ECDC Strategic objective	**Strategic objective 1, 3 and 7**
Objective 2020 – 4	**Strengthen 'One Health' and international collaboration on AMR.**
Key outputs 2020	Support WHO on the implementation of the Global Action Plan on AMR[1], and contribution the Transatlantic Task Force on AMR (TATFAR)[2].
	Contribution to the Actions 'Working together to Fight AMR – South America' and 'Working together to Fight AMR – Asia'[3].
Expected results	Increased awareness of the prudent use of antibiotics by the general public, health professionals and stakeholders in Member States.
	Increased activities and campaigns to promote the prudent use of antibiotics, at national, regional and local level in Member States.
	Better alignment, increased exchange and collaborations with international counterparts to further establish ECDC as a key partner in international cooperation initiatives to prevent and control AMR and HAI.

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[1] e.g. by participating in WHO expert meetings and contributing data for EU/EEA countries, via WHO/Europe, to the WHO Global Antimicrobial Resistance Surveillance System (GLASS).

[2] By implementing many of the TATFAR Actions.

[3] e.g. by providing expert advice and participation in the Actions' technical advisory boards.

The objectives of the ARHAI disease programme on HAIs are:

ECDC Strategic objective	Strategic objective 1 and 2
Objective 2020 – 5	**Improve the quality and sustainability of HAIs surveillance systems as well as comparability of data, at EU level**
Key outputs 2020	Updated comprehensive surveillance of HAIs, including for surgical site infections, intensive care units and *Clostridium difficile* infections. Assessment of the usefulness and applicability of electronic data for surveillance of HAIs and decentralised storage of HAI surveillance data to enable confidentiality, e-surveillance at national level and cross-linking of hospital-based data. Preparation of the point prevalence surveys of HAIs and antimicrobial use in European acute care hospitals (2022) and for European long-term care facilities (2023).
Expected results	Better exchange of surveillance data and better interoperability (AMR, antimicrobial use and HAIs).
ECDC Strategic objective	**Strategic objective 1 and 4**
Objective 2020 – 6	**Provide advice, guidance and sharing of good practices to support the prevention and control of HAIs and AMR in healthcare settings in cooperation with the European Commission and Member States**
Key outputs 2020	Promotion of hand hygiene as an essential infection prevention and control measure, in partnership with the WHO 'SAVE LIVES: Clean Your Hands' campaign. Further implementation of the ECDC directory of online resources for the prevention and control of HAIs and AMR.
Expected results	Increased workforce competence, and capacity and capability of Member States to prevent and control HAIs and AMR in healthcare settings.

Total Resources ARHAI in 2020:

Antimicrobial resistance and healthcare-associated infections	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	9.9 FTE[1]	3.4 FTE	13.3 FTE
Total operational budget title 3	€1 030 000	-	€2 600 727

4.6.2 Emerging and vector borne diseases

Context

Emerging and vector-borne diseases pose a challenge to ECDC and national public health authorities due to the biological complexity of their transmission pattern and their epidemic potential. In recent years, several vector-borne disease outbreaks have occurred in Europe and an increased establishment and spread of invasive mosquitoes or spread of native ticks in new areas has been observed. Emerging and re-emerging pathogens have been identified and are spread throughout Europe. It is anticipated that novel and unusual outbreaks of emerging and vector-borne diseases will occur with progressive risk towards endemicity in some areas. While some diseases are established/endemic in Europe (e.g. West Nile Fever, Lyme disease), others are emerging diseases or introduced from outside the EU via travellers (e.g. Chikungunya, Zika). By nature, dealing with emerging pathogens means dealing with the unpredictable, for which we shouldbe prepared. A multi-sectorial approach to assess the risk related to these diseases is needed, involving sectors such as animal health, food safety, entomology, environment, blood safety.

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[1] A number of FTEs from ARHAI are also involved in cross-cutting activities, such as Foresight, digitalisation and e-health and ECDC international activities for AMR, not included here, as well as in the European Antibiotic Awareness Day, included under 5.1 Health Communication

Most vector-borne diseases have a complex ecology with transmission cycle involving reservoirs, hosts and vectors where the occurrence of human cases or outbreaks is heavily influenced by environmental conditions. ECDC's day-to-day contribution is to collect data, assess the risk and share timely mapping of case s during transmission seasons for the whole of Europe, giving national health authorities timely information for decision making. Furthermore, truly new or rare diseases might appear or re-appear. Efforts to monitor and control these diseases are hampered by often limited capacity for detection combined with some lack of knowledge or awareness from clinicians.

It is important to stress that Member States are facing different threats regarding these diseases. Different types of data are needed to understand and assess the risks linked to the different emerging and vector-borne disease situations in Member States:

- disease data;
- pathogen presence (in human, reservoir hosts or vectors);
- data on presence/abundance/seasonality of competent vectors;
- data on suitable environmental conditions and social/behavioural changes;
- travellers data, population (human and animal), transmission (e.g. through blood donations), resistance.

These challenges require a wider perspective on the surveillance of EVD. Moreover, improved assessment tools are needed such as risk mapping, risk forecasting and orientation on control strategies.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objectives 1, 2, 3, 4, 5, 6, 7 and 9
Objective 2020 - 1	**Provide scientific advice on country preparedness and response to EVD-related threats.**
Key outputs 2020	Provision of risk assessments with the support of relevant networks (public health, laboratory and medical/veterinary entomology networks) and with a multi-sectoral approach.
	Provision of evidence-based guidance and expert opinions supporting the preparedness and response activities to EVD.
	Modelling tools to support decision-making (surveillance and vector control strategies) for mosquito-borne diseases in the EU/EEA.
	Meetings and trainings to strengthen the multi-sectorial collaboration among relevant stakeholders.
	Participation in ad-hoc country visits to assess preparedness or response plans for EVD.
Expected results	Countries' general preparedness and response strengthened for emerging and vector-borne diseases in the EU, including support to inter-sectoral collaboration(s) and public health capacity and capability strengthened.
	Decision makers can better appraise different surveillance and control strategies.
ECDC Strategic objective	**Strategic objective 1, 5 and 9**
Objective 2020 - 2	**Strengthen the surveillance of emerging vector-borne diseases through the implementation of notifiable EVD, the monitoring of vector distribution/abundance and seasonality, and the timely reporting on EVD epidemic-prone diseases.**
Key outputs 2020	Analysis of TESSy surveillance data (using an integrated approach when appropriate).
	Strengthened the epidemiological surveillance and better understand the burden of specific EVD (e.g. Lyme disease).
	Real-time surveillance of EVD (e.g. West Nile fever).
	Provision of data on human disease vectors and their pathogens for vectors and pathogens distribution mapping (ticks, mosquitoes and sand-flies).
	Operating of the event-based surveillance system (event and threat management solution), collecting, analysing and assessing the EVD data.
Expected results	Better overview on EVDs' trends and vector distribution/abundance and seasonality in the EU/EEA.
	Timely surveillance data for diseases transmitted by vectors to support national health authorities to implement intervention measures in a timely manner (e.g. blood safety authorities). Member States supported in the implementation of surveillance of EVDs.
	Operational early warning and outbreak response for EVD in the EU/EEA improved.

ECDC Strategic objective	Strategic objective 1, 3, 4 and 5
Objective 2020 - 3	**Increase laboratory capacity building for early detection and surveillance through an outsourced laboratory network in coordination with other EU initiatives.**
Key outputs 2020	Maintenance of a pro-active and flexible network of European expert laboratories that are involved in diagnosis, in the support of public health activities and research activities.
	External Quality Assessment (EQA) on viral pathogens for vector-borne diseases.
	Provision of short training courses to improve the diagnostic capability of EU expert laboratories in the EU/EEA.
Expected results	Laboratory capacity building strengthened for early detection and surveillance of (re)emerging viral diseases.

ECDC Strategic objective	Strategic objective 1, 2, 4 and 8
Objective 2020 - 4	**Promote multidisciplinary networking and partnerships with international stakeholders.**
Key outputs 2020	Strengthened EVD-related networks to share expertise, best practices and lessons learned.
	Strengthened collaboration between the public health network, the entomological network and the laboratory network as well as collaboration with their animal health counterparts.
	Close collaboration with the European Commission, other EU agencies (e.g. EFSA), WHO and other international stakeholders (e.g. other CDCs).
Expected results	Improved international and inter-sectorial collaborations for better coordinated and harmonised response and preparedness related to disease vectors and EVD threats.

Total Resources EVD in 2020:

Emerging and vector borne diseases	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	5.6 FTE	1.9 FTE	7.5 FTE
Total operational budget title 3	€745 000	-	€1 600 860

4.6.3. Food- and waterborne diseases and zoonoses

Context

The food- and waterborne diseases and Legionnaires' disease exemplify the concept of serious cross-border threats to health, as they are prone to outbreaks and clustering of cases (including fatalities) that can cross national and international borders, due to trade of contaminated food, water, and/or infected animals as well as due to international travel of humans. These characteristics, along with the potentially large economic impact on the trade and the tourist industry, makes the early detection and effective investigation of outbreaks particularly important. This requires multidisciplinary collaboration and regular communication between food-safety, veterinary, environmental and public health authorities to implement control and prevention measures in a timely manner. Therefore, ECDC works, along the 'One Health' principle, in close collaboration with EFSA and the European Union Reference Laboratories (veterinary reference laboratories). The joint ECDC-EFSA molecular typing database was piloted in 2015–2016 and has become operational in 2018. Simultaneously, the scenarios to upgrade the joint ECDC-EFSA molecular typing database with whole genome sequencing (WGS) will be published in April 2019, as a response to the mandate received from the Commission in 2017, and this upgrade is expected to be realised in 2020. Based on the European-wide retrospective, multi-centre validation study on analytical pipelines of sequenced human *L. monocytogenes* isolates, the WGS-enhanced listeriosis surveillance continues in 2020, with a gradual increase in countries able to report WGS data and an improved integrated exposure assessment through national and EU standard patient interview questionnaires. Contribution continues on preparations for integration of WGS for surveillance and outbreak response to other FWD, like campylobacteriosis and Legionnaires' disease. In 2020, priority continues to be given to the assessment of continuous and intermittent common source multi-country foodborne outbreaks, caused by strains of *Listeria monocytogenes* and *Salmonella* with demonstrated persistence in the food chain. As a result of the revision of EU case definitions in 2018, the monitoring of antimicrobial

resistance is strengthened for human *Campylobacter*, *Salmonella* and *Shigella* isolates, thus enabling improved assessment of the public health risks related to multi-resistant strains circulating in the food chain.

The investments in detection and investigation of multi-country foodborne outbreaks have resulted in improved competence in ECDC and Member States to respond to signals from event-based and WGS-enhanced surveillance. The focus of FWD DP will move from short-term objectives to medium- and long term objectives aimed at robust enhanced surveillance, integrating laboratory, clinical and epidemiological data, monitoring trends and highlighting (re)-emerging strains, assessing the public health impact of prevention and control measures/programmes implemented in the food and environmental sector, and identifying disease-specific at-risk population groups and risk factors in the EU/EEA. Focus continues towards joint analyses of ECDC and EFSA data in 'thematic reports' and other scientific publications, allowing for a more in depth analysis of epidemiological features of selected diseases.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objectives 1, 2 and 6
Objective 2020 - 1	**Strengthen surveillance according to the 'One Health' principle, to foster multidisciplinary analyses of collected data, including AMR, in collaboration with relevant EU agencies so that effective preventive and control measures can be implemented (short, medium, and long-term).**
Key outputs 2020	FWD surveillance and further gradual integration of WGS into surveillance of selected FWD, including AMR for *Salmonella* and *Campylobacter* as well as relevant validation/inter-laboratory studies according to the roadmap; collaboration with the WHO Global Antimicrobial Resistance Surveillance System (GLASS); Applied scientific (multidisciplinary) analyses and outputs; ECDC and joint surveillance or thematic reports with sister EU agencies (EFSA, EMA).
Expected results	Reliable scientific evidence provided to policy makers for medium and long-term preventive and control measures in the field of FWD and Legionnaires' disease. Good preparedness for response to EU-wide and global foodborne and travel-associated Legionnaires' disease (TALD) events.

ECDC Strategic objective	Strategic objectives 5 and 6
Objective 2020 - 2	**Strengthen detection and investigation of multi-country food/waterborne and real-time travel-associated Legionnaires' disease (TALD) outbreaks, in collaboration with relevant partners, in the spirit of 'One Health'.**
Key outputs 2020	Communications by ECDC or jointly with EFSA on FWD cross-border threats to health; Scientific communications.
Expected results	Reliable evidence for implementation of short term control measures by risk managers. Better compliance with the legal EU requirements on investigation of foodborne outbreaks (Directive 2003/99/EC, Chapter IV, Article 8); more outbreaks detected and investigated.

ECDC Strategic objective	Strategic objective 3, 4 and 9
Objective 2020 - 3	**Promote the development of high quality capacity in national public health reference laboratories to detect, investigate and respond to emerging FWD and Legionnaires' disease (LD), and outbreaks, allowing comparison of molecular typing data nationally and globally with human, food, feed, animal, and environmental (water) data.**
Key outputs 2020	External quality assessments services (EQA) and inter-laboratory studies for selected FWD and Legionnaires' disease. Capacity building opportunities through the FWD Expert Exchange Programme (FWDEEP).

Expected results	Increased number of countries with WGS capacity and better collaborative response to serious cross-border public health threats related to FWD.
	Improved collaboration across sectors at local, regional, national, EU and global level.

ECDC Strategic objective	Strategic objective 3
Objective 2020 - 4	**Promote multidisciplinary networking and partnerships with international stakeholders to foster the sharing of best practices between Member States.**
Key outputs 2020	Disease Network meetings.
	Joint networks meeting between ECDC and the EU Reference Laboratory for antimicrobial resistance (EURL-AR).
	Collaborative activities with international stakeholders, e.g. WHO Regional Office for Europe and PulseNet International, US CDC.
	Collaborate and compare activities with relevant European Research projects, e.g. European Joint Programme on One Health.
Expected results	High level of preparedness for response to EU-wide and global foodborne and travel associated legionnaire disease (TALD) events.

Total Resources FWD in 2020:

Food and water-borne diseases	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	7.7 FTE	2.6 FTE	10.3 FTE
Total operational budget title 3	€700 000	-	€1 906 711

4.6.4. HIV, sexually transmitted infections and viral hepatitis

Context

This group of diseases have similar basic determinants such as links to sexual behaviour or injecting drug use. They also tend to affect marginalised or stigmatised populations (including men who have sex with men, migrants, people who inject drugs or prison inmates). Another common characteristic is that many of these diseases tend to persist as asymptomatic chronic infections, with resulting challenges for disease detection, burden estimates, co-infection, prevention and control. Dedicated programmes for these diseases have to be based on quite specific evidence and solid data, which is often difficult to obtain and validate. Many EU/EEA Member States have fragmented prevention and care services for HIV, STIs and viral hepatitis, and this poses additional challenges for ensuring effective prevention and control. The importance of integrating programmes for these diseases will be one of the topics of a symposium that will discuss HIV, STIs and viral hepatitis long-term priorities in the EU/EEA.

In 2020, ECDC will continue in its efforts to improve the quality and usefullness of the epidemiological data collected, especially data on viral hepatitis B and C and chlamydia. This will be done by working in close collaboration with Member States to help understand the problems with the data and to identify ways of overcoming them. New systems of routine data collection will be piloted, such as a clinical sentinel surveillance system to collect additional data relevant to monitoring HCV and HBV-related morbidity and mortality. Another initiative will seek to collect alternative sources of data, such as through the database of relevant prevalence studies and serosurveys, and developing modelling techniques to better estimate HIV and viral hepatitis prevalence. A new joint surveillance system for the collection of HIV drug resistance reporting and analysis will be launched together with WHO Europe, while work will continue to extend the gonorrhoeal antimicrobial resistance sentinel surveillance programme (EURO GASP) to cover more countries in the EU. The possibility of studying behaviour that determine the rates of infection will be further explored.

Working closely with EMCDDA, ECDC will begin to update the evidence as the first step in updating the well regarded guidance on Prevention and control of infectious diseases among people who inject drugs, produced in 2011. ECDC will look into the possibility of studying further the determinants of the increasing bacterial STI trends, especially focusing on syphilis, as well as looking into testing of men who have sex with men in the EU/EEA.

Improvements to the data on monitoring the response to several international commitments, such as the sustainable development goals (SDGs) or the Dublin Declaration commitments, will continue in collaboration with

key stakeholders (i.e. WHO and UNAIDS) trying to ensure that the reporting burden on Member States is kept to a minimum.

In addition, during 2020 ECDC aims to continue to work very closely with colleagues in Member States with two Network (HIV and STI) meetings planned for 2020. Apart from these, ECDC will visit more countries to better understand and meet their needs, while ensuring close collaboration with partner agencies such as WHO, EMCDDA and other key stakeholders, including DG-SANTE, to further develop synergies and minimise any duplication of efforts.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 1, 2, 3 and 4
Objective 2020 - 1	**Improve the epidemiological understanding of HIV, hepatitis B and C, STIs, antimicrobial-resistant gonorrhoea and drug-resistant HIV, to support more effective decision-making by Member States and the Commission.**
Key outputs 2020	Improved quality of surveillance data (including on drug-resistant HIV and antimicrobial resistance of gonorrhoea, in collaboration with the WHO Global Antimicrobial Resistance Surveillance System – GLASS); surveillance systems further consolidated and analysis methods improved (including modelling estimates) to produce better, more relevant outputs for effective decision-making.
	Alternative sources of data to better describe the burden of disease, in particular hepatitis C: clinical data; prevalence sero-surveys; attributable mortality estimates and continue work to disseminate prevalence data through the online prevalence database and promoting sero-surveys.
	Country visits in response to specific requests by Member States to strengthen their processes and expert capacity. *(*could be deprioritised in case of emergency).*
	Consultation and coordination of the HIV, hepatitis or STI surveillance networks (annual coordination committee meetings), and STI and HIV (network meetings), in close collaboration with key stakeholders. *(*could be deprioritised in case of emergency)*
Expected results	Better quality epidemiological data that accurately reflects the true burden of disease and the main determinants of HIV, hepatitis B and C and possibly STIs in the EU.
	Informative analysis for experts and policy advisors in the Member States, to help improve the national response and reduce the disease burden of HIV (including HIV drug resistance), hepatitis B and C and STIs (including anti-microbial resistant gonorrhoea) at EU and national levels.
	Contribute to scientific excellence by strengthening the capacity of the public health workforce and associated networks.

ECDC Strategic objective	Strategic objective 2, 7 and 8
Objective 2020 - 2	**Strengthen international cooperation on HIV, hepatitis B and C, and STI with relevant stakeholders to create synergy and improve efficiency.**[1]
Key outputs 2020	Support the international response by participation in major meetings or conferences organised by key partners and invite them to participate in relevant ECDC conferences or meetings. *(*could be deprioritised in case of emergency)*
Expected results	Enhance collaboration with clinical networks, learned societies and other key stakeholders. Broader support for ECDC activities from opinion leaders, influential organisations and leading societies.
	Strengthened collaboration on monitoring and surveillance activities with WHO, UNAIDS and EMCDDA.

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[1] WHO, EMCDDA, UNAIDS, Civil Society Forum, US CDC, International AIDS Society, International Society for Sexually Transmitted Diseases Research, European Association For The Study Of The Liver, International Union against Sexually Transmitted Infections, International Association of Physicians in AIDS Care, AIDS Action Europe, European AIDS Treatment Group, amongst others.

ECDC Strategic objective	Strategic objective 1, 2, 3, 4, 7 and 8
Objective 2020- 3	**Support the European Commission and Member States through the provision of sound, and evidence-based technical advice and guidance, including relevant monitoring and evaluation and capacity building, including exchange of experts and study visits.**
Key outputs 2020	Country missions, jointly with WHO or EMCDDA, to provide technical support to Member States on HIV, STI and hepatitis issues. *(*could be deprioritised in case of emergency)*
	Reports to monitor the response to HIV and Hepatitis in Europe, focusing mainly on indicators relevant to the sustainable development goals (SGDs), Dublin Declaration and the UN General Assembly commitments, in collaboration with WHO, EMCDDA and UNAIDS (sharing of data to reduce duplication of reporting). *(*could be deprioritised in case of emergency)*
	Technical reports and scientific guidance on topics identified by Member States and the Commission as priority areas. Commence work on updating the joint guidance on prevention and control of infectious diseases among people who inject drugs, produced in 2010.
Expected results	Robust information on the response to HIV and hepatitis B and C at EU and national levels, integrating and harmonising the various sets of indicators – assisting Member States to understand where to prioritise efforts.
	Reduced burden on Member States (avoid duplication of reporting with WHO and UNAIDS), and better integrated monitoring reports on Member States commitments.
	Clear evidence-based scientific advice and guidance for the European Commission and Member States to help improve the HIV, hepatitis B and C, and STIs prevention and control.
	Improved Member State response by strengthening the capacity of the public health workforce and associated experts.

ECDC Strategic objective (p.17)	Strategic objective 2, 7 and 8
Objective 2020	**Communicate broadly ECDC evidence-based reports and outputs, and contribute to raising awareness in particular on the burden of HIV and hepatitis.**
Key outputs 2020 - 4	All major technical outputs (including evidence briefs) include elements to ensure that the evidence can be used to support efficient decision-making.
	World AIDS Day, World Hepatitis Day, hepatitis and HIV and hepatitis testing weeks and similar events supported with a variety of external communication activities and outputs. *(*could be deprioritised in case of emergency)*
	Participation at relevant expert meetings from key partners and presentation of ECDC outputs. *(*could be deprioritised in case of emergency)*
Expected results	Better awareness by policy advisors, media and the general population of the epidemiological burden and issues relating to the prevention and control of HIV, STIs and hepatitis in the EU.
	Stronger support for ECDC activities from key stakeholders and influential opinion leaders in these diseases.

Total Resources HSH:

HIV, sexually transmitted infections and viral hepatitis	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	8.1 FTE	2.8 FTE	10.8 FTE
Total operational budget title 3	€1 100 000	-	€2 268 765

4.6.5. Influenza and other respiratory viruses

Context

Seasonal influenza continues to be the communicable disease with one of the highest morbidity and mortality impacts on the EU population. Influenza vaccines and neuraminidase inhibitors remain the best control options against seasonal influenza. In addition, zoonotic influenza and other emerging respiratory viruses continue to threaten public health in unsuspected and unexpected ways. Strong (pandemic) preparedness at the level of surveillance, laboratory activities and comprehensive actions in line with the serious cross border threats to health (Decision 1082/2013/EU) is needed. Globally, the countries participating in the World Health Assembly have agreed to a Pandemic Influenza Preparedness Framework (WHA64.5), which obliges countries to share viruses with pandemic potential and is important for ECDC work to support pandemic preparedness. In order to facilitate access to pandemic vaccines, the European Commission has launched a Joint Procurement mechanism for pandemic influenza vaccines under article 5 of Decision 1082/2013/EU.

Seasonal respiratory syncytial virus (RSV) epidemics are a significant cause of morbidity among infants and potentially the elderly in the EU and several vaccine candidates are currently in phase II and phase III studies. In anticipation of the introduction of vaccination programmes in the EU/EEA, surveillance systems should be established in affected Member States to obtain baseline data for future impact assessment.

EU Member States have agreed to have strong influenza immunisation programmes for the elderly and other risk groups[1] and on the importance of strong immunisation programmes in general[2].

The ongoing outbreaks and threats for humans of avian influenza viruses such as H5 and H7N9 influenza, as well as the Middle East Respiratory Syndrome - coronavirus (MERS CoV) show the importance of the need for strong surveillance systems and scientific advice capacity for seasonal influenza and (re-)emerging respiratory viruses, monitoring the overall impact of seasonal, zoonotic and pandemic influenza and the need for a strong national reference laboratory network in the EU.

Given the nature of diseases, international collaboration is vital, in particular with WHO/Europe, WHO-HQ and national CDCs. ECDC has the experience and capacity to upscale for monitoring emerging viruses and produce timely assessments and options for risk management. Close collaboration with relevant Horizon 2020 projects, such as PREPARE on facilitating clinical research during pandemics is anticipated. Close collaboration with relevant CHAFEA projects, such as the joint action on vaccinations, preparedness, and IMI projects, such as RESCEU on RSV burden of disease and surveillance, is also anticipated, subject to such collaboration being in accordance with the prerequisites for scientific independence endorsed by the Centre's Advisory Forum and Management Board. Cooperation with partners from the animal health side is crucial in the timely sharing of information and capacity building.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 1, 3, and 9
Objective 2020- 1	**Transform the European surveillance of influenza and other respiratory viruses, in collaboration with WHO Europe and the NFPs for influenza and other respiratory viruses, based on the result of evaluations and projects conducted in 2019[3].**
Key outputs 2020	Pilot of a revised influenza surveillance system for European Influenza Surveillance Network, based on a proposal developed in 2019[4]. Further work on forecasting/now-casting of yearly seasonal influenza epidemic, based on a modelling feasibility study performed in 2019. Weekly high-quality and high-impact surveillance reports on FluNewsEurope.org during the season.
Expected results	Member States get high-impact and valuable influenza surveillance outputs, based on surveillance and mortality data. Close collaboration with WHO Europe and WHO Headquarters adds value for Member States with a coherent system of European-wide surveillance of influenza.

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[1] Council recommendation of 22 December 2009 on seasonal influenza vaccination (2009/1019/EU)

[2] Council conclusions on vaccinations as an effective tool in public health of 1 December 2014

[3] Evaluations of the IRV Disease Programmes and the Evaluations of EU/EEA Public Health Surveillance Systems (EPHESUS); ECDC Data Quality Project, Surveillance Systems Re-engineering Project

[4] Based on the evaluation of the disease programmes – in 2018, Data quality evaluation in 2017 and the EPHESUS surveillance evaluation in 2018

ECDC Strategic objective	Strategic objective 5 , 6, and 7
Objective 2020 - 2	**Enable early detection, monitoring, scientific advice, and preparedness for zoonotic and other emerging respiratory viruses (including MERS-CoV and avian/swine influenza viruses).**
Key outputs 2020	Timely high-quality risk assessment and scientific advice on emerging respiratory pathogens. Support to European and international outbreak assessment missions. Quarterly ECDC/EFSA avian influenza reports.
Expected results	European Commission, EFSA, EMA and Member States provided with timely and valuable risk assessments and scientific advice on emerging respiratory pathogens and outbreaks.

ECDC Strategic objective	Strategic objective 3 and 4
Objective 2020 - 3	**Strengthen laboratory and surveillance capacity among the network through training and laboratory support.**
Key outputs 2020	Online training and wet lab courses offered to Member States' network members. (*could be deprioritised in case of emergency) Technical working group on virological surveillance.
Expected results	Strengthened laboratory and network capacity through training and laboratory support.

ECDC Strategic objective	Strategic objective 2
Objective 2020 - 4	**Support Member States' vaccination programmes by monitoring vaccine effectiveness and safety signals, and through communication campaigns.[1]**
Key outputs 2020	Timely vaccine effectiveness estimates available to stakeholders. Expert meeting/review of evidence to support impact analysis for newly established influenza vaccination programmes, within the NITAG collaboration. Ecological/observational study to assess the annual impact of vaccinations on morbidity and mortality of influenza. Lines to take for communication plans on the larger impact of seasonal influenza and vaccination on individuals and society, based on available evidence. Expertise and support to the European Commission for Joint Procurement of pandemic vaccines.
Expected results	Support to national vaccination programmes and strategies, with evidence-based scientific advice and monitoring of influenza vaccine effectiveness at EU-level. Strengthened network of technical and communication experts on vaccination programmes in Member States, sharing best practices to address vaccination hesitancy. Engagement policy makers responsible for vaccination programmes in Member States.

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[1] Council conclusions on vaccinations as an effective tool in public health, 1 December 2014

ECDC Strategic objective	Strategic objective 1 and 3
Objective 2020 - 5	**Monitor and strengthen pandemic preparedness in the EU by supporting the European Commission, the Health Security Committee, the Member States and international partners[1].**
Key outputs 2020	Assessment of preparedness through e.g. case studies, country visits, simulation exercises, and after-event reviews. Scientific advice to the Health Security Committee/DG SANTE/WHO Pandemic Influenza Preparedness (PIP), as requested, and technical support to the PIP implementation process Scientific support to the EU joint procurement process, upon request. Regional pandemic preparedness workshop/exercise and country support for pandemic preparedness and planning, upon request.
Expected results	Enhanced pandemic preparedness in line with Decision 1082/2013/EU through tools and assessments for decision-making.

Total Resources IRV in 2020:

Influenza and other respiratory viruses	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	4.6 FTE	1.6 FTE	6.1 FTE
Total operational budget title 3	€701 000	-	€1 449 620

4.6.6 Tuberculosis

Context

The TB notification rate in the EU/EEA continues its downward trend observed since the launch of the European enhanced TB surveillance in 1996. Over recent years, the average annual notification rate decline was 5%. While this trend is encouraging, it covers marked variations between Member States and it is not sufficient to achieve the Sustainable Development Goal (SDG) target for TB in the EU as a whole by 2030.

EU Member States, EEA countries, candidate countries, potential candidate countries and the European Neighbourhood Policy countries have different tuberculosis (TB) epidemiological profiles:

- medium and high burden of (drug-resistant) TB (TB notification rate ≥ 10 per 100 000 population);
- low burden (TB notification rate < 10 per 100 000 population), but with significant inequalities in TB rates between population sub-groups.

Different approaches are required to achieve TB reduction, and ultimately elimination, according to the epidemiological pattern in a country. In low burden settings, people at risk of TB are often found in vulnerable populations, which may be difficult to reach with the standard models of care. In addition, TB in migrants/refugees contributes to the epidemiology. In medium and high burden settings, TB is more often found in the general population.

Diagnosing and treating patients is the main public health strategy. This requires sufficient human and financial resources and innovative strategies that allow for early case finding and optimal treatment.

The EU Member States have committed themselves to the SDGs, including Goal 3 'Ensure healthy lives and promote well-being for all at all ages' and its target 3.3 to end by 2030 the epidemic of tuberculosis. In a communication[2], the European Commission committed to help Member States in reaching the SDG targets. The SDG target is also reflected in the World Health Organisation's global End TB Strategy, which aims at an 80% reduction in TB incidence and a 90% reduction in TB deaths by 2030 compared with 2015. Progress towards ending TB is measured using the monitoring framework for follow up of the TB action plan for the WHO European Region, which aims at a 35% reduction in TB death, 25% reduction in TB incidence rate and a 75% treatment

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[1] The WHO Pandemic Influenza Preparedness Framework and the Global Health Security Initiative Pandemic Influenza Working Group

[2] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Next steps for a sustainable European future European action for sustainability. Strasbourg, 22.11.2016; COM(2016) 739 final.

success rate among the MDR TB patient cohort by the end of 2020[1]. In September 2018 the United Nations High Level Meeting on TB will consider a proposal for a multi-sectoral accountability framework to accelerate progress to end TB for implementation at global/regional and national level.

To assist Member States with implementing the WHO End TB Strategy and the TB Action Plan for the WHO European Region 2016-2020, and with reaching and monitoring against the SDG targets, ECDC will:

- Provide timely and reliable information, including surveillance and molecular typing data, through joint surveillance and monitoring of tuberculosis with the WHO Regional Office for Europe. Continue the improvement and standardisation of data collection of all diagnosed TB patients and individuals with latent TB infection, with specific focus on drug resistance, treatment outcome results, molecular typing and HIV co-infection.
- Strengthen laboratory services for TB management with consideration to varying country profiles and resources, new diagnostic tests, including rapid drug susceptibility testing, and molecular typing. Support national reference laboratories to ensure quality and timely diagnosis for all through assessments, trainings, and scientific advice in areas that are identified as priorities by Member States in conjunction with ECDC.
- Provide up-to-date scientific advice and technical support, including targeted country support and missions, related to the prevention and control of TB to assist the European Commission and EU Member States with effective and evidence-based decision making to reach the SDG targets for tuberculosis.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 1, 2 and 3
Objective 2020 - 1	**Strengthen (drug resistant) TB (molecular typing) and latent tuberculosis infections (LTBI) surveillance at national and EU level to reach an adequate coverage and completeness in order to:** **inform TB prevention and control actions,** **monitor against agreed targets.**
Key outputs 2020	Updated TB data analysed and reported. Collaboration with the WHO Global Antimicrobial Resistance Surveillance System (GLASS).
Expected results	Further harmonised and improved quality of TB surveillance at national and European level.

ECDC Strategic objective	Strategic objective 2, 3 and 4
Objective 2020 - 2	**Strengthen the TB laboratory services:** • for the management of TB: all TB suspects tested with adequate and rapid diagnosis tests; all laboratory-confirmed TB cases tested for drug resistance; • for the detection and investigation of clusters: use of adequate molecular typing methods.
Key outputs 2020	Strengthened European reference laboratories through implementation of the European Reference Laboratory Network for TB activities including an annual meeting, training of laboratory experts, and external quality assessment. Results of a pilot study on the use of WGS for molecular typing and characterisation of *M. tuberculosis* in the EU/EEA.
Expected results	Improved laboratory services and processes for the management of TB cases and molecular typing for surveillance of TB.

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[1] World Health Organisation Regional Office for Europe. Roadmap to implement the tuberculosis action plan for the WHO European Region 2016–2020 - Towards ending tuberculosis and multidrug-resistant tuberculosis. http://www.euro.who.int/__data/assets/pdf_file/0007/283804/65wd17e_Rev1_TBActionPlan_150588_withCover.pdf

ECDC Strategic objective	Strategic objective 1, 2, and 4
Objective 2020 - 3	**Support TB prevention and control efforts of Member States to progress towards ending TB.**
Key outputs 2020	Country visits and consultancies for countries Capacity building for persons involved in key strategic areas of TB prevention and control.
Expected results	Strengthened national TB control efforts.

ECDC Strategic objective	Strategic objective 1 and 2
Objective 2020- 4	**Provide relevant up-to-date scientific advice on TB prevention and control to support the European Commission and Member States and disseminate the advice according to the dissemination plan.**
Key outputs 2020	Timely high quality scientific advice to support the European Commission and the Member States, including support for the Joint Procurement Procedures under Article 5 of Decision No 1082/2013/EU, (in particular BCG vaccines against tuberculosis).
Expected results	Evidence based decision-making by Member States on TB prevention and control.

Total Resources TB in 2020:

Tuberculosis	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	4.5 FTE	1.5 FTE	6.0 FTE
Total operational budget title 3	€700 000	-	€1 341 100

4.6.7 Vaccine preventable diseases

Context

ECDC will dedicate efforts to implement the Council Recommendation on Strengthened Cooperation against Vaccine-preventable diseases[1], and the Commission communication and roadmap for the implementation of actions. They define key priority areas of intervention to foster sustainable vaccination policies in the EU, and call on ECDC to establish and coordinate a European Vaccine Information Sharing (EVIS) system aimed to bolster the provision of scientific advice on immunisation issues, the surveillance of vaccine-preventable diseases, and the development of tools to counter vaccine hesitancy. Such work strengthens and builds upon the Centre's activities in the area of vaccination and consolidates key EU-level undertakings to bolster the programmatic sustainability of immunisation programmes at national level. The implementation will be done in close collaboration and consultation with Member States.

Effective vaccination programmes prevent threatening diseases in children and adults and save millions of lives. Nevertheless, key challenges still remain to ensure the full integration of vaccination programmes in Member States' primary health systems. Budgetary pressures, demographic shifts, and changes in the vaccine ecosystem challenge the sustainability of vaccination policies in Member States. As more and more new vaccines are available for different age, risk, and target groups, introducing, monitoring and assessing their impact and use in immunisation programmes (including safety and effectiveness) becomes increasingly complex. Meanwhile, shortages of traditional vaccines hamper the delivery of routine immunisation programmes. Furthermore, ageing, migratory flows, and the shift of VPDs burden from childhood to later years of life call for an assessment of the feasibility and cost-effectiveness of a life-course approach to vaccination.

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[1] Council recommendation, 7 December 2018 on strengthened cooperation against vaccine-preventable diseases (2018/C 466/01)

Vaccine hesitancy continues to be a concern in Europe and worldwide, as it undermines the impact of immunisation programmes. It is highly specific to the context, country, and vaccine. At EU level, action is needed to align, across Member States, communication at different levels of the public health systems, to target parents and immunisation providers. It is essential to facilitate access to vaccination, identify the common root causes of hesitancy across countries, monitor its spread, limit the damage when false alarms are rapidly transmitted around the world, and monitor media and social media to detect early signals of decline in confidence towards vaccination. Training of healthcare workers who administer and advise on vaccines in Member States is a key priority.

Opportunities and innovative solutions to address some of these challenges are becoming available, such as e-Health platforms to strengthen immunisation programs. The design and implementation of Electronic Immunisation Information Systems (eIIS) at national and subnational levels can strengthen the performance of immunisation programs, facilitate vaccine coverage monitoring, track immunisation history, identify under-immunised individuals, monitor safety signals, estimate vaccine effectiveness, document vaccine shortages and track product information. Linking these systems to broader healthcare system tools has potential to measure health results and provide timely information for action to health authorities.

The ongoing measles outbreaks in the EU/EEA means that the region will not achieve the measles elimination goal by 2020. ECDC will continue to support countries by generating data for action, relevant for policy-makers, and strengthen its collaboration with WHO. ECDC partners with WHO and international partners to keep the polio-free status of the EU/EEA and support a phased approach to eradicate it globally.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic Objective 1, 2, 3, 9
Objective 2020 - 1	**Establish and coordinate a European Vaccine Information Sharing System (EVIS) as requested by Art. 9 of Council Recommendation on Strengthened Cooperation Against Vaccine-Preventable Diseases**
Key outputs 2020	Feasibility study on core EU vaccination schedule to improve compatibility of national schedules and promote equity in Union citizens' health protection. Scientific evidence and tools to support the National Immunisation Technical Advisory Groups (NITAGs) and national recommendations on immunisation. EU pilot system launched to collect and share data on vaccination coverage rates across the life-course. European Vaccination Information Portal, jointly established with EMA Evidence and tools to counter online vaccine misinformation
Expected results	The EVIS system requested in the Council Recommendation will include the above-listed key outputs and provide EU-wide services to strengthen programmatic effectiveness and sustainability of vaccination programmes. The system will be progressively developed and expanded over the next three to five years, starting in 2019.

ECDC Strategic objective	Strategic objective 1, 2, 3, 9
Objective 2020 - 2	**Consolidate the collaboration between the National Focal Points for VPD and the National Immunisation Technical Advisory Groups (NITAGs) to allow the provision of scientific advice to countries on key VPD and immunisation issues, in line with the Council Recommendation.**
Key outputs 2020	Scientific and technical advice for effective decision-making at national level on immunisation issues Sharing of scientific products/outputs between Member States.
Expected results	Timely authoritative and relevant scientific advice inform and strengthen national immunisation policies, and reduce duplication in the assessment of vaccines and vaccination strategies.

ECDC Strategic objective	Strategic objective 1, 2, 3, 5
Objective 2020 - 4	**Strengthen the EU epidemiological and laboratory surveillance for VPDs and the infrastructures to monitor the impact and effectiveness of priority vaccines and vaccination programmes.**
Key outputs 2020	Evidence for action to support disease control and/or elimination/ eradication targets. Analyses and modelling studies on measles, to identify immunity gaps and priority groups for vaccination. Studies on the epidemiological burden of VPDs across later years of life. EQAs/laboratory support in key priority areas, incl. molecular surveillance of meningococcal disease. Hospital-based surveillance networks launched for priority VPDs (pertussis, pneumococcal disease, Respiratory Syncytial Virus, and influenza), to estimate the effectiveness and impact of vaccine/vaccination programmes.
Expected results	Timely data for action on VPDs for diseases targeted for elimination and/or eradication, trends in Europe, risks of outbreaks. Evidence on the burden of diseases, effectiveness and impact of vaccine/vaccination programmes.

ECDC Strategic objective	Strategic objective 1, 2, 6, 9
Objective 2020 - 5	**Develop evidence and tools to address vaccine hesitancy, with focus on the provision of objective and transparent information on vaccines and vaccination and support to national communications campaigns.**
Key outputs 2020	European Vaccination Information Portal, primarily targeting the general public, in collaboration with EMA/DG SANTE, to provide objective, transparent and updated online evidence on vaccination and vaccines benefits, safety and pharmacovigilance. Evidence-based information tools and guidance to counter online vaccine misinformation and support Member States response to vaccine hesitancy. Training modules for primary healthcare professionals to strengthen effective communication skills towards vaccine hesitant individuals. Support to national campaigns during the European Immunisation Week 2020, in close collaboration with WHO Europe.
Expected results	Tackle vaccine hesitancy and increase knowledge through collaboration and sharing of expertise between EU/EEA countries, by translating scientific evidence into relevant user-friendly communication on immunisation and public health practice.

ECDC Strategic objective	Strategic objective 1, 8
Objective 2020 - 6	**Provide timely response to ad hoc requests for scientific advice from Member States as well as scientific and technical advice to support programmes and activities on vaccination implemented by DG SANTE/CHAFEA/DG RESEARCH/EMA, other EU actors and WHO.**
Key outputs 2020	Technical support to DG SANTE/CHAFEA to implement the Council Recommendation on Strengthened Cooperation Against VPDs and technical input to the Joint Action on Vaccination. Technical support to DG SANTE on the Joint Procurement of medical countermeasures (Art. 5 Decision 1082/2013/EU) for VPDs Technical support to WHO Europe and WHO HQ on measles and rubella elimination, polio eradication, and European and global coordination on immunisation (ETAGE, SAGE)
Expected results	Integration and coordination with activities on vaccination led by key EU, international, and national stakeholders.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
26	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Strengthened Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	**Satisfaction by Member States regarding the work of the Disease Programmes**	83% *(source: annual stakeholder survey 2015)*	>75% satisfaction by two-third of the respondents	As measured by the VPD networks annual survey
27	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Strengthen Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	**Added value of the disease programmes (as per periodical evaluation)**	n/a	>75% satisfaction for the generic index, for each Disease Programme	Generic index based on the evaluation of the programme performed every 5 years (ongoing 2018–2020)

Total Resources VPD in 2020:

Vaccine preventable diseases	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	10.3 FTE[1]	3.5 FTE	13.8 FTE
Total operational budget title 3	€1 699 000	-	€3 191 517

Indicators for all the disease programmes

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
26	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Strengthened Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	**Satisfaction by Member States regarding the work of the Disease Programmes**	ARHAI: 78.2% EVD: 81% FWD: 82% HSH: 85% IRV: 87% TB: 89% VPD: 83% *(source: annual stakeholder survey 2015)*	>75% satisfaction by two-third of the respondents	As measured by networks annual survey
27	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Strengthen Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	**Added value of the disease programmes (as per periodical evaluation)**	Evaluations conducted in 2018: - FWD - IRV Results presented to the Advisory Forum in 2019 Ongoing evaluation 2019: - TB	>75% satisfaction for the generic index, for each Disease Programme	Generic index based on the evaluation of the programme performed every 5 years (ongoing 2018-2020)

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[1] A number of FTEs from VPD are also involved in cross-cutting activities, such as Foresight, digitalisation and e-health, which are not included here

Overall disease work management and coordination in 2020:

Diseases work management and coordination	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	11.6 FTE	4.0 FTE	15.6 FTE
Total operational budget title 3	€ 0	-	€1 832 836

4.7. Management

4.7.1. General management

Context

The general management of the organisation requires work cohesion. The Executive Office established in 2019 supports the Director in managing the Centre in a coherent, effective, and efficient way, supporting the corporate strategy and providing a framework for the efficient functioning of the Centre.

The main focus is to transform the organisation into the next generation ECDC and deliver efficiency gains, aligning the key processes with the planning cycle in the Centre, and ensuring the quality and compliance of ECDC activities. New key performance indicators will be developed for the monitoring of the implementation of the ECDC strategy 2021–2027, and a framework for quality management will be defined, including the internal control framework. All these actions will be carried out in close collaboration with Information and Technology Architects and resource management support, to ensure seamless operations between business, data and content, and IT systems and services.

Seamless communication will be enhanced with Member States and the European Commission, particularly the governing bodies (MB and AF) and the National Coordinators of the Coordinating Competent Bodies. In 2020 a Joint Strategy meeting will be organised to get their views on the implementation of the ECDC Strategy 2021–2027 as well as the recommendations arising from the third External Evaluation of ECDC.

The reduction of the burden for Member States will continue to be a main target. Smooth collaboration with the Member States will be facilitated by the Stakeholder Resource Management System (SRM) and External Document Management System (DMS).

ECDC's products and communications should be scientifically correct and impartial. As ECDC relies on many internal and external experts who shape the scientific position of ECDC, an Independence Policy is in place to prevent conflicts of interest. The review of the annual declarations of interest is guided by the latest, more explicit risk analysis for ECDC. This risk analysis also serves to start collecting information on the proportionality of the resources involved.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Support to strategic objectives 1 to 7
Objective 2020	**Ensure seamless management and coordination of ECDC activities, and increased effectiveness and efficiency in implementing the Centre's mission and programme of activities.**
Key outputs 2020	ECDC Strategy 2021–2027 rolled-out, including improved monitoring system and new key performance indicators.
	Implementation and monitoring of the SPD 2020, including project management and internal control.
	Recommendations from the third ECDC external evaluation 2013–2017 addressed.
	Future ECDC integrated management system defined and implementation started.
	ECDC key processes reviewed, optimised and digitalised, according to plan.
	Continuous improvement, including quality management framework defined.
	Improvement plans resulting from internal evaluations monitored.

ECDC Strategic objective	Support to strategic objectives 1 to 7
Expected results	The organisation and smooth general management of the Centre supports ECDC in implementing its mission and strategy to deliver efficiency gains, and adapt better to its current and future challenges. Improved focus on timely and measurable outputs, products & services, through efficient processes, strong quality and project management culture. Improved planning, monitoring, and reporting of ECDC's annual work programme performance.

ECDC Strategic objective	Support to strategic objectives 1 to 7
Objective 2020 - 2	**Apply the independence policy in a proportional manner to all meetings organised by ECDC.**
Key outputs 2020	All Declarations of Interest checked in a timely way using an electronic submission and storage system.
Expected results	An efficient process is in place to prevent and address conflicts of interests.

ECDC Strategic objective	Support to strategic objectives 1 to 7
Objective 2020 - 3	**Ensure seamless communication with Member States and coordinate the smooth implementation of Governance meetings.**
Key outputs 2020	Enhanced cooperation with and involvement of key stakeholders (AF, MB and CCB) through optimised processes. Improvements to the Stakeholder Relationship Management system (SRM) introduced to further facilitate interactions between key stakeholders and ECDC.
Expected results	Key stakeholders are fulfilling their defined roles. Increased satisfaction of key stakeholders due to simpler access to information and smooth and safe information flows.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
28	Provide scientific advice and authoritative information that enables effective decision-making by Member States and the European Commission	Ensure timely ECDC input to EU policies in the remit of the Centre's mandate	**Number of EU policy documents for the preparation of which ECDC contributed**	n/a	5	List monitored by the Chief Scientist
29	Further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery.	Implement the independence policy of the agency	**Proportion of reviewed annual and specific declarations of interest for delegates to Governing Bodies, ad hoc scientific panels, invited experts and ECDC staff members before participation to the specified activities as defined in the policy, including Rapid Risk Assessments.**	MB: 96% AF: 89% Senior management: 100% External experts for RRA: 100% External experts at meetings: 99%	100%	Report from the compliance officer

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
30	Further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery.	Implement the annual work programme	**Proportion of activities implementation of the Annual Work programme***	89%	85%	Verified via ECDC Management Information System
31	Further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery.	Improve the adequacy and effectiveness of internal control systems	**Rate (%) of external and accepted internal audit recommendations implemented within agreed deadlines (excluding 'desirable')***	80% (8 out of 10 recommendations implemented within originally agreed timeline	90%	Internal control reporting to the Senior Management

* Indicators compliant with the "Guidelines on key performance indicators (KPI) for Directors of EU decentralised agencies, Brussels, 13 March 2015, SWD (2015) 62 Final"

4.7.2. Collaboration and cooperation

Context

From its history and Founding Regulations ECDC's operates as a network organisation, the hub of an EU 'network of networks'. Most of the disease prevention and control resources drawn on by ECDC– including public health laboratories and many of the disease-specific experts – are in Member State's national public health institutes and associated academic environments. Linking with experts and resources in Member States is therefore a vital core task for ECDC. The Director's country visits aim to better understand the national public health systems and policies and facilitate cooperation. The Centre's key partners are the Coordinating Competent Bodies – ECDC's official national counterpart organisations, formally nominated by its Member State. ECDC also nurtures the relationship with its host country Sweden and with key stakeholders at the EU-level, such as the European Health Forum Gastein (EHFG).

The Centre collaborates closely with the EU family of institutions and organisations to ensure its actions are coherent with the EU's policy objectives. Its partners are the European Commission's Directorate-General for Health and Food Safety (SANTE). The Centre also has contacts with other European Commission DGs, among which DG Research and innovation and Neighbourhood and Enlargement Negotiations (NEAR), as well as other EU agencies, most notably the European Food Safety Authority (EFSA) and the European Medicines Agency (EMA). These collaborations will be enhanced and the potential synergies with further agencies will be explored. ECDC is active in the Heads of Agencies network and its sub-networks to increase joint activities, common procedures and possible efficiency gains.

The European Parliament is also a partner for ECDC. The Director has an annual exchange of views with the Parliament's Committee for the Environment, Public Health and Food Safety (ENVI), presents the work of the Agency and submits annual written reports to its Committee for Budgetary Control (CONT). The Director also maintains regular contacts with the designated Member of European Parliament for ECDC contact in the ENVI committee. ECDC will in 2020 continue to strengthen its cooperation with the newly elected European Parliament and it members.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 2
Objective 2020 - 1	**Maintain appropriate relationships with the European Parliament (EP), in particular with the ENVI committee.**
Key outputs 2020	ECDC Director's annual exchange of views with the ENVI committee and, upon request, appearance before Parliamentary Committees.
	Biannual invitation for a delegation from the ENVI committee to visit ECDC. Provision of scientific opinions as requested by the European Parliament.
	Information of ECDC activities and of the Centre's disease specific areas in a format useful for making decisions.
Expected results	Ensure continuous and smooth relationships with the European Parliament.

ECDC Strategic objective	Strategic objective 2
Objective 2020 - 2	**Maintain and further enhance the cooperation with our host country, Sweden, via the designated contact person at the Swedish Ministry for Health and the ECDC liaison.**
Key outputs 2020	Actions as per agreement on strategic co-operation between ECDC and the Swedish Government, represented by the Ministry of Health and Social Affairs.
	Liaison on a regular basis with key persons at the Ministry of Health and Social Affairs.
	Sharing of experiences, evidence and expertise with the Swedish authorities.
Expected results	To inform about ECDC's mandate and activities and ensure continuous and smooth relationships with our host country Sweden.

ECDC Strategic objective	Strategic objective 2
Objective 2020 - 3	Maintain and further enhance the cooperation with key stakeholders at the EU-level.
Key outputs 2020	ECDC participation and interaction in the European Health Forum Gastein.
Expected results	Provide policy-makers, public health professionals and NGOs with the scientific evidence for decision making within the area of communicable diseases through organised events.

ECDC Strategic objective	Strategic objective 2
Objective 2020 - 4	**Further develop seamless, timely and efficient procedures for cooperation with the European Commission, in particular for the implementation of Decision1082/2013/EU.**
Key outputs 2020	Strategic planning meeting with DG SANTE to align the work.
	Activities of ECDC support and complement the work of DG SANTE and CHAFEA.
Expected results	Ensure strategic synergy with the European Commission.

ECDC Strategic objective	Strategic objective 2
Objective 2020 - 5	**Strengthen the existing collaboration with EU agencies through aligned planning, reporting, and monitoring of joint activities.**
Key outputs 2020	Processes in place to ensure alignment of planning, reporting, and monitoring of joint work.
Expected results	ECDC's collaboration with other EU agencies adds to synergy visible in joint reports, assessments and projects.

Indicators

Nb.	Multi-annual strategicobjective	Objective	Indicator	Baseline 2018	Target 2020	Verification
32	Further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery.	Achieve 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**	91% *(source: annual stakeholder survey 2015)*	75 % satisfied with communication and coordination	Measure with dedicated survey
33	Further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery.	Achieve successful meetings through the provision of enhanced and more cost effective organisational and substantive support.	**Level of satisfaction of representatives of Member States in meetings.**	n/a	75 % of questionnaires completed provided ratings for the organisation of the meetings of very good to excellent.	Measure to be integrated into the meeting satisfaction questionnaire

4.7.3. Resource management

Context

ECDC will continue to focus on delivering results, EU added value and return on investment. As a publicly funded independent agency of the European Union, the Centre will maintain the high level of budget execution, low vacancy rate and compliance with the rules and regulations that apply to ECDC activities. We will make sure that ECDC has the relevant competences to address current and future public health challenges. The Centre will therefore further strengthen its ability to adapt to evolving EU challenges and priorities, including the impact of BREXIT. This will allow the Centre to better support and complement the European Commission and the Member States while remaining an attractive place to work also from staff well-being and gender-balance perspectives.

ECDC will continue to focus on continuous improvement, efficiency and effectiveness, and aim towards a lean and paperless organisation: all areas of resource management will continue to be scrutinised for simplification and effective support to the Centre's operations. ECDC will further enhance the internal performance and monitoring of its support activities, reflected in the Centre's administrative performance indicators, well-structured, clear, efficient, and aligned internal procedures and processes for administration, with clear roles definition, and electronic workflows, paperless administration (e-Administration programme) that empower ECDC staff. The meeting and business travel organisation will benefit from more effective and integrated tools, as will procurement and grants management activities with the objective to simplify and save time in a paperless environment.

ECDC will further focus its efforts on value-added activities to free scientific experts' time. The development of ECDC capabilities under the ECDC's Enterprise Architecture (EA) will continue to support the improvement of the Centre's overall consistency and coordination of resources within ECDC. The three pillars of EA are Business Architecture (processes and organisation), Information Architecture (data and content) and Technology Architecture (IT systems and services). The areas of conflict of interests and transparency will continue to be a priority, as well as the implementation of the General Data Protection Regulation (GDPR).

With the support of our modern premises, ECDC will continue to explore new ways of working to strengthen and increase internal cooperation and collaboration. This will impact the Centre's culture and increase its corporate and social responsibility contribution. ECDC will also maintain and strengthen the security of staff against all threats in general with a variety of measures (close partnerships with local authorities, other EU bodies, revised procedures, crisis management plans and business continuity, regular security assessments, testing and simulation exercises).

As one pillar of EA, the ECDC information management adopted in 2017 will be further supported by efficient content management tools and methods. ECDC is regulatory compliant according to Regulation (EC) No 851/2004 of the European Parliament and of the Council 21 April 2004 - regarding its document and records management.

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objectives 1 to 7
Objective 2020 - 1	**Ensure efficient budget and financial management**
Key outputs 2020	Provide the annual accounts of the Centre. Ensure the preparation of draft, approved and amending budgets. Perform financial initiation and ex-ante verification and provide financial advice and support to all Units of the Centre.
Expected results	Improved efficiency and effectiveness of ECDC budget performance according to the ECDC Single Programming Document indicators.

ECDC Strategic objective	Support to strategic objectives 1 to 7
Objective 2020 - 2	**Ensure that ECDC has adequate and effective staffing in order to fulfil its strategic objectives**.
Key outputs 2020	Increased opportunities for scientific and non-scientific staff to develop and utilise their skills in the most effective ways; increase self-awareness of their roles and responsibilities. (*could be deprioritised in case of emergency) 'Field Deployment Support Programme' – supported by external expertise in preparing ECDC staff for field missions and upon return from the deployment. Health and wellbeing support to staff in PHE operations and field deployments in cooperation with the medical and counselling service providers.
Expected results	Further acquisition and development of skills supporting the improvement of internal efficiency and boosting performance capabilities for both scientific and non-scientific staff. Relevant framework established to support ECDC staff in Public Health Events (PHE) operations and in potential field deployments.

ECDC Strategic objective	Support to strategic objectives 1 to 7
Objective 2020 - 3	**Ensure continuous improvement, efficiency and effectiveness for support activities.**
Key outputs 2020	Continuous improvement culture, Enterprise Architecture, Information Management to increase quality outputs, efficiency, free up staff time and improve decision making. e-Administration programme as a unique continuous improvement frame for all administrative process automation related initiatives in close collaboration with the European Commission. Further development of electronic workflows (particularly for procurement) to simplify and ensure better compliance with internal processes. Operate within ECDC new premises, in a healthy and highly collaborative environment including business continuity and crisis management plans fully operational.
Expected results	Essential support services and processes consolidated and further optimised against documented baseline (e.g. excellence in the operations of Finance, Procurement, Missions and Meetings, Business Continuity). Business travel and meetings organisation workflows fully integrated to the Centre's e-Administration framework programme, including travellers' bookings and submissions. Secured healthy workplace, that fosters staff wellbeing and consolidates ECDC foundations for a more efficient, collaborative and secure environment.

ECDC Strategic objective	Support to strategic objectives 1 to 6
Objective 2020 - 5	**Strengthen transparency and accessibility to the information generated or held by ECDC in a secured way.**
Key outputs 2020	Enhanced knowledge sharing with decision makers and the general public, compliant with the legal frameworks and rights of third parties (data protection and Regulation 1049/2001).
	As part of ECDC Enterprise Architecture approach, operate the Information Architecture domain, coordinating all information management operations and new initiatives under the Information Governance Steering Committee (IGSC).
	Maintenance and improvement of information management policies and internal procedures to enable efficient and transparent information access and retrieval. Effective operations enabling creation, distribution, retention and/or final disposition of information, in accordance with Council Regulation No 354/83, amended by CR (EU) 2015/496.
	Continue the implementation of General Data Protection Regulation (GDPR).
Expected results	Harmonised approach across the Centre to ensure transparency, collaboration and availability of information at all stages of its lifecycle, compliant with the legal frameworks and relevant policies, supporting ECDC activities and ensuring the independence of its scientific outputs.
	A set of relevant policies and improved procedures are in place and working.

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
34	Further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery.	Ensure 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***	98.5% committed 81.2 paid	100% committed minimum 80% paid minimum	Annual accounts
			Percentage of invoices paid within the time limits of the ECDC Financial Regulation*	93%	95%	Total payments in year N and carry-forwards to Year N+1, as a % of the total EU funding and fee income, where applicable, received in Year N
				2.41%	2%	
			Rate of cancellation of payment appropriations*	3.23%	5%	
			Rate of outturn*			
35	Further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery.	Ensure swift and timely fulfilment of the Agency's establishment plan correlated to the implementation of activities of the work programme	- **Average vacancy rate***	1.77%	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
			- **Percentage of staff satisfaction/ engagement***	52% *(2016)*	75%	ECDC biannual staff survey
			- **Average recruitment time**	8.7 weeks *(2017)*	12 weeks as from the vacancy notice deadline	

* Indicators compliant with the "Guidelines on key performance indicators (KPI) for Directors of EU decentralised agencies, Brussels, 13 March 2015, SWD (2015) 62 Final"

Total general management and resources management in 2020:

General management and resource management	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	82.3 FTE	-53.9 FTE[1]	28.4 FTE
Total operational budget title 3	€ 0	-	€8 1241 422

4.7.4 Information and communication technology

Context

Information and communication technologies (ICT) are a critical success factor for ECDC with three key objectives:

- Enable ECDC's mission, by efficiently and effectively supporting the Centre's ICT needs for internal, European Commission and Members States users;
- Enable ECDC to continue improving the suitability, sustainability and best value for money of products and services;
- Enable ECDC to take the full advantage of the augmentation of data and information and the new technologies that are able to handle and exploit this information.

The implementation of the IT Target Operating Model Roadmap will continue. In 2020, a significant part of the IT infrastructure services and IT products will have been handed over to new external service providers. The focus will be to gain efficiency and quality, working with the external contractors.

Through exploiting technological innovations and acquiring an in-depth knowledge of surveillance business goals and having an optimised processes to achieve them, ECDC is developing state-of-the-art informatics tools that are highly fit for purpose. The objective is to maximise the public health impact of ECDC surveillance, while reducing the burden for ECDC staff and for the data providers in Member States.

It is also ECDC's legal duty to host and maintain EU's cross-border public health threats Early Warning and Response System (EWRS). Regular maintenance and further evolution of critical solutions and services (EWRS, TESSy, Surveillance portal, ECDC web portal) are vital investments for enabling ECDC core missions.

The ICT unit will continue to maintain high reliability of IT systems, ensuring that the necessary infrastructures are in place, including a reliable data centre, data communications, overall security, business continuity capabilities, as well as a disaster recovery site (cloud-based).

Objectives, key outputs 2020, and expected results

ECDC Strategic objective	Strategic objective 1 to 8
Objective 2020 - 1	Ensure ECDC operations by maintaining high availability of IT infrastructure services.
Key outputs 2020	Maintained and secure infrastructures and applications, hosted as per SLA requirements.
Expected results	ECDC operations maintained according to the needs.

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[1] The negative FTE corresponds to the deduction of the administrative FTE who contribute to operational work and have been distributed horizontally across all operational activities, following the benchmarking methodology applied by all agencies.

ECDC Strategic objective	Strategic objective 1 to 8
Objective 2020 - 2	Deliver IT solutions to support the annual work programme and maintain existing products, ensuring their reliability, their security, their need to meet evolving business needs and interoperability, taking into account the recommendations of the European Interoperability Framework).
Key outputs 2020	New systems developed as per ICT work plan commitments, respecting the recommendations of the European Interoperability Framework. Existing solutions maintained as per ICT work plan commitments.
Expected results	Reliable and secure IT solutions meeting the business needs. Developed new core-business and administrative solutions.

ECDC Strategic objective	Cross-cutting objective 8, Cross-cutting objective 9
Objective 2020 - 3	Transformation programme IT-2021 implemented.
Key outputs 2020	Target operating model implemented, which includes: • Previously decentralised maintenance activities are centralised; • IT activities (services and IT products in scope) taken over by external service provider and service quality has been stabilised; • ICT services delivered, based on agreed service levels, measured and controlled; • Established processes evaluated, measured and improved. • Functional Architecture (based on the interaction, insight, support and integration domains) defined.
Expected results	IT processes and activities harmonised in the centre. External service providers enabled to deliver IT services to ECDC. Organisational wide alignment on functional reference architectures.

ECDC Strategic objective	Cross-cutting objective 8
Objective 2020 - 4	Ensure the IT security and the continuous improvement of the IT services.
Key outputs 2020	IT continuous quality improvement plan defined for 2020 and actions implemented. IT and information Security function strengthened.
Expected results	Continuous quality improvement maintained. Further improved IT Security

Indicators

Nb.	Multi-annual strategic objective	Objective	Indicator	Baseline 2018	Target 2020	Verification
36	Further improve efficiency and further clarify responsibilities in close cooperation with relevant stakeholders, whilst retaining control over quality and service delivery.	Ensure agencies operations by maintaining constant availability of IT services elements to ensure a smooth running of the Centre's activities (dedicated applications, databases, web portal).	**Performance of ICT services:** **- availability of hosted applications under service level agreement (SLA),**	25/31 infrastructure services and backend systems and 11/32 applications had a uptime of 100%; lowest uptime: 99.9%	99% each	ICT statistics: verified by regular monitoring reports
			proportion of ICT Front-Office requests and incidents resolved as per SLA.	97.4% of requests (out of 3729 requests) 93.1% of incidents (out of 3326 incidents)	90% of requests and 90% of incidents > 80 % of all products are compliant	ICT statistics: number of critical / high severity defects found in Production. Criteria defined in the IT product quality acceptance criteria (doc. SMT 194/7)
			Compliance with predefined Product Acceptance criteria	88% compliance *(2017)*		

Total Resources ICT in 2020:

ICT	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	34.6 FTE	-27 FTE[1]	7.6 FTE
Total operational budget title 3	€4 500 000	-	€8 510 339

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[1] The negative FTE corresponds to the deduction of the ICT staff who contribute to operational work and have been distributed horizontally across all operational activities, following the benchmarking methodology applied by all agencies.

4.8. Cross-organisational initiatives

Foresight programme

The 'Foresight' programme provides a structured approach for assessing future trends and threats. 'Foresight' is based on a combination of quantitative (e.g., modelling) and qualitative (e.g. expert consultation) methods, which can assist in identifying major trends affecting these topics, defining strategic work plan priorities, and projecting the likely workforce skills required in the medium to long-term, as well as Member State preparedness measures. ECDC will conduct an ECDC 'Foresight' Programme, and the Advisory Forum has recommended that the ECDC Foresight study to be applied to vaccine-preventable diseases (VPD) and antimicrobial resistance (AMR). These two prominent infectious disease challenges for Europe, AMR and VPD, are heavily affected by a number of drivers of change and have the potential to affect vast swathes of the European population. As such, they warrant particular attention in this 'Foresight' Programme.

ECDC Strategic objective	Cross organisational initiative: Foresight programme
Objective 2020 - 1	Foresight programme for VPD and AMR established and operationalised with internal and external partners and stakeholders.
Key outputs 2020	Foresight studies that address infectious disease transmission in the future and/or their relevant underlying drivers identified through scoping literature review. Scenarios or alternative futures of infectious disease threats identified. Intervention strategies to mitigate the potential adverse impacts from these scenarios identified.
Expected results	Insights from scoping literature review integrated into next phase of ECDC foresight programme.

E-health and digitalisation

ECDC will build on the Commission Recommendation on a European Electronic Health Record exchange format[1], that aims to have a common data exchange format for several health information domains, including laboratory and vaccination data.

Based on its unique experience in managing and analysing public health data pertaining to cross-border disease surveillance, ECDC will explore the challenges and opportunities offered by new technologies. One example is the design and implementation of Electronic Immunisation Information Systems (eIIS) at national and subnational levels, which can strengthen the performance of immunisation programs, enable or facilitate the monitoring in real time of vaccine coverage, track immunisation history, identify under-immunised individuals, monitor safety signals, estimate vaccine effectiveness, document vaccine shortages and track product-specific information. The centre will engage in proof-of-concept studies that require exchanging a subset of laboratory and clinical data for EU/EEA surveillance purposes. for cross-border surveillance in partnership with EU e-health initiatives, in collaboration with the European Commission and the Member States. To empower citizens and build a healthier society, the Centre will also explore the digitalisation of data collection and the prediction of epidemics with big data, with a pilot in 2020 for automatic screening of big data from social media for event detection.

ECDC strategic objective	Strategic objective 9
Objective 2020 - 1	**Support Member States in upgrading their electronic healthcare databases to enable automatic data transfer of surveillance data**
Key outputs 2020	Catalogue of Member States eHealth systems and the features relevant for enabling EU surveillance.
Expected results	Evidence available for supporting the necessary developments in Member States and ECDC eHealth surveillance systems.

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[1] Commission Recommendation on a European Electronic Health Record exchange format (C(2019)800) of 6 February 2019

ECDC Strategic objective	Strategic objective 1, 2, 3, 5, 9
Objective 2020 - 3	**Harness the potential of eHealth to the benefit of immunisation, by providing technical guidance and support to countries to improve the performance and monitoring of vaccination programmes.**
Key outputs 2020	Technical guidance and country support on core data requirements for the development of key immunisation information system functionalities.
Expected results	Rollout and deployment of functional electronic immunisation information system at both national and sub-national level is facilitated. Immunisation is part of the EU eHealth agenda.

See also:

- 6.7 VPD - objective 1 (European Vaccine Information Sharing System – EVIS)
- 1.2 Epidemic intelligence – objective 3 (Pilot study to assess the benefits of trend analysis of social media sources for epidemic intelligence).

Total general cross-organisational initiatives:

Cross-organisational initiatives	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	2.08 FTE	0.71 FTE	2.79 FTE
Total operational budget title 3	€1 205 000	-	€1 602 059

Annex 1. Resource allocation per activity 2020–2022

The resource allocation split by activities of the Centre is a provisional estimation based on figures from 2020. See details under Activity Based Budget (ABB).

Activities	2020		2021		2022	
	FTE	**Total Budget**	**FTE**	**Total Budget**	**FTE**	**Total Budget**
1. Surveillance and epidemic intelligence	30.3	4 656 266	30.3	4 656 266	30.3	4 656 266
2. Scientific support (including microbiology)	19.6	3 362 045	19.6	3 362 045	19.6	3 362 045
3. Preparedness and response	19.4	3 037 632	19.4	3 037 632	19.4	3 037 632
4. Training and capacity building	30.7	7 761 462	30.7	7 761 462	30.7	7 761 462
5. Communication	32.5	3 792 124	32.5	3 792 124	32.5	3 792 124
6. Disease programmes	83.5	16 192 136	83.5	16 192 136	83.5	16 192 136
7. Management and support	36.1	16 651 761	36.1	16 651 761	36.1	16 651 761
8. Cross Unit projects	2.8	1 602 059	2.8	1 602 059	2.8	1 602 059
9. Neutral category as per benchmarking	25.2	3 068 516	25.2	3 068 516	25.2	3 068 516
SNEs		335 000		335 000		335 000
Grand total	**280**	**60 459 000**	**280**	**60 459 000**	**280**	**60 459 000**

Annex 2. Human and financial resources (Tables) 2020–2022

Expenditure

Expenditure	N (2019)		N+1 (2020)	
	Commitment appropriations	**Payment appropriations**	**Commitment appropriations**	**Payment appropriations**
Title 1	31 384 000	31 384 000	31 646 000	31 646 000
Title 2	7 362 000	7 362 000	7 551 000	7 551 000
Title 3	20 460 000	20 460 000	21 262 000	21 262 000
Total expenditure	**59 206 000**	**59 206 000**	**60 459 000**	**60 459 000**

EXPENDITURE	Commitment and payment appropriations						
	Executed budget N-1 (2018)	**Budget N (2019)**	**Draft budget N+1 (2020)**		**VAR N+1 (2020) / N (2019)**	**Envisaged in N+2 (2021)**	**Envisaged N+3 (2022)**
			Agency request	**Budget forecast**			
Title 1 **Staff Expenditure**	**31 749 250**	**31 384 000**	**31 646 000**		+0.8%	**31 500 000**	**31 500 000**
11 Salaries & allowances	28 061 461	27 865 000	28 240 000			28 173 000	28 173 000
- of which establishment plan posts	*21 500 700*	*21 130 000*	*22 592 000*			*21 778 000*	*21 778 000*
- of which external personnel	*6 560 761*	*6 735 000*	*5 648 000*			*6 395 000*	*6 395 000*
12 Expenditure relating to Staff recruitment	442 691	375 000	365 000		-2.6%	365 000	365 000
13 Mission expenses	686 900	660 000	600 000			660 000	660 000
14 Socio-medical infrastructure	119 185	170 000	160 000		-5.8%	150 000	150 000
15 Training	370 165	400 000	400 000			400 000	400 000
16 External Services	2 034 590	1 874 000	1 842 000		-1.7%	1 715 000	1 715 000
17 Receptions and events	34 258	40 000	39 000		-2.5%	37 000	37 000
Title 2 **Infrastructure and operating expenditure**	**7 255 259**	**7 362 000**	**7 551 000**		+2.5%	**7 680 000**	**7 680 000**
20 Rental of buildings and associated costs¹	3 059 240	3 913 000	4 174 000		+6.6%	4 180 000	4 180 000
21 Information and communication technology	2 372 798	2 262 000	2 318 000		+2.4%	2 500 000	2 500 000
22 Movable property and associated costs	144 046	118 000	65 000		-44.9%	100 000	100 000
23 Current administrative expenditure	731 772	240 000	240 000			200 000	200 000
24 Postage / Telecommunications	144 848	218 000	185 000		-15.1%	200 000	200 000
25 Meeting expenses	802 555	611 000	569 000		-6.8%	500 000	500 000
26 Running costs in connection with operational activities							
27 Information and publishing							
28 Studies							
Title 3 **Operational expenditure**	**18 169 606**	**20 460 000**	**21 262 000**		+3.9%	**21 262 000**	**21 262 000**
to be specified by chapter	**18 169 606**	**20 460 000**	**21 262 000**			**21 262 000**	**21 262 000**
TOTAL EXPENDITURE	**57 174 115**	**59 206 000**	**60 459 000**			**60 442 000**	**60 442 000**

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¹ Including possible repayment of interest; detailed information as regards building policy provided in Table in Annex III

Detail for Title 3 per budget lines:

Budget line		Section	Total budget 2020
BL 3000 - Integrated Surveillance, including Epidemic intelligence and Microbiology	Public Health Unit	Surveillance	**1 496 619**
BL 3001 - Preparedness and Response	Public Health Unit	Emergency preparedness and response support	**630 181**
BL 3002 - Scientific Processes and Methods	Scientific Methods and Standards Unit	Scientific process and methods	**1 032 400**
BL 3003 - Public Health Training	Public Health Unit	Public Health Training	**4 246 500**
BL 3004 - External communication	Director Office	Communication	**503 000**
BL 3005 - Information and Communication technologies	Digital Transformation Unit	all DT sections	**4 500 000**
BL 3006 - Information and Knowledge Management	Scientific Methods and Standards Unit	Information and knowledge management	**640 200**
BL 3007 - Air-Borne, Blood-Borne and Sexually Transmitted Infections	Disease Programmes Unit	Air-Borne, Blood-Borne and Sexually Transmitted Infections	**4 335 000**
BL 3008 - One Health related diseases	Disease Programmes Unit	One Health related diseases	**2 475 000**
BL 3009 - EU and external cooperation	Director Office	European and international Cooperation	**198 100**
BL 3010 - New health technologies assessment	Transversal activity	-	**755 000**
BL 3011 - Foresight assessment of future trends and threats	Transversal activity	-	**450 000**
TOTAL			**21 262 000**

Activity Based Budget 2020:

Strategic activity/Action/Expense/Resources	FTEs	Admin support	Total FTEs	Title 1	Title 2	Title 3	TOTAL
1. Surveillance and epidemic intelligence	**22.6**	**7.7**	**30.3**	**2,690,857**	**621789.9**	**1,343,619**	**4,656,266**
1.1 Surveillance	**17.3**	**5.9**	**23.1**	**2,090,101**	**475,466**	**1,235,000**	**3,800,567**
1. Public health surveillance	1.1	0.4	1.5	79,557	30,298	360,000	569,855
2. Molecular surveillance	**6.3**	**2.1**	**8.5**	**736,747**	**173,867**	**125,000**	**1,035,614**
3. Methods to support disease prevention and control	4.3	1.5	5.8	424,125	118,436	750,000	1,292,562
4. Management and administrative support	5.6	1.9	7.4	749,672	152,865		902,537
1.2 Epidemic intelligence	**5.3**	**1.8**	**7.1**	**600,755**	**146,324**	**108,619**	**855,698**
1. Epidemic intelligence	5.3	1.8	7.1	600,755	146,324	108,619	855,698
2. Scientific support (including microbiology)	**14.6**	**5.0**	**19.6**	**1,866,396**	**402,649**	**1,093,000**	**3,362,045**
2.1 Scientific Advice	**12.1**	**4.1**	**16.2**	**1,491,632**	**333,962**	**940,000**	**2,765,594**
1. Scientific advice coordination	6.9	2.3	9.3	864,976	190,221	825,000	1,880,197
2. Research coordination and studies	**0.4**	**0.1**	**0.5**	**47,574**	**10,329**	**115,000**	**172,903**
4. Management and administrative support	4.8	1.6	6.5	579,082	133,413		712,495
2.2 Microbiology	**2.5**	**0.8**	**3.3**	**374,764**	**68,686**	**153,000**	**596,450**
1. Microbiology support	2.5	0.8	3.3	374,764	68,686	153,000	596,450
3. Preparedness and response	**14.4**	**4.9**	**19.4**	**1,884,623**	**397,828**	**755,181**	**3,037,632**
3.1 EU and country preparedness support	**7.0**	**2.4**	**9.3**	**988,900**	**191,598**	**550,181**	**1,730,679**
1. Country preparedness	2.4	0.8	3.2	340,958	66,276	550,181	957,415
2. EU preparedness	0.6	0.2	0.8	101,221	16,526		117,747
3. Management and administrative support	4.0	1.3	5.3	546,721	108,796		655,517
3.2 Response	**7.5**	**2.5**	**10.0**	**895,723**	**206,230**	**205,000**	**1,306,953**
1. Support to EU outbreaks	5.8	2.0	7.8	708,823	159,751	170,000	1,038,575
2. Emergency operations	1.7	0.6	2.3	186,899	46,479	35,000	268,379
4. Training and capacity building	**22.9**	**7.8**	**30.7**	**2,730,220**	**630,742**	**4,400,500**	**7,761,462**
4.1 Training	**15.8**	**5.4**	**21.1**	**1,878,673**	**434,496**	**4,246,500**	**6,559,669**
1. Fellowships EUPHEM -EPIET	6.99	2.38	9.37	736,461	192,631	3,468,000	4,397,092
2. Training networks	**2.6**	**0.9**	**3.5**	**356,167**	**72,473**	**608,500**	**1,037,140**
3. e-learning	2.0	0.7	2.7	249,472	55,087	150,000	454,559
4. Management and administrative support	3.9	1.3	5.2	498,515	106,042	20,000	624,556
5. MediPiet	0.3	0.1	0.4	38,059	8,263		46,322
4.2 Coordinated Country support	**1.2**	**0.4**	**1.6**	**202,441**	**33,052**	**40,000**	**275,493**
3. Management and administrative support	1.2	0.4	1.6	202,441	33,052	40,000	275,493
4.3 International Relations	**5.9**	**2.0**	**7.9**	**649,106**	**163,194**	**114,000**	**926,300**
1. Cooperation with the World Health Organisation (WHO)	0.3	0.1	0.3	21,077	6,886		27,963
2. Working with non-EU Countries	4.5	1.5	6.0	473,413	122,740	114,000	710,153
3. Management and administrative support	1.2	0.4	1.6	154,615	33,568		188,184
5. Communication	**24.2**	**8.2**	**32.5**	**2,419,143**	**667,581**	**705,400**	**3,792,124**
5.1 Health communication	**19.3**	**6.6**	**25.9**	**1,876,844**	**531,586**	**613,000**	**3,021,429**
1. Press, media and Information services	3.2	1.1	4.3	337,882	87,450	195,000	620,332
2. Editorial services	5.4	1.8	7.2	472,291	148,734	30,000	651,024
3. Web portal and extranets	**3.0**	**1.0**	**4.0**	**261,438**	**82,630**		**344,068**
4. Translations	0.3	0.1	0.4	29,548	8,263	80,000	117,811
5. General support to disease work and other units	2.8	1.0	3.8	284,822	77,810	157,000	519,632

Strategic activity/Action/Expense/Resources	FTEs	Admin support	Total FTEs	Title 1	Title 2	Title 3	TOTAL
6. Stakeholders and networking	3.3	1.1	4.4	325,940	90,893	151,000	567,833
7. Management and administrative support	1.3	0.4	1.7	164,923	35,806		200,729
5.2 Eurosurveillance	**4.9**	**1.7**	**6.6**	**542,300**	**135,995**	**92,400**	**770,695**
1. Eurosurveillance	4.7	1.6	6.2	487,784	128,076	92,400	708,261
2. Management and administrative support	0.29	0.10	0.39	54,516	7,919		62,434
6. Disease programmes	**62.3**	**21.2**	**83.5**	**7,789,984**	**1,717,152**	**6,685,000**	**16,192,136**
6.0 Disease work: Management, coordination and support	**11.6**	**4.0**	**15.6**	**1,512,645**	**320,191**		**1,832,836**
6.1 ARHAI - Antimicrobial resistance and healthcare-associated infections	**9.9**	**3.4**	**13.3**	**1,297,360**	**273,367**	**1,030,000**	**2,600,727**
6.2 EVD - Emerging and vector borne diseases	**5.6**	**1.9**	**7.5**	**701,101**	**154,759**	**745,000**	**1,600,860**
6.3 FWD - Food- and Waterborne Diseases and Zoonoses	**7.7**	**2.6**	**10.3**	**994,111**	**212,600**	**700,000**	**1,906,711**
6.4 HSH - HIV, Sexually Transmitted Infections and viral Hepatitis	**8.1**	**2.8**	**10.8**	**935,836**	**222,929**	**1,110,000**	**2,268,765**
6.5 IRV - Influenza and other Respiratory Viruses	**4.6**	**1.6**	**6.1**	**622,954**	**125,666**	**701,000**	**1,449,620**
6.6 TB - Tuberculosis	**4.5**	**1.5**	**6.0**	**517,155**	**123,945**	**700,000**	**1,341,100**
6.7 VPD - Vaccine Preventable Diseases	**10.3**	**3.5**	**13.8**	**1,208,821**	**283,696**	**1,699,000**	**3,191,517**
7. Management	**116.8**		**36.1**	**9,039,477**	**2,537,984**	**5,074,300**	**16,651,761**
7.1 General management	**20.0**		**4.4**	**1,826,182**	**740,847**		**2,567,029**
1. Management support and coordination	6.0		0.0	507,139	318,000		899,517
2. Management and administrative support	8.4		1.2	780,478	74,664		780,764
3. Organisation Governance meetings	2.2		0.0	142,067	275,000		417,067
4 Ensuring independence	1.0		0.8	89,560	16,854		106,414
5. Internal Control	1.0		1.0	184,705	27,554		212,259
6. Internal communication	1.4		1.4	122,232	28,775		151,007
7.2 Collaboration and cooperation	**0.9**		**0.0**	**92,732**	**50,000**	**44,100**	**186,832**
1. ECDC in the 'family' of European Institutions and Bodies	0.5		0.0	55,640	50,000	4,500	119,517
2. Working with the European Union Member States	0.44		0.0	37,093		39,600	67,315
7.3 Resource management	**61.4**		**24.1**	**3,685,931**	**1,171,430**	**530,200**	**5,387,561**
1. Human Resources	13.1		11.3	1,142,679	367,755		1,510,434
2. Finance and Accounting	15.0		0.0		182,000		182,000
3. Legal and procurement	12.0		1.8	780,810	53,585		834,395
6. Internal Content and Knowledge Services	6.3		5.1	612,688	416,823	530,200	1,559,711
7. Corporate Services	11.0		3.0	717,620	91,661		809,281
8. Management and administrative support	4.1		2.9	432,135	59,605		491,740
7.4 ICT	**34.6**		**7.6**	**3,434,632**	**575,707**	**4,500,000**	**8,510,339**
1. IT infrastructure services	10.9		6.4	1,102,954	130,515	2,065,843	3,299,312
2. IT product basic maintenance	0.7		0.1	62,723	41,427	155,000	259,150
3. IT product further development	3.7		0.4	329,316	8,350	815,397	1,153,062
4. New IT solutions	5.4		0.4	488,740	284,850	1,347,760	2,121,350
5. Support IT services	6.0		0.2	589,889	107,020	76,000	772,908
6. Management of the Unit / Transformation programmes	7.9		0.2	861,010	3,545	40,000	904,556
8. Cross-Unit Projects	**2.1**	**0.7**	**2.8**	**339,734**	**57,324**	**1,205,000**	**1,602,059**

Strategic activity/Action/Expense/ Resources	FTEs	Admin support	Total FTEs	Title 1	Title 2	Title 3	TOTAL
8.0 Cross-Unit Projects	**2.1**	**0.7**	**2.8**	**339,734**	**57,324**	**1,205,000**	**1,602,059**
9. Benchmarking	**0.0**		**25.2**	**2,550,566**	**517,950**		**3,068,516**
9.0 Neutral category as per Benchmarking Methodology	**0.0**		**25.2**	**2,550,566**	**517,950**		**3,068,516**
(blank)	0.0		25.2	2,550,566	517,950		3,068,516
4241-1. Human Resources (Benchmarking)	**0.0**		**1.7**	**160,476**	**34,941**		**195,417**
4242-2. Finance and Accounting (Benchmarking)	**0.0**		**15.0**	**1,509,008**	**308,304**		**1,817,312**
4243-3. Legal and procurement (Benchmarking)	**0.0**		**3.2**	**288,695**	**65,771**		**354,467**
4244-6. Internal Content and Knowledge Services (Benchmarking)	**0.0**		**0.0**				
4245-7. Corporate Services (Benchmarking)	**0.0**		**2.4**	**232,137**	**49,020**		**281,157**
4246-8. Management and administrative support (Benchmarking)	**0.0**		**0.5**	**42,468**	**10,585**		**53,053**
4247-4. Quality management, project management and planning (Benchmarking)	**0.0**		**2.4**	**317,782**	**49,329**		**367,110**
4248-5. Internal Control (Benchmarking)	**0.0**		**0.0**				
Grand Total	**280.0**		**280.0**	**31,311,000**	**7,551,000**	**21,262,000**	**60,124,000**
SNEs	0.0			335,000			335,000
TOTAL	**280.0**		**280.0**	**31,646,000**	**7,551,000**	**21,262,000**	**60,459,000**

Revenue

Revenues	N (2019)	N+1 (2020)
	Revenues estimated by the agency	Budget Forecast
EU contribution	57 833 122	59 059 000
Other revenue	1 373 443	1 400 000
Total revenues	**59 206 000**	**60 459 000**

REVENUES	N-1 (2018)	N (2019)	N+1 (2020)		VAR N+2 (2021) /N+1 (2020	Envisaged N+2 (2021)	Envisaged N+3 (2022)
	Executed Budget	Revenues estimated by the agency	As requested by the agency	Budget Forecast			
1 REVENUE FROM FEES AND CHARGES							
2. EU CONTRIBUTION	55 928 863	56 753 826	57 179 653			59 059 000	59 059 000
of which Administrative (Title 1 and Title 2)	38 155 230	37 139 703	31 014 243			39 180 000	39 180 000
of which Operational (Title 3)	17 773 633	19 614 123	26 165 410			19 879 000	19 879 000
of which assigned revenues deriving from previous years' surpluses	0	1 079 296	1 879 347				
3 THIRD COUNTRIES CONTRIBUTION (incl. EFTA and candidate countries)	1 245 252	1 373 443	1 400 000			1 383 000	1 383 000
of which EFTA	1 245 252	1 373 443	1 400 000			1 383 000	1 383 000
of which Candidate Countries							
4 OTHER CONTRIBUTIONS							
of which delegation agreement, ad hoc grants							
5 ADMINISTRATIVE OPERATIONS							
6 REVENUES FROM SERVICES RENDERED AGAINST PAYMENT							
7 CORRECTION OF BUDGETARY IMBALANCES							
TOTAL REVENUES	**57 174 115**	**59 206 000**	**60 459 000**			**60 442 000**	**60 442 000**

Budget outturn and cancellation of appropriations; calculation budget outturn

Budget outturn	N-4* (2016)	N-3* (2017)	N-2* (2018)
Revenue actually received (+)	58 439 000	58 553 000	58 069 000
Payments made (-)	46 591 000	47 792 000	47 369 000
Carry-over of appropriations (-)	11 328 000	10 986 000	10 304 000
Cancellation of appropriations carried over (+)	1 231 000	953 000	792 000
Adjustment for carry-over of assigned revenue appropriations from previous year (+)	721 000	402 000	498 000
Exchange rate differences (+/-)	+166 000	-51 000	+205 000
Adjustment for negative balance from previous year (-)			
Total	2 638 000	1 079 000	1 891 000

*N – the year covered by the programming document drafted in N-1

Budget outturn

First estimate of the 2018 surplus that should be reimbursed to the EU budget (as assigned revenue): EUR 1 891 409,81.

The Centre cashed its budget of EUR 58 030 000 in 2018.

The expenditures of 2018, including the carry forward to 2019 equals to EUR 57 673 670,64.

The amount of cancelled unused payment appropriations carried forward from previous year of EUR 792 939,69, the adjustment for carry-over from the previous year of appropriations available at 31.12 arising from assigned revenue of EUR 498 205,45 and the exchange rate gains for the year 2018 of EUR 205 666,12 have resulted in a positive budget outturn 2018.

In 2018, ECDC reimbursed the budgetary positive balance from 2017 of EUR 1 079 296,82.

As a result of the above, EUR 1 891 409,81 has to be reimbursed in 2019 to the EU budget (as assigned revenue) related to the Centre's 2018 budget.

Cancelation of commitment appropriations

The total implementation of commitment appropriations for ECDC in 2018 reached 98.53%, with a total of EUR 855 884,81 cancelled for all three Titles, compared to EUR 127 885,27 cancelled in 2017. As a result, the reductions of the EU contribution of 2% for the implementation of commitment appropriations and 2% for the cancellation of payment appropriations are not applicable for ECDC in 2020. The commitment of appropriations for the operational expenditure on Title 3 reached 98.20% in 2018.

Cancelation of payment appropriations for the year

See cancelation of commitment appropriations

Cancelation of payment appropriations carried over,

The Centre has carried forward EUR 10 488 275,17 from 2017 to 2018, of which EUR 9 695 335,48 was paid (fund source C8).

This corresponds to 92.44% of the amount carried forward.

Annex 3. Staff

Overview of all categories of staff

Staff population		Filled as of 31.12.2017[2]	Authorised under EU budget 2018	Filled as of 31.12.2018[1]	Authorised under EU budget for year 2019	Draft budget for year 2020	Envisaged in 2021	Envisaged in 2021
Officials	AD							
	AST							
	AST/SC							
TA	AD	124	126	123	126	126	126	126
	AST	52	52	52	52	51	51	51
	AST/SC	2	2	2	2	3	3	3
Total		**178**	**180**	**177**	**180**	**180**	**180**	**180**
CA GF IV		48	50	47	50	50	50	50
CA GF III		36	36	35	36	36	36	36
CA GF II		12	12	10	12	12	12	12
CA GF I		2	2	2	2	2	2	2
Total CA		**98**	**100**	**94**	**100**	**100**	**100**	**100**
SNE		3	5	2	5	5	5	5
Structural service providers		16		12				
TOTAL		**295**		**285**				
External staff for occasional replacement		36		28				

Multi-annual staff policy plan Year N+1-Year N+3

Category and grade	Establishment plan in EU budget 2018		Filled as of 31/12/2018[3]		Modifications in year N-1 in application of flexibility rule		Establishment plan in voted EU budget 2019		Modifications in year N in application of flexibility rule		Establishment plan in draft EU Budget 2020		Establishment plan 2021		Establishment plan 2022	
	officials	TA	officials	TA	officials	TA	officials	TA	officials	TA	officials	TA	officials	TA	officials	TA
AD 16																
AD 15		1						1				1		1		1
AD 14		4		1				2				2		2		2
AD 13		5						3				3		3		3
AD 12		10		5				7				9		12		16
AD 11		10		5				8				12		15		17
AD 10		25		10				23				23		24		25
AD 9		25		15				24				26		27		28
AD 8		20		30				22				23		22		20
AD 7		26		11				26				21		16		12
AD 6				11				10				6		4		2
AD 5				35												
Total AD		**126**		**123**				**126**				**126**		**126**		**126**
AST 11																
AST 10		2						1				2		3		4
AST 9		2						2				2		3		4
AST 8		3		2				3				5		6		7

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[1] Posts filled at 31.12.2018 include 6 offers made and accepted (2 AD8, 2 AD5, 2 CA IV)

[2] Posts filled at 31.12.2017 include 13 offers made and accepted (8 AD, 4 AST, CA IV).

[3] Posts filled at 31.12.2018 include 4 offers made and accepted (2 AD8, 2 AD5)

Category and grade	Establishment plan in EU budget 2018		Filled as of 31/12/2018[3]		Modifications in year N-1 in application of flexibility rule		Establishment plan in voted EU budget 2019		Modifications in year N in application of flexibility rule		Establishment plan in draft EU Budget 2020		Establishment plan 2021		Establishment plan 2022	
	officials	TA	officials	TA	officials	TA	officials	TA	officials	TA	officials	TA	officials	TA	officials	TA
AST 7		10		3				11				11		11		11
AST 6		10		7				10				11		12		12
AST 5		15		13				15				13		11		10
AST 4		5		18				5				5		4		3
AST 3		5		3				5				2		1		
AST 2				2												
AST 1				4												
Total AST		**52**		**52**				**52**				**52**		**52**		**52**
AST/SC1				2												
AST/SC2																
AST/SC3		2						2				3		3		3
AST/SC4																
AST/SC5																
AST/SC6																
Total AST/SC				**2**				**2**				**3**		**3**		**3**
TOTAL		**180**		**177**				**180**				**180**		**180**		**180**

Annex 4. Recruitment, performance appraisal, mobility, gender balance

A. Recruitment policy:

Temporary agents

Type of key functions

The establishment table focuses on the core functions of the Centre: the temporary agents. Temporary agents form the core capacity, that is, operating the Centre; and in addition, contract agents are recruited with a primary focus on support functions and as junior experts.

Of key importance is the recruitment of highly qualified professionals in operational as well as in administrative and management functions. This is especially important, since ECDC is to be a Centre of excellence in a 'knowledge sector'. Moreover, the Centre needs to cover a broad range of specialist areas (including specialists in 55 diseases and conditions, and broad public health functions such as emerging infection, health determinants, burden of disease, training, response capacity, preparedness planning and disease surveillance and monitoring) which makes it essential to have access to a solid and broad basis of the best professionals. Many positions are expert posts, specialised in specific fields of public health such as epidemiology. The epidemiological resources in Europe, at senior level, are limited and therefore it is important to offer appropriate incentives and attractive conditions.

The establishment table reflects the emphasis on building up internal expert capacity and attracting the best experts in the fields of competence of the Centre. Hence, broadly, two thirds of the temporary agent posts are identified at administrator (AD) level, the majority of the posts intended for technical experts in areas such as public health and epidemiology. The large number of AD staff is possible since a support capacity is built up around temporary agents on assistant (AST) level for the core support functions. Another important part of the Centre's administrative support capacity relies on contract agents.

Selection procedure

The selection procedure for temporary agents follows the Centre's implementing rules on temporary agents which is the model implementing rules for all agencies. The implementing rule is a provision for internal selection which the Centre uses. The Centre aims to carry out recruitment processes in an objective, transparent and highly efficient manner, respecting the candidate confidentiality as well as recruitment ethics. The focus is on selecting the best candidates with a high level of professional competency and motivation. Selection committees consist of at least three members including a representative of the staff committee and take into account gender and geographical balance as well as the unit.

Entry grades

Temporary agents are recruited at the levels of AST/SC 1, AST 1 to AST 4 for the assistant (AST) category and at the levels of AD 5 to AD 8 for the administrator (AD) category.
Temporary agents at the level of Head of Unit are mainly recruited at the AD 11 grade. Deputy Heads of Unit are recruited mainly at grade AD 10. Recruitment of temporary agents at grades AD 9, AD 10 and AD 11, or on an exceptional basis, AD 12, remains within the 20% limit of the total of AD posts recruited annually over a five-year period.

The balance between expert and senior expert staff (AD 5 and AD 8) is in line with the objective to attract experienced senior experts while at the same time aiming at recruiting experts who can grow professionally along with the Centre. This will enable the Centre to have a well-balanced staffing to assure that activities are carried out with the view of providing the best expertise as well as to secure business continuity.

When recruiting staff, the Centre may consider where possible to use the full range of grades as provided for in the statutory provisions.

Taking into consideration that the Centre focuses on recruiting many contract staff in supportive functions, it aims to have experienced senior administrative support staff (AST 4 and above) to coordinate the contract staff.

Contract duration

The contract duration for temporary agents is initially five years with a possibility of renewal for an additional five years and a possible second renewal resulting in a contract of indefinite duration. Temporary agent posts are normally identified as posts of possible long-term employment.

Near it's expiry, each contract is considered, on a case-by-case basis, for possible renewal taking into account in particular the identified requirements from the work programme.

Job profiles

The Centre's temporary agents are mainly recruited for:

- operational posts (technical experts in the operational units);
- management posts;
- sensitive posts in administration, e.g. human resources, legal, finance, ICT.

The Centre's temporary agents are mainly employed for following posts and corresponding entry grades:

- AD 5–7   Experts operational units etc;
- AD 8   Senior Experts in operational units, Heads of Section, etc;
- AD 10   Deputy Heads of Unit, Senior Experts in specific areas (External relations etc);
- AD 11–12   Heads of Unit;
- AST/SC 1   Administrative Assistants;
- AST 4   Procurement Officers, Human Resources Officers, Information Officers, etc.

Contract agents

The Centre's contract agents are mainly in the administrative unit, in projects and programmes. The ones in supportive functions are important in order for the organisation to focus on the core tasks. The ones in operational functions are crucial for the development of short-term operational projects as well as ensuring junior technical support in the long-term operational disease programmes.

The Centre is currently in the process of adopting the new agency model rules on engagement and use of contract staff.

Selection procedure

The selection procedure for contract agents follows the Centre's implementing rules which is the model decision for agencies. The Centre's aims at carrying out recruitment processes in an objective, transparent and highly efficient manner, respecting the candidate confidentiality as well as recruitment ethics. The focus is on recruiting and selecting the best candidates with a high level of professional competency and motivation. Selection committees consist of at least three members including a representative of the staff committee and take into account gender and geographical balance as well as unit.

Functions and contract duration

Contract agent functions are defined according to two main categories: long-term functions and short-term function as follows:

- Long-term functions are assistant/officer posts in administrative support functions (financial assistants, assistants in mission & meetings, human resources assistants, assistant secretaries, legal officers, web editors, editors, etc) and junior experts in operational programmes of long term nature;
- Short-term functions could be posts for projects.

The contract duration is set as follows:

- Long-term contracts have an initial duration of five years, with a possibility for a renewal of additional five years. A possible second renewal leads to an indefinite contract.
- Short-term contracts have a duration dependent on the nature of the function, and can be either two years with a possibility for a renewal of up to two additional years, or three years with a possibility for a renewal of up to three additional years. The maximum duration of the contract is four or six years accordingly.

Near it's expiry, each contract is considered, on a case-by-case basis, for possible renewal taking into account in particular the identified requirements from the work programme.

Job profiles

The Centre's contract agents are mainly recruited for:

- administrative support functions;
- junior experts in operational programmes;
- projects;

Contract agents are recruited within Function Group I – IV, precise grading being determined by the experience of the appointed candidate, in accordance with Staff Regulations and the applicable implementing rules.

The Centre's contract agents are mainly employed in following posts and corresponding grades:

- FG I   Logistics assistants, etc;
- FG II   Office Assistants, etc;
- FG III   Financial Assistants, Human Resources Assistants, Travel/mission Assistants, Information Assistants, etc.;
- FG IV   Junior Experts in operational programmes/projects, Junior ICT developers, Editors, Legal Officers etc.

Seconded national experts

Article 29 (3) of the Centre's founding regulation provides for the following: 'Secondment to the Centre of public health experts, including epidemiologists, for a defined period of time, for the achievement of certain specified tasks of the Centre will be encouraged within the framework of existing regulations.' On this basis, the Centre has adopted a decision laying down the rules concerning seconded national experts at ECDC which was revised in 2009 to take into account the changes adopted by the European Commission and deemed relevant for the Centre.

SNEs are considered an important resource bringing expertise in specific areas within the Centre's mandate and facilitating the development of links with Member States. Seconded National Experts coming to the Centre are mainly at Senior Expert level working on operational activities.

Structural service providers

Structural service providers (consultants) are brought in to carry out and strengthen ICT projects and tasks supporting the functioning of the agency. This includes functions such as ICT infrastructure (ICT front office and back office), data management as well as projects for software development and implementation of IT systems.

Through open calls for tender, the Centre has framework contracts covering ICT services/consultancy and data management.

Interims are used to temporarily cover replacements due to maternity, parental and sick leave, vacancies and in exceptional circumstances for support functions in peak periods. Through an open call for tender, the Centre has framework contracts with interim agencies.

B. Appraisal of performance and reclassification/promotions

Reclassification of temporary staff/promotion of officials (2018 exercise)

Category and grade	Staff in activity at 1.01.Year N-2 (2017)		How many staff members were promoted / reclassified in Year N-1 (2018)		Average number of years in grade of reclassified/promoted staff members[1]
	officials	TA	officials	TA	
AD 16					
AD 15					
AD 14					
AD 13		1			
AD 12		4		1	3.2
AD 11		4			
AD 10		7		1	4.3
AD 9		12		2	4.9
AD 8		28		4	4.9
AD 7		1			
AD 6		22		6	4.2
AD 5		27		1	4.4
Total AD		**106**		**15**	
AST 11					
AST 10					
AST 9					

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[1] In accordance with Annex II of the implementing provisions regarding Article 54 of the CEOS.

Category and grade	Staff in activity at 1.01.Year N-2 (2017)		How many staff members were promoted / reclassified in Year N-1 (2018)		Average number of years in grade of reclassified/promoted staff members[1]
	officials	TA	officials	TA	
AST 8		1			
AST 7		3			
AST 6		4		1	5.6
AST 5		16		3	5.3
AST 4		19		8	4.9
AST 3					
AST 2		5		1	4.4
AST 1		6		1	4.5
Total AST		**54**		**14**	
AST/SC1					
AST/SC2					
AST/SC3					
AST/SC4					
AST/SC5					
AST/SC6					
Total AST/SC					
Total		**160**		**29**	

Reclassification of contract staff (2018 exercise)

Function group	Grade	Staff in activity at 1.01.Year N-2 (2017)	How many staff members were reclassified in Year N-1 (2018)	Average number of years in grade of reclassified staff members
CA IV	18			
	17	1		
	16	2		
	15	7		
	14	30	2	3.3
	13	8		
CA III	12	1		
	11	2		
	10	11	3	6.2
	9	16	3	4.7
	8	6		
CA II	7			
	6	1		
	5	8	1	5.3
	4			
CA I	3			
	2	1		
	1	1		
Total		**95**	**9**	

C. Mobility policy

a) Internal mobility along with quantitative evolution;

In 2018, 19 % of vacancies (6 out of a total of 32) were filled by internal staff.

 b) Mobility between agencies

In 2018, two staff members left ECDC to be employed by another agency. One new staff member joined ECDC from another agency through inter-agency mobility. In total, the Centre now has 22 staff members who previously worked for an EU agency (21 who directly joined ECDC from another agency and one who previously worked in another agency, but did not join ECDC directly after employment with that agency).

c) Mobility between agency and Institutions.

In 2018, no staff member left ECDC to be employed by an institution (European Commission including its missions, representations and executive agencies). In total, ECDC now has 18 staff members who previously worked for an EU institution (15 who directly joined ECDC from an institution and three who previously worked in an institution, but did not join ECDC directly after employment with that institution).

D. Gender and geographical balance

Gender balance in ECDC as of 31 December 2018 is as follows (offers not included):

	CA	AST (incl AST/SC)	AD	Total TA	Total ECDC
Male	21	20	60	80	**101**
Female	71	34	59	93	**164**
Total	**92**	**54**	**119**	**173**	**265**

In total, the Centre employs 62% women and 38% men (TAs and CAs).

Total ECDC

- male
- female

38%

62%
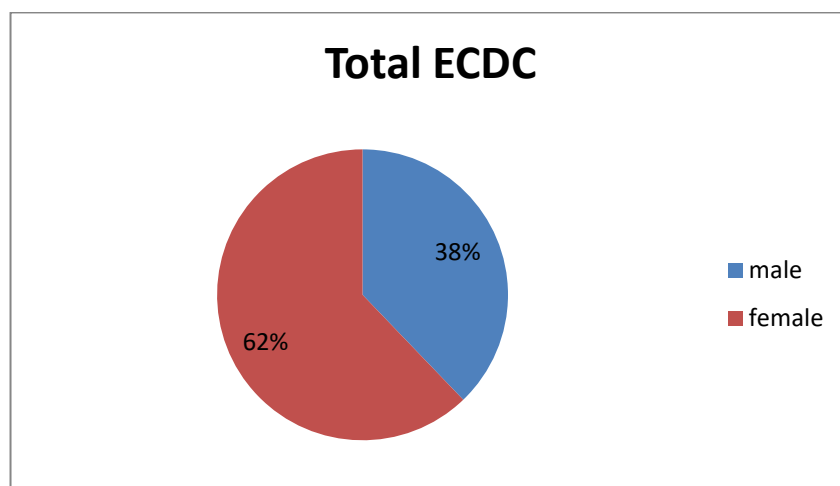
The gender balance within the different contract types is for temporary agents 54% women and 46% men and for contract agents 77% women and 23% men.

Temporary Agents Total

■	male
■	female

46%

54%

Contract Agents

■	male
■	female

23%

77%
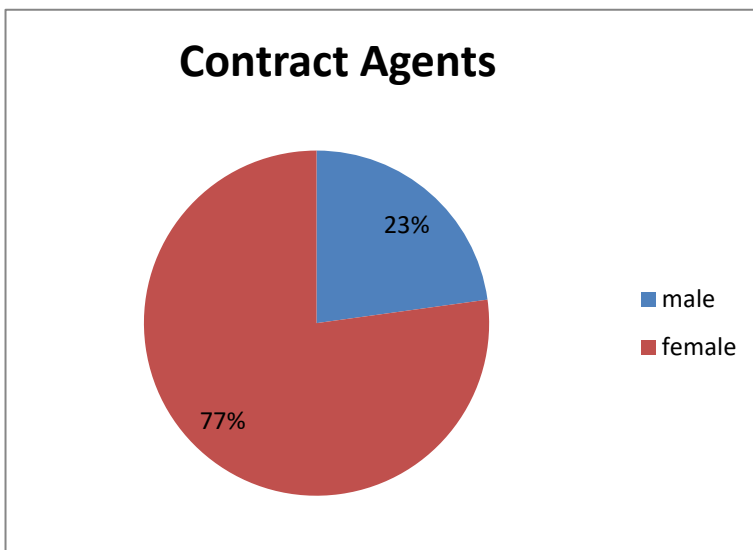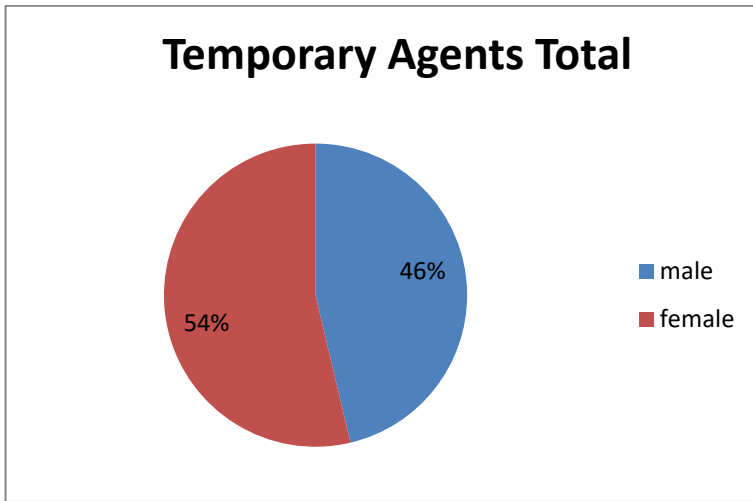
Gender balance is important and is taken into account by the appointing authority in recruitments. One of the organisational HR objectives is to further strengthen the gender balance in management positions (proportion of women in the new appointments to management posts (Director/Heads of Units) is aimed to be 50 %). The current gender balance in this category is 33% women and 67% men.

Moreover, gender balance is taken into account when appointing selection committees in recruitment processes to further strengthen the view of both genders and encourage a mixed collaboration in the important work of finding the most competent candidates.

The Centre is fully committed to the provision of equal opportunity for its entire staff through its employment practices. It is aiming at developing an environment taking into account diversity and ensuring that no one is treated inequitably due to gender, marital status, age, nationality, sexual preference or religion. This is done through a series of measures including statements in vacancy notices, as mentioned above in composition of selection committees, conditions of work (e.g. flexitime, teleworking policy, part-time).

Nationality balance

On 31 December 2018, ECDC employs staff from 26 member states (offers not included):

Nationality	AST/SC	AST	AD	TA Total	CA	SNE	ECDC total
Austria		0	1	1	1		2
Belgium		0	6	6	3		9
Bulgaria		0	6	6	2		8
Croatia		0	0	0	0		0
Cyprus		1	0	1	0		1
Czech Republic		0	1	1	1		2
Denmark		3	2	5	1		6
Estonia		0	0	0	1		1
Finland		1	10	11	3		14
France		3	15	18	7		25
Germany		6	14	20	5		25
Greece		1	5	6	3		9
Hungary		0	3	3	1	1	5
Ireland		1	1	2	0		2
Italy		3	11	14	6	1	21
Latvia		2	2	4	0		4
Lithuania		1	0	1	4		5
Luxembourg		0	0	0	0		0
Malta		0	2	2	0		2
Netherlands		2	3	5	2		7
Poland		2	1	3	7		10
Portugal		2	3	5	4		9
Romania	1	7	2	10	7		17
Slovakia		0	1	1	1		2
Slovenia		0	1	1	0		1
Spain		2	3	5	3		8
Sweden	1	12	19	32	26		58
United Kingdom		3	7	10	4		14
Total	**2**	**52**	**119**	**173**	**92**	**2**	**267**

ECDC total without SNEs

Croatia 0.0%
Czech Republi 0.8%
United Kingdom 5.3%
Austria 0.8%
Belgium 3.4%
Bulgaria 3.0%
Cyprus 0.4%
Denmark 2.3%
Estonia 0.4%
Finland 5.3%
Sweden 21.9%
France 9.4%
Germany 9.4%
Spain 3.0%
Romania 6.4%
Greece 3.4%
Slovenia 0.4%
Hungary 1.5%
Portugal 3.4%
Italy 7.5%
Ireland 0.8%
Poland 3.8%
Slovakia 0.8%
Nethe 2.6%
Malta 0.8%
Luxembourg 0.0%
Lithuania 1.9%
Latvia 1.5%
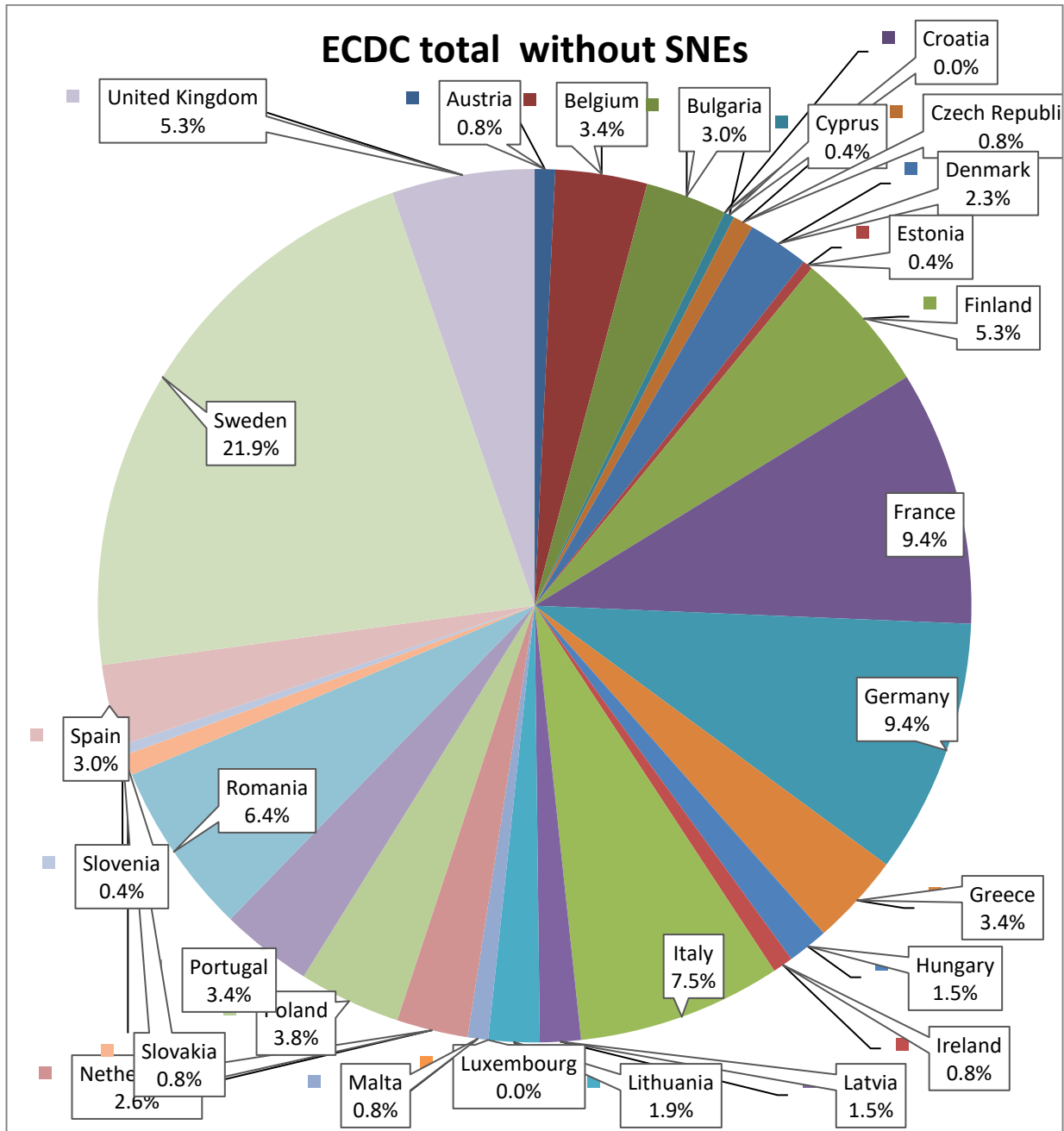
E. Schooling

There are a number of alternatives regarding international schooling within the region where the Centre is situated (international schools, German, British, French, Finnish schools). There is no European school in Stockholm.

Public schools, whether Swedish or international, are free of charge. Private school fees are high; although national grants per student reduce fees. However, the private International School situated in the Stockholm City Centre charges very high fees and the double educational allowance only covers a minimal part of the fees of this school.

There has been no special agreement set with any particular school.

It should be noted that the seat agreement between the Centre and the Swedish government provides for the possibility to consider a European section or school.

Annex 5. Building

	Name, location and type of building	Other Comment
Information to be provided per building:		
Surface area (in square metres) Of which office space Of which non-office space	Gustav III boulevard 40 Hilton 3 building Total surface: 9.407 sqm Office space: 4.905 sqm Non office space 4.502 sqm	Office space includes: offices, meeting rooms, boardroom, auditorium, EOC social areas and reception. Non-office space includes: corridors, stairs, toilettes, storage areas, server rooms, technical rooms, canteen, cafeteria, basement and parking.
Annual rent (in EUR)	Hilton 3 building Gustav III:s boulevard 40 169 73, Solna, Sweden	The rent cost projection without indexation for 2019 is 16.394.506,52 SEK and for 2020 is 19,491,840 SEK
Type and duration of rental contract	Gustav III:s boulevard 40 Contract start date is 27/2/2018. Expiration date 27/2/33.	15-year contract with the option of 2 renewals of 5 years each. Termination notice period 12 months.
Host country grant or support	No financial support is provided by the Host Country.	Host Country support was extended in the process of identification of the new premises and in ensuring that the provisions of the seat agreement with regard the new premises are implemented.

Annex 6. Privileges and immunities

Agency privileges	Privileges granted to staff	
	Protocol of privileges and immunities/diplomatic status	Education/day care
The Agency enjoys the privileges stipulated in the Protocol on the Privileges and Immunities of the European Communities (Articles 1 to 4 of the Protocol)	Articles 12 to 16 of the Protocol on the Privileges and Immunities of the European Communities are applicable to the staff of the Centre. This includes: • Immunity from jurisdiction as regards acts carried out by them in their official capacity. • Exemption from regulations restricting immigration and formalities for the registration of foreigners. • Right to import household effects from their last country of residence or from the country of which they are nationals The Director of the Centre and the Deputy to the Director together with their families are granted the immunities and privileges accorded to heads of diplomatic missions and members of their families.	Family members of staff have access to day care/education in accordance with Swedish legislation.

Annex 7. Evaluations

External evaluation

ECDC's Founding Regulation requires the Centre to organise external evaluations every five years to assess how well it is performing its mission. The second independent external evaluations of ECDC, conducted by a consortium led by the Rome-based consultancy Economisti Associati, was concluded during 2014. The report looked at the period 2008–2012. The Management Board adopted a set of recommendations in response to the evaluation in its meeting in June 2015. Based on the recommendations of the Board, ECDC developed an action plan for the implementation of actions, approved by the Management Board in November 2015. In November 2017, ECDC presented the final report to the Board on the final implementation of the actions set in the plan. The external evaluation is available on ECDC website: http://www.ecdc.europa.eu/en/aboutus/Key%20Documents/ECDC-external-evaluation-2014.pdf

In 2018, ECDC has launched its third external evaluation. A steering group of the Management Board, the External Evaluation Steering Committee (MEES), composed of representatives of the Member States, the European Commission and the European Parliament prepared the terms of reference, approved by the Management Board in March 2018. The third external evaluation started in September 2018 and was finalised in October 2019. It was conducted by Price Waterhouse Cooper (PWC). In November 2019, the MEES presented a set of recommendations for approval by the Management Board.

Internal evaluations:

ECDC has had a procedure for the internal evaluation of its activities and outputs since 2015. Every year a number of ECDC's projects or products have been assessed. The following internal evaluations took place:

- 2015: ECDC assessment the ECDC IT governance;
- 2016: evaluation on the deployment of ECDC experts in Africa;
- 2017: start of the evaluation of the ECDC disease programmes with the development of a common protocol for all disease programmes evaluations. The first two programmes to be evaluated in 2018 were IRV and FWD; FWD evaluated in 2019 – *outsourced*;
- 2018: evaluation of ECDC's intranet;
- 2019: evaluation of the document management system - *outsourced*
- 2019: evaluation of ECDC Fellowship Programme - *outsourced*
- 2018-2020: EPHESUS (evaluation of the surveillance systems) - *outsourced.*

The scope of the procedure is the implementation of the Internal Control Framework 12:

> 'The Agency deploys control activities through corporate policies that establish what is expected and in procedures that put policies into action…the impact assessment and evaluation of financial expenditure and other non-spending activities are performed in accordance with the guiding principles of the Commission's better regulation guidelines, to assess the performance of EU interventions and analyse options and related impacts on new initiatives.'

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

The following are out of the scope of this procedure:

- Five-year external evaluations[1];
- Audits;
- Specific internal self-assessments / evaluations performed by individual Units with the purpose of continuous improvement (e.g. peer reviews, evaluations of Unit-specific processes);
- PHE evaluations, CMMI, individual appraisals, as they follow dedicated methodologies.

An annual evaluation plan and indicative multi-annual evaluation programme are approved by the Director, after consultation with the relevant internal stakeholders.

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[1] ECDC Founding Regulation, article 14.5.b

In addition, the Financial Regulation (art. 29(5)) requires regular ex-ante, interim or ex-post evaluations for certain interventions[1].

The multi-annual evaluation programme shall be drawn up taking into account the life cycle of the interventions, the operational and strategic needs of the Units, general requirements for evaluation, and any specific requirement for evaluation as set out in the legal base of the intervention.

All interventions addressed to external parties must be periodically evaluated in proportion with the allocated resources and the expected impact.

The timing of evaluations must enable the results to be fed into decisions on the design, renewal, modification or suspension of activities.

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

Stakeholder surveys:

In 2015, ECDC launched a first stakeholder survey targeted to members of the Management Board, Advisory Forum, Competent Bodies, National Focal Points and relevant external stakeholders (EU institutions, relevant EU agencies, international organisations). The results of the survey were presented to the Management Board. In 2015, the corrective actions proposed were included in a common action plan with the external evaluation. A second survey was done in 2016. The next stakeholder survey has been postponed to avoid duplication with the external evaluation of ECDC.

Monitoring of ECDC work programme implementation:

The implementation of the ECDC work programme is managed through a Management Information System, as well as dedicated dashboards reviewed monthly by the senior management. A quarterly review of the level of implementation of the Work Programme are conducted and communicated to the senior management. For all projects, quarterly meetings are organised with each Unit to ensure follow up, and escalated to senior management and the Director when needed. An update of the implementation of the Work Programme is given at each meeting of the Management Board.

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

Annex 8. Risk assessment for the Single Programming Document 2020

As part of preparing the draft Single Programming Document (SPD) 2020, ECDC conducted a high-level risk self-assessment exercise in order to identify the main risks that could impact the implementation of the SPD 2020. A more detailed exercise was conducted for the final SPD 2020 in October 2019 at which stage the main risks and mitigating measures were confirmed.

The following main risks were identified:

- Risk of SPD implementation suffering from a PHE event or impacted by other unforeseen additional political, or public health, prioritised activities. Although there is preparedness in ECDC for scaling down activities, it would still imply that ECDC would not implement a part of the SPD as planned.
- Unavailability of data from Member States and/or unavailability of Member States/stakeholders resources to contribute to and/or participate in ECDC activities. At the moment ECDC has a good acceptance/support among stakeholders, however budget constraints on Member States/stakeholders could impact their priorities regarding ECDC related activities.
- Outsourcing of activities. Any outsourcing implies dependence on external parties. All forms of external parties' non-delivery (including insufficient quality) would potentially jeopardise the implementation of the SPD. Good planning and follow-up of outsourced work (including quality control) should reduce this risk to an acceptable level.
- Any budget cuts in the 2020 budget and/or cuts of posts in the establishment table 2020, would impact the SPD negatively. A specific risk for the SPD 2020 are the potential negative effects of the on-going BREXIT negotiations, as these have not yet been concluded. Also, any large change in the exchange rate (SEK/EURO) risks impacting the budget implementation and thereby also the execution of the SPD.

The following action was identified as an additional mitigation:

- ECDC will closely follow, and liaise with the European Commission, on the effects of the BREXIT negotiations

Annex 9. Grants

1. ERLTB-Net

Subject matter of the Action: ERLTB-Net: Implementation of laboratory coordination activities, including laboratory network coordination, EQA, training, strain collection, typing, scientific advice & technical guidance on lab issues as well as methods harmonisation and network meeting

Type of grant: Specific grant agreement

Objective of the grant: To strengthen the TB laboratory services in the EU.

Expected result: Ensure coordination and full establishment of the network and enhance support to master the challenges of TB control and elimination at EU level.

Expected amount 2020: 199 600 EUR

Expected launch: Q1 2020

Maximum rate of co-financing: 90%

Human resources from ECDC (FTEs): 24 days (=0.16 FTEs)

2. Monitoring and evaluation of VENICE.Net

Subject matter of the Action: Monitoring and evaluation: Continuation of VENICE.net activities for VPDs incl. influenza under the existing FWC

Type of grant: Launch of the new Framework partnership agreement

Objective of the grant: To continue the VENICE project.

Expected result: To collect information on the national vaccination programmes through a network of professionals and ensure its availability to Member States and relevant stakeholders.

Expected amount 2020: 0.00 EUR

Expected launch: Q2 2020

Maximum rate of co-financing: 90%

Human resources from ECDC (FTEs): 48 days (0.3 FTE)

3. Scientific coordination of ECDC Fellowship Programme and hosting of fellows

Subject matter of the Action: Scientific Coordination of ECDC Fellowship Programme (Epidemiology (EPIET) and Public Health Microbiology (EUPHEM) paths) and hosting of fellows at Training Sites

Type of grant: Specific grant agreements under existing framework partnership agreements

Objective of the grant: To ensure that EU-track fellows can be employed by their Training Sites with the financial support of ECDC, and to ensure the availability of highly qualified scientific coordinators

Expected result: Successful running of the ECDC Fellowship Programme

Expected amount 2020: 2 400 000 EUR

Expected launch: Q4 2020

Maximum rate of co-financing: 90%

Human resources from ECDC (FTEs): 100 days (= 0.66 FTEs)

List of specific agreements: 25 specific agreements

4. ECDC Fellowship Programme and hosting of fellows

Subject matter of the Action: ECDC Fellowship Programme (Epidemiology (EPIET) and Public Health Microbiology (EUPHEM) paths) and hosting of fellows at Training Sites

Type of grant: Direct award of framework partnership agreements

Objective of the grant: To ensure that EU-track fellows can be employed by their Training Sites with the financial support of ECDC

Expected result: Successful running of the ECDC Fellowship Programme

Expected amount 2020: 0.00 EUR

Expected launch: Q2 2020

Maximum rate of co-financing: 90%

Human resources from ECDC (FTEs): 100 days (= 0.66 FTEs)

Indicative number of framework partnership agreements: 6 framework partnership agreements
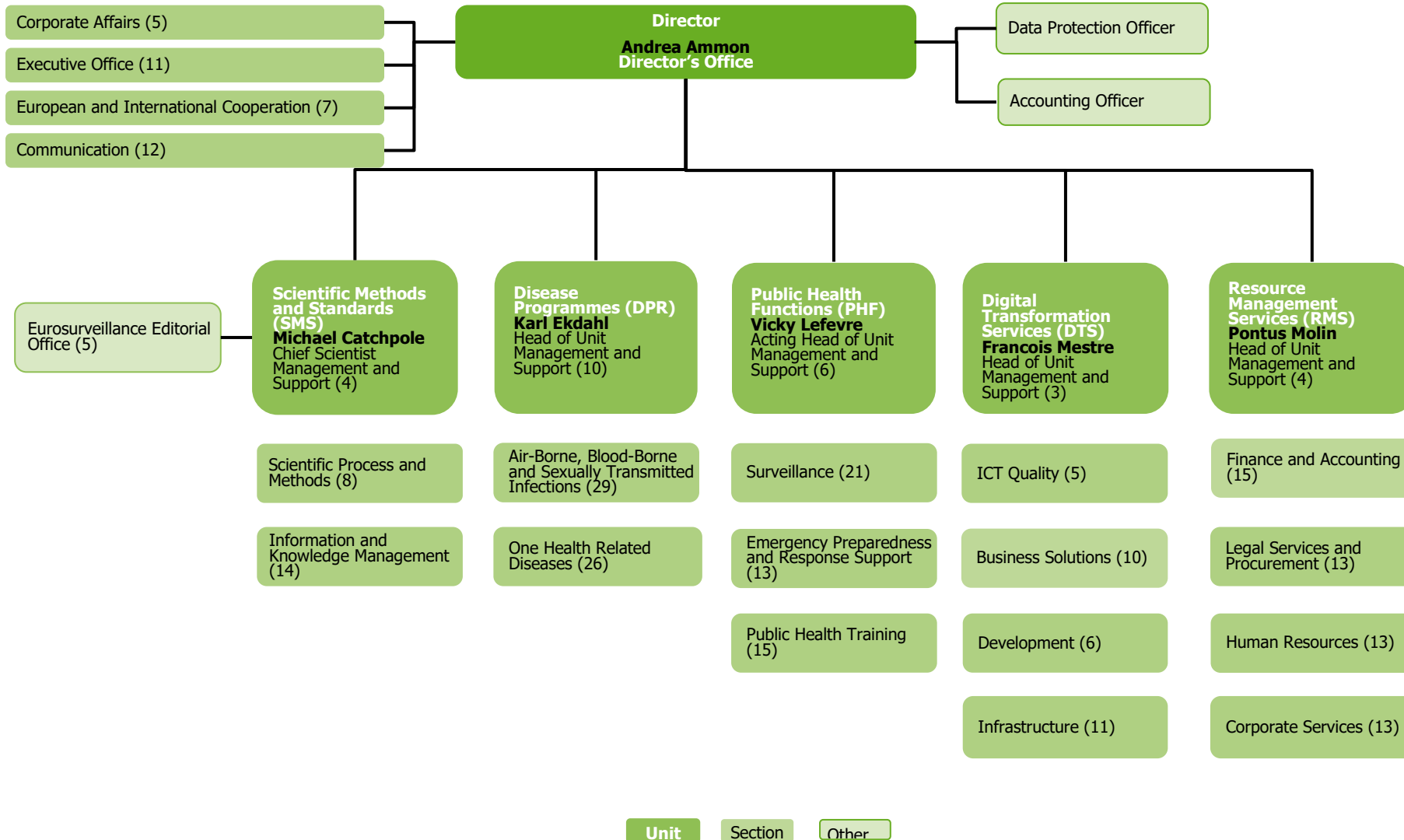
Financing Decision (procurements) 2020

Strategy	Functional Group	Generic description of procurements	Financing Decision Amount	Indicative number and type of procurements	FWC number	Indicative period
1. Surveillance and epidemic intelligence	1. Public health surveillance	Data management	630 000	1 Specific contract under framework contract;		Q4 2019
		Total	**630 000**			
	2. Molecular surveillance	Molecular surveillance	125 000	3 Specific contracts under framework contract;	DI/07360 New Framework Contract	Q4 2019-Q2 2020
		Total	**125 000**			
	3. Methods to support disease prevention and control	Methods to support disease prevention and control (analysis of surveillance data and GIS, evaluation of surveillance systems)	597 619	1 Negotiated procedure;4 Specific contracts under framework contract;	ECDC/2019/015 ECDC/2016/037 New Framework Contract	Q4 2019-Q1 2020
		Total	**597 619**			
		Total 1. Surveillance and epidemic intelligence	**1 352 619**			
2. Scientific support	1. Scientific advice coordination	Methodology, standards and tools for scientific advice (incl.scientific advice repository, EBPH grading system, needs and use of scientific advice, ESCAIDE etc)	750 000	2 Open calls for tender;7 Specific contracts under framework contract;One or more order forms;	ECDC/2019/028 ECDC/2017/007 ECDC/2017/009 ECDC/2017/015 New Framework Contract: Increasing EBPH capacity in-house and in MSs, needs assessment New Framework Contract: Determinants dashboard	Q4 2019-Q3 2020
		Total	**750 000**			
	2. Knowledge and information management services	Library, open access publications, knowledge management services, rapporteurs and facilitators for scientific meetings, scientific editing, information management, design support	601 000	4 Negotiated procedures;4 Specific contracts under framework contract;One or more order forms;		Q4 2019-Q3 2020
		Total	**601 000**			
		Total 2. Scientific support	**1 351 000**			
3. Preparedness and response	1. EU preparedness and support to EU outbreaks	PH emergencies preparation, biorisk, simulation exercises, country case studies, EOC and trainings on preparedness	302 181	1 Open call for tender;1 Negotiated procedure;6 Specific contracts under framework contract;	Open call for tender: Prioritisation of emerging threats: ranking tool and methodology development	Q4 2019-Q2 2020
		Total	**302 181**			
		Total 3. Preparedness and response	**302 181**			
4. Training and capacity building	2. Training networks, e-learning, training materials	Training networks, e-learning, training materials , accreditations	418 500	5 Open calls for tender;6 Negotiated procedures;1 Specific contract under framework contract;	ECDC/2015/037 Open calls for tender: Update of core competencies, maintenance of existing online products, eLearning services, Training on control of multidrug-resistant micro-organisams in healthcare settings, Online course on preparedness	Q4 2019-Q2 2020
		Total	**418 500**			

	Total 4. Training and capacity building		**418 500**			
5. Communication	1. Press, media, corporate comunication and stakeholders	Media monitoring, audiovisuals, stakeholders, networking, corporate communication, branded items, printing and distribution of publications, infostands, EAAD	337 000	4 Negotiated procedures;4 Specific contracts under framework contract;One or more order forms;	New Framework Contract	Q2 2019-Q3 2020
		Total	**337 000**			
	2. Eurosurveillance	Eurosurveillance (Seminar, editing, printing and distribution , fees, etc)	38 400	1 Specific contract under framework contract;1 Call for expression;One or more order forms;	ECDC/2017/015	Q4 2019-Q1 2020
		Total	**38 400**			
	Total 5. Communication		**375 400**			
6. Disease work	ARHAI	ARHAI (incl. EAAD, EARS, ESAC, EQA for AMR, HAI-Net etc)	833 200	5 Open calls for tender;13 Specific contracts under framework contract;	ECDC/2016/011 ECDC/2016/016 ECDC/2017/008 ECDC/2017/017 Open calls for tender: ESAC-Net support, Hai_net support, Implement6ation of the molecular surveillance, External Quality Assessment AMR (local clinical microbiology laboratories), Support for European Clostridium difficile surveillance	Q4 2019-Q3 2020
		Total	**833 200**			
	HSH & TB	HSH & TB (incl.HIV modelling, hepatitis monitoring, ghonorreal resistance, support to MS, country support for TB elimination, ERLTB-Net, etc)	1 080 000	5 Open calls for tender;5 Negotiated procedures;15 Specific contracts under framework contract;	ECDC/2018/014 ECDC/2018/027 ECDC/2018/028 ECDC/2019/030 ECDC/2017/004 Open calls for tender: Health systems strengthening for tuberculosis elimination, Implementation of the hepatitis prevalence sero-survey in several countries, Improving the utility of HIV surveillance and monitoring data for public health action by integrating clinical data, Further developing the gonorrhoeal antimicrobial resistance sentinel surveillance programme (EUROGASP), Follow up of public health guidance on LTBI	Q4 2019-Q3 2020
		Total	**1 080 000**			
	Immunisation and Respiratory Viruses	IRV & VPD (incl. seasonal influenza vaccine efectiveness studies, Wetlab, EuroMOMO, EU online vaccination portal, VEBs, IBD, EVIS, etc)	2 141 000	5 Open calls for tender;6 Negotiated procedures;15 Specific contracts under framework contract;One or more order forms;	ECDC/2018/029 ECDC/2016/041 ECDC/2017/001 ECDC/2017/005 Open calls for tender: Monitoring and evaluation of vaccination coverage, IBD incl. WGS component, Preparation and launch of new VENICE IV, Vaccine	Q4 2019-Q3 2020

						Effectiveness, Burden, and Impact Studies, Mortality monitoring.
		Total	2 141 000			
	Zoonotic, Food-, Water-and Vector-born Diseases	EVD & FWD (incl. European network for mollecular and veterinaty entomology. EVD-LabNet, EQAs for STEC, Listeria, Legionalla and Salmonella, EuroCJD, etc)	1 060 200	1 Negotiated procedure;11 Specific contracts under framework contract;	ECDC/2019/030 ECDC/2016/037 ECDC/2016/043 ECDC/2016/044 ECDC/2016/045 ECDC/2017/007 ECDC/2017/009 ECDC/2017/011	Q4 2019-Q2 2020
		Total	1 060 200			
	Total 6. Disease work		5 114 400			
7. Management and resource management	1. Working with European Union and member States	Working with European Union and member States (European Forum Gastein, country technical support, etc)	79 600	1 Negotiated procedure;1 Specific contract under framework contract;	ECDC/2018/026	Q1 2020-Q1 2020
		Total	79 600			
	2. Working with non-EU Countries	Working with non-EU Countries	39 000	One or more order forms;		Q2 2020
		Total	39 000			
	4. IT infrastructure services	IT infrastructure services	2 065 843	2 Specific contracts under framework contract;	DI/07600 DI/07722 ECDC/2018/037	Q4 2019
		Total	2 065 843			
	5. IT solutions	IT solutions	2 434 157	18 Specific contracts under framework contract;12 Re-openings of competition;One or more order forms;	DI/07720 DI/07722 ECDC/2018/032 ECDC/2018/041 ECDC/2018/033	Q4 2019-Q2 2020
		Total	2 434 157			
	Total 7. Management and resource management		4 618 600			
8. External meetings-(FWC ECDC/2019/011)	Total		3 729 300			
Total			17 262 000			

Annex 10. Organisation chart year N+1

Director
Andrea Ammon
Director's Office

- Corporate Affairs (5)
- Executive Office (11)
- European and International Cooperation (7)
- Communication (12)

- Data Protection Officer
- Accounting Officer

Eurosurveillance Editorial Office (5)

Scientific Methods and Standards (SMS)
Michael Catchpole
Chief Scientist
Management and Support (4)

- Scientific Process and Methods (8)
- Information and Knowledge Management (14)

Disease Programmes (DPR)
Karl Ekdahl
Head of Unit
Management and Support (10)

- Air-Borne, Blood-Borne and Sexually Transmitted Infections (29)
- One Health Related Diseases (26)

Public Health Functions (PHF)
Vicky Lefevre
Acting Head of Unit
Management and Support (6)

- Surveillance (21)
- Emergency Preparedness and Response Support (13)
- Public Health Training (15)

Digital Transformation Services (DTS)
Francois Mestre
Head of Unit
Management and Support (3)

- ICT Quality (5)
- Business Solutions (10)
- Development (6)
- Infrastructure (11)

Resource Management Services (RMS)
Pontus Molin
Head of Unit
Management and Support (4)

- Finance and Accounting (15)
- Legal Services and Procurement (13)
- Human Resources (13)
- Corporate Services (13)

Unit | Section | Other

January 2020

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