ECDC Management Board

Fiftieth Meeting

Stockholm, 25 November 2020

ECDC Single Programming Document 2021

Document: MB50/10 Rev. 1	Date: 23 November 2020
Summary:	In accordance with ECDC's Founding Regulation, the Centre's work is guided by an annual work programme. The Framework Financial Regulation and the European Commission guidelines for a programming document for decentralised agencies set up the structure for the Programming Document. The document presents the list of activities and resources for 2021 as well as a three-year rolling plan for 2021-2024, readjusted every year. This document constitutes the final draft of the Programming Document. It follows a first discussion in the Management Board in June 2019, a written consultation of the Management Board, Advisory Forum and Coordinating Competent Bodies and a discussion of the Management Board in November 2019. It includes the detailed resource allocation (budget and FTEs) and annexes. The draft version of the document was sent to the European Commission Council and Parliament on 31 January 2020. This final version also addresses comments received from the European Commission in September 2020. An additional written consultation of the Management Board took place in October 2020.
Action:	For final approval
Background:	Article 14(5) (d) of Regulation (EC) No 851/2004 of the European Parliament and of the Council of 21 April 2004 states that the Management Board shall "adopt each year a programme of work for the coming year. It shall also adopt a revisable multiannual programme. The Management Board shall ensure that these programmes are consistent with the Community's legislative and policy priorities in the area of its mission". Communication C (2014) 9641 final from the European Commission on the guidelines for programming document for decentralised agencies and the template for the consolidated Annual Activity Report for decentralised agencies.

	Art 32 of the Financial Regulation of the European Centre for Disease Prevention and Control and its implementing rules adopted by the Management Board on 13 August 2019 ECDC Strategy 2021-2027 adopted by the Management Board in June 2020

ECDC CORPORATE

Single Programming Document

2021-2023

204 November 2020

Background:
- Regulation (EC) N° 851/2004 of the European Parliament and of the Council of 21 April 2004
- Article 14.5(d) – [The Management Board shall:] "adopt, before 31 January each year, the Centre's programme of work for the coming year."

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Foreword

Over the last 15 years, ECDC has demonstrated its relevance and the benefit it brings to the Member States and the EU, by providing pertinent scientific advice, collecting and analysing surveillance data across Europe, assessing risks, supporting capacities and by adding value through increased synergies, including with relevant international organisations, such as WHO. In 2020, the COVID-19 pandemic reminded us how necessary is the collation and exchange of data and information across Member States, facilitated by ECDC, the timely delivery of rapid risk assessments and the provision by the Centre of scientific evidence at EU level. The pandemic has a profound impact on public health and healthcare systems worldwide, and its massive consequences on the global exchanges and the economies of all countries remind us that rather than just being a cost, public health and preparedness to crises constitute one of the most important investments our societies should ensure. In 2021, ECDC will continue to address the COVID-19 crisis and support the efforts of the Member States and the Commission. Based on lessons learnt and after action reviews in countries, a major challenge will be to put in place effective integrated surveillance systems for COVID-19 and as an investment for the future, but also, in case of available vaccines, robust systems to support vaccine uptake and measure effectiveness. In the same sense, the work on preparedness will be enhanced with the aim of revisiting and updating preparedness and contingency plans at EU level and in Member states.

The Centre will also start the implementation of a strategy that will guide its efforts towards 2027. The objectives are to be better equipped to respond to unforeseen threats, more relevant in addressing individual needs of Member States, and more performant as an organisation. When building its strategy, ECDC largely took into consideration the results of external and internal evaluations, as well as the views of its main stakeholders. In 2019, the third external evaluation of ECDC for the period 2013-2017 showed that ECDC's role is widely recognised and appreciated among its stakeholders and its value acknowledged.

Our ultimate aim is "to improve lives in Europe, and globally applying scientific excellence, thus empowering the Member States, the European Commission, and other partners to drive public health policy and practice".

In addition to the priority efforts dedicated to the COVID-19 crisis, 2021 will be a year of transition into the ECDC strategy, with the setting of the first milestones and the continuation of efforts started in different areas.

- ECDC will continue to fulfil the core missions set in its Founding Regulation (such as the collection of surveillance data across Europe, epidemic intelligence, the provision of rapid risk assessments, training activities, scientific advice, support microbiology laboratories' performance in Europe, the coordination of European communicable diseases networks);
- The Centre will further develop or finalise projects launched in previous years, such as the reengineering of its surveillance systems, the establishment of a foresight function, the assessment of new technologies and e-health in the area of communicable diseases, now integrated in the strategy.

To ensure that the multi-annual and annual work programmes will contribute to implement the ECDC strategy, the structures of the Programming Document and the strategy are aligned.

The general priorities of the Centre will ~~have a clear focus on~~ among priorities approved by the Management Board, support implementing some of the priorities highlighted by the President of the European Commission, Ursula von der Leyen. These include the implementation of the European One Health Action Plan against Antimicrobial Resistance and the cooperation at international level on antimicrobials; advocacy to promote vaccination and tackle vaccine hesitancy; work on e-health and contribution to the creation of a European Health Data Space to promote health-data exchange. In the area of its mission and within available resources, the Centre will also contribute to the European Green Deal and the EU Next Generation recovery programme. With the reinforcement of the EU and countries preparedness, being critical to tackle the still ongoing COVID-19 pandemic and emerging cross-border threats to health, these are issues at the core of the ECDC missions, for which the Centre has already started to invest substantial efforts and which will remain among ECDC highest priorities in the years to come.

Finally, the Centre will address the Management Board recommendations stemming from the Third External Evaluation of ECDC in 2019, and an action plan will be presented for approval to the Management Board, latest by March 2021.

5.1.2e,

Director

List of acronyms

ABAC	Accrual-Based Accounting, the EC integrated budgetary and accounting system
AMR	Antimicrobial resistance
5.1.2e	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
CDTR	Communicable disease threats reports
COVID-19	Coronavirus disease 2019
CPCG	Committee on procurement, contracts and grants
CPDP	ECDC Continuous Professional Development Programme
CRM	Customer Relationship Management
Decision 1082/2013/EU	Decision No 1082/2013/EU of the European Parliament and of the Council of 22 October 2013 on serious cross-border threats to health
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
EUCAST	European Committee on Antimicrobial Susceptibility Testing
EUPHEM	Public Health Microbiology Path of the ECDC Fellowship Programme
EuroCJD	European and allied countries collaborative study group of Creutzfeldt-Jakob disease
EuSCAPE	European survey on carbapenemase-producing Enterobacteriaceae

EVA	ECDC Virtual Academy
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
FTE	Full time equivalent
FWD	Food- and waterborne diseases and zoonoses
FWD-Net	European Food- and Waterborne Diseases and zoonoses network
HAI	Healthcare-associated infection
HAI-Net	Healthcare-Associated Infections Surveillance Network
HIV	Human immunodeficiency virus
HSH	HIV, sexually transmitted infections and viral hepatitis
ICT	Information and Communication Technology
IPC	Infection prevention and control
IRIS	Issue-Resources-Impact-Solidarity, decision-making and prioritisation tool
IRV	Influenza and other respiratory viruses
JIACRA	Joint Interagency Antimicrobial Consumption and Resistance Analysis
MediPIET	Mediterranean Programme for Intervention Epidemiology Training
MERS-CoV	Middle East respiratory syndrome coronavirus
MMR	Measles, mumps and rubella
MRSA	Methicillin-resistant Staphylococcus aureus
NFP	National Focal Point
NMFPs	National Microbiology Focal Points
NPI	Non-pharmaceutical interventions
OCP	Operational contact Points
RRA	Rapid Risk Assessment
SARMS	Scientific Advice Repository and Management System
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2
SLA	Service level agreement
SMAP	Strategic multiannual work programme
STEC	Shiga toxin-producing Escherichia coli
STI	Sexually transmitted infections
TALD	Travel-associated Legionnaires' disease
TCS	Targeted country support
TB	Tuberculosis
TESSy	The European Surveillance System
VBORNET	European Network for Arthropod Vector Surveillance for Human Public Health.
VectorNet	European Network for Arthropod Vector Surveillance for Human Public Health and Animal Health
VENICE	Vaccine European New Integrated Collaboration Effort
VPI	Vaccine-preventable diseases and Immunisation
VTEC	Verocytotoxin-producing Escherichia coli
WGS	Whole genome sequencing
WHO	World Health Organization
WHO Europe	World Health Organization, Regional Office for Europe

Acronyms of ECDC IT systems[1]

System/application	Description
Early Warning and Response System (EWRS)	A rapid alert system that supports critical communication about serious cross border health threats, in accordance with Decision 1082/2013/EU, through a web-based platform between the Member States, the European Commission, other EU agencies and WHO.
Epipulse (ECDC surveillance portal) *(to be launched in 2021)*	Online entry-point for ECDC and Member States to carry out all surveillance activities: data and events reporting, interpretation and assessment of findings, analysis and visualisation of outputs. It integrates the functionality of TESSy, EPIS, and molecular surveillance, while adding the possibility for Member States to interact with each other and with ECDC.
Epidemic Intelligence Information System (EPIS)	Supports the reporting and assessment of public health events that may represent a serious cross border health threat as per Decision 1082/2013/EU 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 all other disease networks). EPIS will be replaced by ETMS which will be integrated in Epipulse (*to be launched in 2021*).
The European Surveillance System (TESSy)	Supports collection and validation of data for public health surveillance, provided by EU Member States and other associated countries. TESSy will be integrated in Epipulse (*to be launched in 2021*).
ECDC data warehouse	Hosts the cleaned data for use by all ECDC core businesses. It is accessible through Epipulse (*to be launched in 2021*).
Event and Threat Management Solution (ETMS) *(to be launched in 2021)*	Platform for reporting, detecting, and assessing signals and events from indicator-based and event-based surveillance. It allows interaction within disease and public health functions networks, to share, discuss, and assess relevant signals and events. It will replace the current Threat Tracking Tool (TTT) and EPIS applications.
PHE Intranet (EOC)	Internal crisis management tool where response activities and resources are gathered, managed and maintained.
Threat Reports app	Free and open access mobile application that gives direct access to key updates and reports on communicable disease threats of concern to the EU on mobile devices.
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.

[1] This list contains ECDC's major IT systems but is not an exhaustive list, e.g. a number of support systems are not included here.

System/application	Description
ECDC Virtual Academy (EVA)	Launched in 2014, EVA is the learning management system that supports ECDC public health training activities. It provides access to e-learning and blended courses, training materials, and administration of face to face activities, including the ECDC Fellowship programme.
Stakeholder Relationship Management (SRM) system	A primary business system of contacts, relationships (internal and external) and interactions with ECDC stakeholders. Supports a centralised management of MS and other external contacts. Position of the system is a user-friendly one-stop-shop with the evolution to meet growing business needs.
Intranet	Tool for internal communication and support of internal processes.
Document Management System (DMS) and Records Management (RM)	Supports the management of electronic formats of documents, providing a single point of controlled access to documents in the Centre contributing to dematerialisation of paper based processes.
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 production of ECDC outputs with scientific content from registration to clearance and dissemination using electronic workflows, and provides a repository of ECDC scientific outputs for reference and auditing purposes.
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 (ELIZA)	The Library provides information delivery services throughout its collection and by making available the tools to ease the access to information. The Library develops a collection (both electronic and print) and provides services via the Library Intranet and physical area.
ECDC KM Services	Knowledge Management Service is a collective term, describing Terminology Services, Talent Map and Enterprise Search.
Terminology Services (TS)	A system that allows human and machine user to benefit using shared professional vocabularies in order to improve transparency and consistency of ECDC the language used in ECDC documents as well as to ensure consistent metadata-tagging.
Enterprise Search (ES)	Enterprise Search is 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 profile, on a voluntary basis.
Management Information System (MIS)	Internal system used to plan and monitor the implementation of the annual work programme of ECDC

Mission Statement

The Centre's mission is laid down in Article 3 of the Founding Regulation,[2] which states that:

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

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

Key tasks of the ECDC include:

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

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

ECDC Vision

To improve lives in Europe and globally applying scientific excellence, thus empowering the Member States, the European Commission, and other partners to drive public health policy and practice.

[2] 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.

I. General Context

The coronavirus pandemic of 2020 has a profound impact on public health and healthcare systems worldwide, and its massive consequences on the global exchanges and the economies of all countries remind us that rather than just being a cost, public health and preparedness to crises constitute one of the most important investments our societies should ensure.

This crisis demonstrates again the need of a collaborative European approach, supported by timely evidence-based scientific assessments. ECDC was established after the 2003 SARS pandemic precisely to serve this purpose. During the COVID-19 crisis, the Centre continuously provided scientific assessment and support to the Commission and EU Member States. Before the pandemic, ECDC also contributed to strengthened preparedness plans in the EU and its neighbouring countries.

In 2021, a major challenge will be to put in place effective integrated surveillance systems for COVID-19 and influenza in hospitals as well as in the community but also, in case of available vaccines, robust systems to measure vaccine uptake and effectiveness, as well as scaling-up the work on pandemic preparedness. Already in 2020, a strategic and performance analysis of the ECDC response to the COVID-19 pandemic took place. ECDC will start the implementation of prioritised recommendations in 2021. This work is geared towards, on one hand, improving the ECDC public health emergency outputs, and on the other, enhancing the internal efficiency of ECDC operations in pandemic situations.

The COVID-19 pandemic is also a reminder that despite all the achievements of ECDC and its partners, at national and EU level, the fight against infectious diseases remains a major challenge. Increased scientific knowledge highlights that humankind cannot completely predict and prevent pandemics. Horizon scanning is slower than the speed of the emergence, mutations, and adaptations of pathogens. The threats will never disappear, but preparedness, including resilient (public) health systems, can increase our ability to prevent, and our response might mitigate and counteract future massive damage. After/in-action reviews for the COVID-19 pandemic will be conducted at all levels to learn lessons and be more prepared in the future. These reviews will also include assessments of indirect public health consequences of the COVID-19 pandemic, including the implementation of the national immunisation programmes.

The global dimension of communicable diseases requires continuous cooperation and exchange of practices globally with partners, such as WHO and relevant CDCs worldwide. In this context, ECDC's role and contribution are more essential than ever.

The ongoing efforts by the European Commission and the ~~European legislator~~ Council and European Parliament to strengthen the ECDC mandate through a legislative act, show that to prevent and support the response to such events, ECDC's role and contribution are essential.

Although the exact outcomes of these evaluations and after/in-action reviews are not yet on the table, observations from the pandemic so far allow a few conclusions. We need robust surveillance systems at EU and national level that provide reliable and timely data also in a crisis situation. An increased level of digitalisation will make parts of the surveillance continuum independent from the time public health experts can spend on it. Experiences currently gathered, for example with the use of Apps in contact tracing, can provide novel effective solutions. Other elements would include further implementation of electronic health records (and the inclusion of parameters important for public health), the application of AI for data validation, and analysis and automated reporting. Despite all MS having preparedness plans, the part of hospital preparedness will require reviewing and strengthening, in terms of monitoring beds, human capacities, testing capacities, stockpiles of essential medicines and equipment. In addition, the crucial role of frontline health care services (primary health care, school health, occupational health) has become evident for early identification, prevention and treatment of mild cases to mitigate pressure on hospitals. Activities to strengthen community preparedness should be foreseen, including sharing experiences between public health experts. We will most likely also see training priorities emerge as consequence of the actions above, and increased collaboration between institutions and citizens for better community engagement for which emergency risk communication will have a central role.

International coordination and cooperation have been reaffirmed as critical aspects of handling and controlling the pandemic. This is relevant for the immediate neighbourhood of the EU and the rest of world. What is not yet visible is the detrimental effect that the necessary focus of the health systems on COVID-19 will mean for other diseases, infectious and non-infectious. ~~Part of the strengthening of preparedness plans may mean to clearly establish~~

~~essential parts of national health programmes that need to be preserved if any possible~~.

In 2021, ECDC starts its long-term strategy 2021-2027, which provides a framework to guide the actions of the Centre for the years to come. The annual Programming Document is putting the strategy in action on an annual basis, to gradually implement the strategy and its associated roadmap until 2027. The structure of the programming document follows the structure of the strategy to ensure easier monitoring of its implementation over the years.

2021 being the first year of the implementation of the ECDC strategy, in addition to COVID-19 related work, the work programme for 2021 is made up of three components:

- ECDC's statutory and recurring tasks, e.g. basic surveillance, Rapid Risk Assessments, provision of scientific advice at the request of the European Commission, European Parliament or Member States;
- Activities and projects that will be carried forward from 2020, due to their multi-annual nature;
- New activities, stemming from the implementation of the ECDC strategy 2021-2027. These will be limited during the first year and will gradually increase.

In September 2019, in her mission letter to new health Commissioner Stella Kyriakides, the new President of the European Commission, Ursula von der Leyen, particularly emphasised three priorities: e-health and the creation of a European Health Data Space to promote health-data exchange; the implementation of the European One Health Action Plan against Antimicrobial Resistance and the cooperation at international level on antimicrobials; advocacy to promote vaccination and tackle vaccine hesitancy. An ambitious Green Deal was also announced that should diffuse in all areas of EU work. The Commission also presented an ambitious Next Generation programme aimed at supporting Member States to recover from the pandemic. With the reinforcement of the EU and countries preparedness, being critical to tackle the still ongoing COVID-19 pandemic and emerging cross-border threats to health, these issues will remain among ECDC highest priorities in the years to come.

Finally, the Centre will address the Management Board recommendations stemming from the Third External Evaluation of ECDC in 2019, and an action plan will be presented for approval to the Management Board, latest by March 2021.

Priorities for 2021

Priorities remain the same as in previous years, as 2021 is a year of transition towards the implementation of the strategy 2021-2027. ECDC will contribute to greater health security in Europe giving particular attention to the following areas:

1. **Support the European Commission and the Member States in responding to the COVID-19 pandemic;**
   The COVID-19 pandemic continues to pose an unprecedented threat to EU/EEA countries and the UK as well as countries worldwide, many of which have been experiencing widespread transmission of the virus in the community for several months. The COVID-19 crisis is far from being over as there is still community transmission reported in most EU/EEA countries, the UK and EU candidate and potential candidate countries. ~~Some countries are reporting a resurgence of observed cases or large localised outbreaks and the global trend continues to show a steady increase in the number of cases and deaths~~. ECDC will continue to provide scientific and technical support to the European Commission and Member States, with regular Risk Assessments, analytical and technical guidance and after/in-action reviews to help inform the response plans in the countries.

2. **Support the European Commission and the Member States in strengthening the preparedness and response for cross-border health threats;**
   The COVID-19 pandemic has forced all countries to continuously review and adapt their emergency response plans, investing in increased hospital capacity, infection prevention and control (IPC) in the community and non-pharmaceutical interventions (NPI) as the primary strategy in the absence of an effective treatment and vaccine. 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 the current pandemic 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, readiness and response planning and ensure interoperability of preparedness plans between countries and sectors. ECDC will collaborate with the Joint Actions set up for this:

- Joint Action to strengthen preparedness in the EU against serious cross-border threats to health and support the implementation of the International Health Regulations (SHARP)
- Joint Action on Points of Entry (EU healthy gateways)
- Joint Action to strengthen health preparedness and response to biological and chemical terror attacks (~~BICTRA~~ TERROR)

3. **Tackle antimicrobial resistance;**
ECDC will continue tackling antimicrobial resistance (AMR), particularly by supporting the European One Health Action Plan against AMR. AMR 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, EMA and other stakeholders in the 'one health' approach.

4. **Improve vaccine coverage in the EU;**
The level of vaccine hesitancy in Europe from the general public and the healthcare professionals, in a 'post factual' era[3] is worrying, when there is ample evidence that vaccines have been one of the strongest protection measures and a safeguard to citizen health in Europe for decades. High trust in immunisation will also be critical when a COVID-19 vaccine becomes available, in view of achieving a successful roll-out of what are likely to be mass vaccination efforts to curb the pandemic. ECDC will continue to develop initiatives and tools to improve vaccination coverage in Europe, increase vaccine acceptance and tackle hesitancy. This will be done by working towards improving quality and availability of coverage data, as well as developing tools and guidance to address issues of uptake. ECDC will continue to support the implementation of the 2018 Council Recommendation on Strengthened Cooperation against Vaccine Preventable Diseases and the Joint Action on vaccination.

5. **Support the European Commission and the Member States in addressing the Sustainable Development Goals[4] 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 in the area of HIV, TB and hepatitis, by working closely with the European Commission, the Member States and WHO to tackle the three diseases and contribute to reduce their incidence and mortality.

6. **Focus on strategic partnerships to create synergy and avoid duplication of work;**
ECDC will actively support the Member States through its targeted country support work that allows identification and addressing the countries' needs, building on the existing coordination mechanisms with WHO and close collaboration with the Member States. In addition, the Centre will further strengthen its relationships with external partners such as relevant EU agencies, the WHO, Centers for Disease Control (CDCs) globally and enhance cooperation with the countries in the closest EU neighbourhood.

7. **Further enhance ECDC's performance and monitoring;**
ECDC will further enhance its internal performance and monitoring through the development and implementation of ECDC integrated management framework, which brings together elements of governance, planning and monitoring, quality, and internal controls. ~~This relies in particular on well-structured, transparent, efficient, and aligned~~. In 2021 the focus will be on alignment of internal ~~procedures and~~ processes and initiation of the implementation of a quality management system suited for ECDC needs~~, for administration and operations, with clear roles definition that empower ECDC staff,~~

[3] '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
[4] http://www.un.org/sustainabledevelopment/

~~investment on professional development of staff to keep being abreast of scientific developments/methodologies, and~~ With the further use of digital workflows, ECDC will aim towards a lean and paperless organisation.

8. **Digitalisation of surveillance systems ~~Assess and integrate innovative technological and scientific advances;~~**
   ECDC will prepare for the future by assessing and 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, and an assessment of the resource implications and pace of adoption across Member States, ECDC will develop guidance to integrate these developments into routine work in Member States and at EU level including for ECDC. In practice, to support digitalisation of EU surveillance, ECDC will work with member states to digitalise the reporting of laboratory-confirmed (COVID-19 and influenza) severe acute respiratory infections in countries participating to the SARI surveillance project. Based on an assessment of current capacities and capabilities in Member States and building upon information collected in the context of other EU projects and joint actions, ECDC will expand this surveillance approach to other diseases for which electronic health record data provide relevant and reliable information in a representative manner.

The present work programme includes a particular focus on these priorities for 2021.

II. Multi-annual programming 2021-2023

Indicators for the multiannual programming 2021-2023

The indicators for the multiannual work programme are the same as the indicators to monitor ECDC strategy 2021-2027, discussed by the management Board in November 2020, as the objective of the successive work programmes are to implement the long term strategy towards 2027.

Strategic Key Performance Indicator	Baseline	Target	Source
Use of reliable evidence, ECDC scientific advice, recommended methodologies, tools and ECDC outputs for decision-making in EU MS - composite: - Accessibility of methods, tools, outputs, data and evidence; - Use of methods, tools, outputs, data and evidence; - Satisfaction with methods, tools, outputs, data and evidence.	NA	-tbc -tbc -70%	Stakeholder survey or existing survey used for network meetings)
Level of capacity reached compared to target, following ECDC standards applied through technical assistance to MS (measured through EULabCap, Preparedness and other assessment tools): - Level of public health microbiology system capability/capacity: EULabCap Index for EU/EEA countries (mean national EULabCap index + potentially inter-country index variation) - Level of public health preparedness capacity	for EULabCap: 7,8 mean national index (2018) tbc	0,3 points increase compared to previous period	EULabCap, IHR or SPAR/JEE
% of countries visited by ECDC upon their demand compared to target (based on the needs and the requests on any topic in the mandate of the Centre); could be virtual or physical country visits	NA	4	Internal monitoring
Degree of implementation of post-COVID19 enhanced preparedness framework /Stakeholder satisfaction with preparedness outputs as part of COVID19 response	NA/ 50% (2020 McKinsey survey)	100%/ 70%	Internal monitoring/ Stakeholder survey
- % of countries visited by ECDC upon their demand compared to target (based on the needs and the requests on any topic in the mandate of the Centre); could be virtual or physical country visits	tbc	100%	Internal monitoring
Number or % of ECDC foresight outputs used by MS	NA	70%	Stakeholders survey
Number or % of ECDC guidance and expert opinions that identify specific knowledge gaps that could be addressed through research	NA	100%	Internal monitoring
Degree of implementation of enhanced post-COVID 19 surveillance framework/ Stakeholder satisfaction with digitalisation of surveillance work	NA/69% (2020 McKinsey survey)	100%/ 70%	Internal monitoring/ Stakeholders survey
Degree of implementation of the joint action plans with international partners (other CDC, WHO, etc.)	74% (2019 WHO joint action plan)	100%	Internal monitoring
Stakeholder satisfaction with coordination of activities with other EU institutions and bodies	NA	70%	Stakeholders survey
Decrease in duration of core process instances over time - RRA, AER, other scientific outputs (average % of decrease)	tbc	10% decrease	Internal monitoring
Overall staff satisfaction	51%	75%	Staff survey
Overall stakeholder satisfaction	NA	75%	Stakeholders survey

Goal 1: By 2027, all ECDC scientific outputs have a high impact, informing decisions on public health policies and practices in the EU

Strategic objective 1. Strengthen and apply scientific excellence in all ECDC's activities and outputs to inform public health policy and practice

1.1 Standards: Promote standard setting to facilitate the use of data and the implementation of public health policies

By 2023, ECDC will have defined with its partners, the key scientific processes, systems and outputs for which the Centre can provide EU added value through: (a) the identification and promotion of the use of existing standards applicable to processes and outputs from ECDC and its partners in Member States, to identify, assess and communicate on infectious disease threats to health (b) the development of new standards (in collaboration with relevant authorities), with particular focus on:

- Data standards, for exchange and for collation of data for surveillance, prevention and control purposes
- Standards for the reporting of scientific studies
- Standards for surveillance systems and methods by intended objectives
- Standards for the production of evidence-based public health guidance and other scientific outputs
- Standards for safeguarding and demonstrating scientific independence

1.2 Evidence: Provide partners with robust evidence and guidance for public health policies and practice

To ensure that the Centre's outputs are relevant for Member States and other partners, by 2023 ECDC will have further engaged them in ECDC priority setting, analytical and knowledge creation work through the IRIS prioritisation framework and through a structured process for consultation on priorities with Competent Bodies. ECDC will maintain and strengthen its systems and processes for the provision of high quality, high impact information and evidence, for surveillance and scientific advice outputs (including evidence-based guidance produced by others and made accessible through ECDC's website).

ECDC will have developed and increased the use of indicators from surveillance (including molecular surveillance), response and programme monitoring activities, to provide partners with robust evidence for the response to outbreaks and other cross-border infectious disease threats, and for the implementation and evaluation/self-assessment of national public health policies and practices. To ensure synergies, ECDC will continue its close collaboration with WHO, JRC and other EU agencies and partners with a mandate for data collection.

Furthermore, ECDC will have completed the re-engineering of EU surveillance systems. Using the new ECDC data warehouse, ECDC and Member States will be able to explore a wide range of data for hypothesis generation and analysis.

1.3 Methodologies: Contribute to the development and implementation of methodologies to increase the impact of actions targeted to reduce the burden of infectious diseases

By 2023, ECDC will have increased the impact of public health actions in the field of communicable disease prevention and control, through the assessment or development of methods that will provide improved insight into disease trends and their determinants: e.g. analysis of data from new sources (e.g. 'big data' from social media to detect, monitor, and assess public health events and threats) and data from multiple disparate sources. ECDC will continue to provide training on evidence-based methods, for developing high quality, high impact scientific advice. The Centre will also identify methods and tools that proved to increase the impact of public health actions, through implementation science[5] studies. ECDC will continue to improve the public health relevance and use of existing

[5] "Implementation science" is commonly defined as the study of methods and strategies to promote the uptake of interventions that have proven effective into routine practice, with the aim of improving population health. Implementation science therefore

data through the adoption, development, and promotion of relevant methodologies, such as more in-depth and advanced bio-statistical and mathematical modelling analyses.

1.4 Knowledge transfer: Bridge the gap between science, policy, and practice to ensure sustainable impact on prevention and control of infectious diseases

By 2023, ECDC will have developed and implemented an internal framework for the collation of knowledge derived from its activities in the area of epidemiology, programme support and monitoring, and networks. The Centre will develop formats and tools for the effective dissemination, translation and transfer of the knowledge for improved policy and practice. ECDC will identify, assess or develop mechanisms to support evidence-use (e.g. identify effective knowledge translation and transfer mechanisms, demonstrated through implementation science studies, and drawing on the experience from ECDC's vaccine hesitancy work). The Centre will also establish a portal single point of entry to all its available data and information and shared by partners in Member States.

ECDC will continue to ensure the editorial independence of *Eurosurveillance* as a reliable source for sound, widely accessible, timely and clear information and evidence for public-health practice and decision-making. Through its policies and practices, Eurosurveillance will have assisted in increasing awareness for standards and the need of transparency and reproducibility in generating scientific information in European public health, and the journal will have facilitated the retrieval of such information. *Eurosurveillance* will also have continued and broadened its educational activities, focussing on science reporting and dissemination and publication ethics, to support capacity building in the countries. In 2023, the journal editors will establish (virtual) contact with journal editors from other international public health agencies to investigate benefits and interests in setting up a community of practice.

The Centre's annual European Scientific Conference on Applied Infectious Disease *Epidemiology* ESCAIDE will continue to bring together around 600 professionals in the EU/EEA and globally, to share scientific knowledge and experience in infectious disease epidemiology, public health microbiology and related scientific fields. Through the ESCAIDE Scientific Committee, ECDC will review opportunities to broaden the appeal of the conference, to attract a broader audience.

Goal 2: By 2027, ECDC has improved its knowledge of countries, thus, by enhancing disease specific work, surveillance, training and emergency preparedness, is able to equip/empower partners to drive public health policy and practice

Strategic objective 2. Support the countries to strengthen their capacities and capabilities to make evidence based-decisions on public health policies and practices

2.1. Country focus: Use country information to better target ECDC activities and improve country support

By 2023, ECDC will have furthered its work with the Member States on a methodology to gain better knowledge and understanding of countries specificities, and support their ~~capacities~~ capabilities to better prevent, identify and control communicable diseases. ECDC will collate and further deepen its analysis and use of collected surveillance and other relevant quantitative and qualitative data to better understand the strengths, vulnerabilities and needs of the countries to prioritise and tailor its support to them. ECDC will learn more about the countries' needs through its Disease and Public Health Networks, ~~and use the most suitable IT platforms for collating, visualising and sharing information and communication. ECDC will~~ strengthen the analysis of existing data and ensure better coordination to capture qualitative information (e.g. via network meetings, country visits etc.). Using the most suitable IT ~~platforms~~ solutions to collate and visualise quantitative and qualitative data at Member State level (country overview), ECDC will streamline data and information already collected, rather than adding extra requests to the

examines what works, for whom and under what circumstances, and how interventions can be adapted and scaled up in ways that are accessible and equitable (Eccles & Mittman (2006) Implement Sci. 2006; 1: 1. doi: 10.1186/1748-5908-1-1).

Member States. This will also include at a later stage the integration of existing data collected by key stakeholder institutions, e.g. OECD, WHO, Eurostat.

Using a corporate harmonised approach, ECDC staff and external experts will provide direct support to address the specific situation of Member States for targeted health conditions or public health areas, through regular country visits, at the ~~request~~ invitation of Member States. ECDC will offer bilateral/trilateral visits to support and enhance the development of cross-border pandemic planning and address specific challenges in regions with border traffic as well as on other relevant topics (e.g. after/ in-action action reviews, AMR/HAI).
ECDC will also support projects of common interest to all Member States, such as information on funding opportunities. ~~All ECDC work will better take into account the capacities and capabilities of Member States~~. Planning of country support activities, will take place through bilateral discussions with the Member States, based on the vulnerabilities and needs identified, and taking into account their capacities and capabilities, to avoid adding burden to them, while maximising the benefits.

A monitoring and evaluation framework on the impact of targeted country support will be developed. ECDC will report progress annually to the National Coordinators of the Coordinating Competent Bodies and collect their feedback to adapt its work and better respond to the countries' needs. An interim evaluation will take place in 2023/2024.

2.2. Prevention and control programmes: Support and strengthen capacity to deliver programmes targeted at the prevention and control of infectious diseases

By 2023, ECDC will have further produced relevant scientific advice in the form of expert opinions, technical reports, systematic reviews and guidance documents, as a basis for driving public health policies and actions; the Centre will have increased the relevance and usability of its outputs, together with the Member States and other stakeholders. These efforts, together with enhanced surveillance and vaccine monitoring systems, will have benefited the European COVID-19 response as well as the prevention and control programmes for other key communicable diseases. In close collaboration with key partners, ECDC will continue supporting the implementation of the Council recommendations on vaccine preventable disease and the European One Health Action Plan against Antimicrobial Resistance, as well as supporting the European Commission and the Member States in addressing the Sustainable Development Goals (SDGs). For the remainder of the COVID-19 pandemic, substantial resources will be put to ensure that ECDC continuously provides the Member States and the EU institutions with the scientific assessments, advice and guidance necessary for efficient policy decisions.

ECDC will have strengthened public health microbiology structures and activities in the Member States, based on the gaps identified by monitoring EULabCap indicators, the results of external quality assessment (EQA) exercises and support to the development of capacity for whole genome sequencing (WGS).

ECDC will consolidate its work on prevention, including primary prevention, with activities linked to public health behavioural aspects or One Health policies. During 2021-2023 the Centre will:

- Investigate determinants of communicable diseases, to inform preventive actions (including healthcare system structures and processes, environmental, social-behavioural, and other determinants)
- Monitor emerging pathogens and their determinants and reservoirs (e.g. through the monitoring of disease vectors, environmental and behavioural data such as air traffic, specific disease determinants)
- Develop methods, systems and content for public health communication that promote and strengthen infectious disease prevention
- Develop scientific advice on communicable disease preventive measures
- Strengthen public health capacity and infrastructures to support surveillance and implement prevention programs
- Monitor and evaluate the effectiveness and impact of communicable disease preventive measures through surveillance and epidemiological studies

This work will be initiated and gradually implemented, however their full implementation will only be reached after 2023. Coordination with relevant bodies, such as the Joint Research Centre (JRC), will be ensured.

2.3. Training: Provide adequate training opportunities taking into account the changing environment for infectious disease prevention and control

By 2023, ECDC will have provided trainings that address the needs of Member States and the European Commission, in the areas of applied epidemiology, public health microbiology, and disciplines relevant for health security and cross-border threats to health. This includes:

- A ~~revised~~ Fellowship Programme with an updated curriculum and other improvements implemented following ~~the results of~~ the external evaluation 2019, as part of a multiannual roadmap where inequalities between Member States and simplified administration are key areas for change.
- A MediPIET programme, coordinated by ECDC and aligned with the Fellowship Programme, under the EU Initiative on Health Security with DG NEAR funding.
- Continuous Professional Development activities ~~courses~~, addressing new needs, with different formats: from blended to e-learning and professional ~~senior~~ exchange visits. These activities mainly target professionals in the CCB networks, and supervisors of the ECDC Fellowship Programme. Collaborations with European (e.g. ASPHER) and international stakeholders will be nurtured to align and expand the ECDC offer.
- Identification of country capacity gaps and training needs, through regular ~~triennial~~ assessment surveys and combined methodology supporting the CCBs' contribution to country capacity mapping, to tailor the trainings to identified gaps and address inequities in capacity across Europe.
- Gradual increase of e-learning offers and training materials accessible in the ECDC Virtual Academy (EVA) linked to the results of the needs assessments.
- Continuous quality improvements linked to accreditation of short courses under EACCME[6] and APHEA[7].
- Assistance to Member States to design and develop national Field Epidemiology Training Programmes, with different levels of association with the Fellowship Programme, and other training programmes.

2.4. Emergency preparedness: Support countries in emergency preparedness and response.

By 2023, ECDC will have continued supporting the European Commission in monitoring and evaluating gaps in preparedness and response planning (Art. 4) and in the implementation of Decision 1082/2013/EU. The analysis of the 2020 reporting cycle under Art. 4 of Decision 1082/2013/EU will be produced in 2021. Based on discussions in the Health Security Committee and decisions on further actions, ECDC will, in collaboration with key stakeholders, foster the exchange of best practices, strengthen the cross-sectoral dimension of preparedness and response planning, and assist in capacity development to support the implementation of IHR core capacity requirements.

By using public health emergency preparedness frameworks and methodologies, to assess cross border health threats (e.g. risk ranking, simulation exercises, case studies and after/in-action reviews), ECDC will support activities to strengthen the preparedness and response planning process and enhance knowledge in public health crisis event evaluation.

ECDC will strengthen its internal preparedness and response capacities through its Emergency Operations Centre, collaborating with respective networks and international partners. The Centre will provide support to develop, assess and strengthen the EU Member States capacities to create and develop Public Health Emergency Operation Centres (EOC).

ECDC will continue to perform rapid risk/outbreak assessments and support countries in their efforts to respond to public health threats. When needed, ECDC will coordinate outbreak investigations of relevant public health events and conduct after action reviews. ECDC will also provide expertise and facilitate the deployment of expert teams for outbreak response upon requests from the Member States, the European Commission (DG ECHO, DG SANTE) and GOARN[8].

[6] European Accreditation Council for Continuing Medical Education
[7] Agency for Public Health Education Accreditation
[8] WHO Global Outbreak Alert and Response Network

Goal 3: By 2027, ECDC actively engages in the assessment of relevant innovation and is a trusted source for supporting countries in the adaptation to technological advances for infectious disease prevention and control

Strategic objective 3. Future outlook: Prepare for the future through foresight and innovation assessments

3.1. Foresight: Work with partners to identify and address key knowledge gaps and areas of uncertainty, and to develop new multidisciplinary approaches to prevent and control infectious diseases

ECDC will identify relevant key knowledge gaps and the evidence needed, for the formulation and implementation of policies, through: evidence reviews, expert panel consultations, horizon-scanning, foresight and other forward-looking activities (when implemented), and consultations with Competent Bodies and other partners on relevant questions.

By 2023, ECDC will have initiated and disseminated the preliminary findings of a 4-year programme to guide public health interventions and EU preparedness for major public health threats ~~antimicrobial resistance (AMR) and vaccine preventable diseases (VPD)~~ threats. This will include:

- Assessing drivers, including climate change, technological, behavioural, medical, and other factors, of major public health threats ~~AMR and VPD~~ and their likely impact on current and emerging infectious disease threats over a 3- to 8-year horizon.
- Identifying and evaluating measures that might reduce such risks in the future, including public health interventions, research and development, and technological advances.
- Proposing new areas of research and potentially revise ECDC activities in this area as necessary.

3.2. Engage: Promote innovation through active engagement with EU research and innovation initiatives

By 2023, ECDC will have agreed, and where possible implemented, collaboration arrangements with partners, to address gaps and uncertainties that are within the Centre's mandate and capacity. ECDC will link with relevant partners (e.g. DG Research and Innovation, Joint Research Centre) regarding knowledge gaps that can only be addressed through appropriate research (e.g. by input into priority setting, shaping initiatives through advisory board memberships, benefits realisation).

3.3. Support transformation: Promote and contribute to the Digital Health actions and support Member States in adapting, adopting, and exploiting new technologies for infectious disease prevention and control

By 2023, ECDC will have:

- Assessed the feasibility of establishing automatic transfer of relevant surveillance data, extracted from electronic health records to the national level and eventually to ECDC, for complementing or replacing notification-based surveillance data, across a range of diseases and surveillance areas.
- Developed guidelines to inform the development/upgrade of health information systems in Member States to serve infectious disease surveillance and applied research purposes.
- Integrated EpiPulse as a 'node' in the future European Health Data Space (EHDS).
- Established a collaboration with the eHealth network and the European Commission aimed at realising the vision to *Connect and share health data for research, faster diagnosis and better health outcomes*, as stated in the Communication from the Commission on enabling the digital transformation of health

and care in the Digital Single Market[9]
- Assessed the impact on public health key functions of new digital and laboratory diagnostic technologies and integrated them in routine practice as deemed appropriate.
- Completed the re-engineering of EU surveillance systems.

Goal 4: By 2027, ECDC contributes to increased health security in the EU through international collaboration and alignment regarding infectious disease policies and practice

Strategic objective 4. Increase the health security in the EU through strengthened cooperation and coordination between ECDC and partners in non-EU countries

4.1. Neighbourhood: Develop and implement, together with partners, a comprehensive programme to support the Western Balkans and Turkey and ENP partner countries to strengthen their infectious disease prevention and control systems and public health workforce

An ECDC action programme will aim at:
- Strengthening capacities, skills and institutional mechanisms for prevention, preparedness and response to health threats
- Supporting implementation and approximation of the relevant Union legislation, standards and best practices
- Supporting the setting up of a regional competent workforce for the prevention and control of communicable diseases.

By 2023, ECDC will have developed and be implementing technical cooperation activities to support the Western Balkans and Turkey for a future participation to ECDC upon their accession to the EU according to their level of readiness and in line with EU policy priorities through strengthening surveillance and data sharing, supporting public health microbiology laboratory system capacities, supporting public health emergency preparedness and advancing towards One-Health responses against AMR.

The Centre will support the European Neighbourhood Policy (ENP) partner countries through the EU Initiative on Health Security programme aiming to set up a regional competent workforce for the prevention and control of challenges posed by communicable diseases and to enhance regional cooperation to tackle cross-border health security threats. This will include:
- Training of field epidemiologists delivered through Mediterranean and Black Sea Field Epidemiology Training Programme (MediPIET). The MediPIET programme ensuring will be in operation from 2021, aligned with the Fellowship Programme;
- Capacity building activities on epidemic intelligence, risk assessment, preparedness and response;
- Partner countries gradual integration into ECDC activities.

These activities will be implemented with grants provided by DG NEAR.

4.2. Major CDCs: Increase ECDC's collaboration with major Centres for Disease Control

By 2024, ECDC will have strengthened its cooperation with major Centres for Disease Control (CDCs), such as the U.S. CDC, China CDC, Public Health Agency of Canada and the Israel CDC, for which cooperation arrangements are in place. The centre will also have explored the benefits of new administrative arrangements, with other CDCs that worked closely during COVID-19 crisis, including the Africa CDC, the Caribbean Public Health Agency, Singapore, Mexico and Korea CDCs.

[9] Communication from the Commission on enabling the digital transformation of health and care in the Digital Single Market; empowering citizens and building a healthier society, COM/2018/233 final

Multilateral collaboration via the established Network of major CDCs will be strengthened. Some of the identified areas of possible increased cooperation are:

- Global health security, and in particular support to the implementation of the International Health Regulations (IHR) in close collaboration with WHO;
- Workforce development on infectious diseases;
- Information sharing;
- Sharing of experience and best practice on emergency response including on deployments and training.

By 2021 ECDC will have initiated and started to implement a four-year development cooperation partnership programme with Africa CDC, aimed at contributing to health security in Africa, by sharing EU practices and strengthening Africa CDC and its Regional Collaborating Centres capacities in preparedness, surveillance and response to health threats posed by communicable diseases (subject to external EU funding by DG DEVCO). This will also enable signature of ECDC and Africa CDC/African Union Commission collaboration agreement in pre-defined areas of mutual benefit.

4.3. Coordination: Ensure seamless coordination with international partners to enable achievement of common objectives

By 2023, ECDC has strengthened coordination and collaboration with key partners, both at the EU and global level aiming at:

- Improved coordination with the EU Institutions and bodies, particularly the European Commission (DG SANTE, DG ECHO, DG NEAR, DG DEVCO) and the European External Action Service (EEAS), to ensure that ECDC international actions are coherent with the EU's priorities and policy objectives.
- Enhanced collaboration and search of synergies with other EU agencies.
- Strengthened collaboration, coordination and cooperation with WHO, towards a productive and efficient partnership, including further development of the joint reporting, data sharing, and addressing serious cross-border threats to health posed by infectious diseases and contributing to health security; and alignment of messages and reduction of double reporting by Member States.

Goal 5: By 2027, ECDC is an efficient organization that can react flexibly and timely to the changing environment

Strategic objective 5. Transform the organisation to the next generation ECDC

5.1 Integrated management framework: Increase organisational effectiveness and efficiency through improved processes and enhanced monitoring of organisational performance

By 2023, ECDC will be gradually implementing an "integrated management framework" to increase the Centre's organisational efficiency through:

- Adherence to policies, processes and methods, to ensure that ECDC outputs and services are of high quality, roles and responsibilities are clear, and decisions are timely implemented,
- Implementation and monitoring of the ECDC strategy and work programme.

The Centre will have:

- Developed a broad suite of measures (technical, procedural, physical) to enable delivery towards the mandate independent of working modalities (primarily remote working)
- A proposal for an "organisational efficiency and effectiveness programme" based on the assessment of key processes
- A revised framework to manage its instructional documents (policies, processes, decisions, internal procedures), and map, review and optimise all its key processes
- An integrated monitoring of the ECDC strategy

- Composite indicators to monitor the performance of the Centre
- Innovation initiatives proposed
- A Quality Management Framework implemented throughout the organisation
- A "learning culture" based on past assessment (e.g. evaluations, audits, lessons learned etc.)

To support the transformation of its organisation, ECDC will review the architectural setting of its applications. A roadmap will support the improvement of the overall performance management of the organisation, improve the Centre's ability to better steer and support its operations while better managing its information assets. The roadmap will include a strategy towards the rollout of the Centre's administrative applications and other resource management tools.

5.2. Engaged staff: Recruit and retain capable, motivated, and resilient staff

By 2023, ECDC Human Resources management services will be designed to capture and respond to current and future capacity needs of Units, by supporting the development of staff and through effective and efficient recruitment services. A comprehensive framework will enhance well-being and a healthy work-life balance of staff. To support the implementation of its Strategy, the Centre will particularly focus on:

- An agile workforce: ensure that the Centre's staffing is flexible and its work force planning is linked to its strategy, and that staff can meet new demands (e.g. digital skills) as well as ensure a stronger focus on impact driven mode of working;
- Capable managers: highly capable managers who actively manage performance based on objectives and organisational values, and promote career opportunities based on merits;
- Knowledge sharing: create an environment which fosters knowledge sharing and continuous learning;
- Values: establish commonly agreed organisational values, enshrined in the organisation;
- Wellbeing: ensure a healthy workplace that fosters the wellbeing of its staff and allows for a good work-life balance;
- Contemporary services: provide future-oriented Human Resources Management services within the applicable EU regulatory framework.

By 2023, EDCD will revise and implement its Internal Communication policy to further develop an efficient and consistent approach in informing and engaging staff.

5.3. Stakeholders and external communication: Enhance the transparency, visibility, and availability of ECDC's outputs

By 2023, ECDC will have a policy on stakeholder management, based on a revised stakeholder mapping, as well as a revised methodology for stakeholder surveys.

By 2023, ECDC will have developed a new corporate branding across its outputs. The Centre's social media presence will be increased and optimised, an enhanced website with the new branding will be key for ECDC visibility, a stakeholders' Engagement Programme and a Public relations plan will be in place. Through its external communication activities, ECDC will further aim to be a trusted partner in communicable disease prevention and control for the communication of scientific and technical information with an impact at the European level, collaborating with European networks and supporting communication capacity all across Europe, working in close partnership with the Member States, the Commission and other stakeholders.
The Centre will particularly focus on:

- Assessing the needs of its target audiences and ensuring that ECDC scientific and technical outputs are timely, easily available, impactful, re-usable and adjusted to the audience needs.
- Increasing visibility and consolidating the reputation of ECDC as an independent, transparent agency that produces and disseminates high quality scientific content.
- Supporting the sharing of knowledge, information and analysis among stakeholders, with a focus on strengthening communication capacity and preparedness in EU Member States.

Human and financial resource - outlook 2021 – 2023

2.1. Overview of the past and current situation

Staff population overview 2019
See in Annex IV - table 1

Expenditure for N-1
See Annex III: Table 1: Expenditure

2.2 Outlook for the years 2021 – 2023

A) New tasks

The Centre has not yet been entrusted with any new tasks requiring the extension of the agency mandate. However, discussions are ongoing about a possible review/extension of the Centre's mandate.

B) Growth of existing tasks

Following the COVID-19 pandemic and the ongoing discussions about a possible review/extension of the Centre's mandate, a careful assessment has to be carried out regarding the resource needs and prioritization of activities taking into account the increased work load this may entail.

A number of tasks have been expanded within ECDC's current mandate in view of the implementation of Decision No 1082/2013/EU. The Council recommendation on strengthened cooperation on vaccine preventable diseases, the recent year's discussions on ECDC's support to unusual outbreaks, and the Centre's future role in the area of climate change in support to the Commission's priorities will lead to an increased work load, which the Centre will have to balance, either by de-prioritizing other areas of work or by adding additional staff (increase the posts in its establishment table). Furthermore, the Centre will have a significant increase of its external funding for specific projects such as in the area of health security.

2.3 Resource programming 2021-2023

Financial resources

Justification

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

In the note for the preparation of the Draft Budget 2021, the Commission stated that the agencies do not need to provide a financial programming for the period 2022-2027 at this stage.

Title 1:

The budget 2021 forecasts to accommodate the salaries and salary related costs of the implemented establishment plan and the Centre's contract staff. The budget for salary related expenditures has been estimated considering the 2019 implementation and includes the 20 additional contract agent posts granted to the Centre for fighting the COVID-19 outbreak. As we have seen in previous years, the impact on the budget line for the weighting remains an unknown and unpredictable macro-economic part of the ECDC's budget planning and its execution. This is due to the correction coefficient applied to the salaries in Sweden, which is driven, to a large extent, by the fluctuations of the Swedish krona.

Title 2:

In 2021, the total budget of Title II decreases by 6.9% compared to the amended budget 2020.

Title 3:

The amount of Title 3 for 2021 provided in Annex 2 table 1, will be increased by 11.9% compared to the amended budget 2020. The 2021 budget is forecasted to reach EUR 24 137 000. Title 3 will be used to implement ECDC work programme activities through external procurements, grants and meetings (virtual, hybrid and physical). The detail of the expected outputs is given in part III of the present document.

Budget Outturn and cancellation of appropriations

Information provided in Table 3 with short descriptive information and justification.

See Annex III table 3

Human resources

Overview of the situation over the years 2021-2023

In view of the ongoing COVID-19 pandemic and a potential expansion of the Centre's mandate, the work load will remain high in the years to come. Specific funding for 20 additional Contract Agents has been granted to the Centre in 2020 for a period of two years to support the Centre in its work on COVID-19. Furthermore, the Centre has received funding for several projects which include around 18 additional Contract Agents. The majority of these Contract Agent posts are operational posts (such as Scientific Officers). Considering both the work load linked to the pandemic as well as the work on externally funded projects, the Centre will see a growth in its staff population in the years to come. See more detailed information in Annex IV. Table 1 – *Staff population and its evolution; Overview of all categories of staff*

2.4 Strategy for achieving efficiency gains

ECDC continues its efforts towards delivering efficiency gains and having continuous improvement as a focus. The Centre remains committed to further digitalisation of its administrative and operational processes, which are critical aspects in order to both sustain as well as to reach further efficiency gains, and to promote a sustainable (paperless) environment. ~~Commencing in 2020,~~ ECDC will adopt a strategic, integrated and structured approach for the whole organisation. 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. This will enable the Centre to develop its resource management systems and processes with the aim of ensuring shorter planning and execution cycles across all ~~resource management~~ services, while maintaining compliance with regulations.

2.5 Negative priorities/Decrease of existing tasks

In the Centre's Strategic Multi-Annual Plan 2014-2020 it is stated that following the post cuts (which were 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 therefore efforts will continue to be put into looking at process efficiency in order to ensure the best use of the Centre's human resources.

Following the COVID-19 pandemic and the ongoing discussions about a possible review/extension of the Centre's mandate, a careful assessment needs to be undertaken considering the work load this may lead to and the subsequent need for resources. The assessment should also take into account the EU-added-value to be better prepared to the next pandemic and the financial impact of pandemics.

As ECDC will embark in a new strategy from 2021-2027, this will require a thorough review of current activities and practices ~~which will be done in 2020 and~~ discussed with ECDC's stakeholders.

III Work programme 2021

Executive summary

In 2021, ECDC will continue to support the European Commission and the Member States in responding to the COVID-19 pandemic. ECDC will continue to provide technical support to the European Commission and Member States, with regular Risk Assessments, scientific and technical guidance and in/after action reviews to help inform the response plans in the countries.

2021 will be the first year of the implementation and of transition into ECDC strategy 2021-2027, with the setting of the first milestones and the continuation of efforts started in different areas:

- ECDC will continue to fulfil the core missions set in its Founding Regulation (such as the collection of surveillance data across Europe, epidemic intelligence, the provision of rapid risk assessments, training activities, scientific advice, support to microbiology laboratories' performance in Europe, the coordination of European communicable diseases networks);
- The Centre will further develop projects launched in previous years, such as the reengineering of its surveillance systems, the establishment of a foresight function, the assessment of new technologies and e-health in the area of communicable diseases.

To ensure that the multi-annual and annual work programmes will contribute to implementing the strategy, the structure of the Programming Document is now aligned with the structure of the strategy.

The total budget of the Centre is EUR 65,642,000, with EUR 24,137,000 dedicated to operations (title 3).

Strategic objective 1. Strengthen and apply scientific excellence in all ECDC's activities and outputs to inform public health policy and practice

1.1. Standards: Promote standard setting to facilitate the use of data and the implementation of public health policies in practice

ECDC will coordinate the identification and catalogue the relevant existing standards, advocate at EU level for standards' adoption, and identify gaps. The Centre will strengthen and promote the principles of scientific excellence, and define, in consultation with relevant stakeholders, standards that the Centre will adhere to, for demonstrating scientific independence. Furthermore, surveillance systems standards will be developed for COVID-19 and influenza. ~~The evidence provided by the EPHESUS evaluation will enable the development of surveillance standards.~~

1.2 Evidence: Provide partners with robust evidence and guidance for public health policies and practice

ECDC will establish mechanisms for ensuring that its evidence and guidance are relevant and useful to Member States. The IRIS instrument for priority setting of scientific advice will be further developed. ECDC will formally engage with national Competent Bodies to identify priorities for scientific advice and knowledge outputs. The Centre will establish a repository of quality-assured guidance developed by national authorities and professional bodies in Member States. In the area of surveillance, ECDC will continue to coordinate data collection, analysis and dissemination. ~~A new version of TESSy will be released, ensuring a lower burden for reporting by Member States and increased timeliness of outputs~~. ECDC will strengthen the engagement of Member States in the conception and implementation of analyses and outputs, via EpiPulse, its new surveillance portal. ECDC will identify opportunities for collaborative, in-depth analysis of existing surveillance data (targeting specific areas or public health questions) and publish results involving ECDC and Member States' experts. ECDC will continue to perform threat detection through event-based surveillance, expanding the range of data sources and the automation of searches. The Centre will work with the Member States to provide more timely surveillance data, based on reliable

processes, improved data quality and completeness, more in-depth analyses and useful reports for policy advisors and technical policy makers.

1.3 Methodologies: Contribute to the development and implementation of methodologies to increase the impact of actions targeted to reduce the burden of infectious diseases

ECDC will assess benefits from technological advances, through the review and assessment of methods and tools for analysing big data (e.g. the use of big data for event detection and monitoring). The Centre will further advise and provide support on evidence-based public health methods, and develop and promote analytical methodologies, including advanced bio-statistical and mathematical modelling analyses, to gain greater insight from existing data sources.

1.4 Knowledge transfer: Bridge the gap between science, policy, and practice to ensure sustainable impact on prevention and control of infectious diseases

ECDC will promote and facilitate bridging the gap between science, policy, and practice, to ensure sustainable impact on prevention and control of infectious diseases. ECDC will consult on how it can make its scientific advice and technical reports for Competent Bodies and other relevant bodies more relevant, to advise on public health policy and practice in their country. ECDC will also establish a mechanism to monitor and assess evidence from implementation science studies, for the prevention and control of infectious diseases. The Centre will support the transfer of knowledge, by strengthening communities of practice within its networks. 2021 will mark the 25th anniversary of *Eurosurveillance*, which will be reflected in communications and a dedicated scientific seminar in the margins of an international scientific conference. *Eurosurveillance* will also initiate a community of practice among editors of journals published by major CDCs. The Centre will continue to coordinate the organisation and the scientific programme of the European Scientific Conference ESCAIDE.

Strategic objective 2. Support the countries to strengthen their capacities and capabilities to make evidence-based decisions on public health policies and practices

2.1 Country focus: Use country information to better target ECDC activities and country support

ECDC will improve its methodology to continue to collate and analyse country-specific information to gain better understanding of the main strengths and challenges faced by the Member States. ECDC will increase its capacity to identify Member States ~~challenges~~ vulnerabilities and needs to tailor its support in a more efficient way. This will encompass:

a) a corporate approach on country visits based on Member States ~~requests~~ invitation;
b) a mechanism to identify and prioritise countries' ~~challenges~~ vulnerabilities and needs ~~with a facilitated access to visualise the~~ based on the analysis of existing integrated data, collated and visualised at Member State level (to be integrated with other external sources, ~~(e.g. OECD, WHO~~ at a later stage)
c) a methodology to collect country needs expressed during Network Meetings
d) compilation of available EU funding opportunities, shared with Member States to highlight additional funding suitable to their needs

All ~~ECDC~~ country support work will be based on bilateral discussions with the Member States, taking into account their capacities and capabilities, as well as interregional cross-border challenges. ~~of the Member States~~.
The monitoring of indicators and progress reports to measure how far they have managed to achieve the UN Sustainable Development Goals (SDGs) in the area of HIV/AIDS, hepatitis and TB, will provide important feedback and data to help them benchmark and better use resources. ECDC will support the implementation of the 2018 Council Recommendation on Strengthened Cooperation against Vaccine Preventable Diseases and the European One Health Action Plan against Antimicrobial Resistance.

2.2 Prevention and control programmes: Support and strengthen capacity to deliver programmes targeted at the prevention and control of infectious diseases

Based on robust surveillance data (including on COVID-19), ECDC will continue to support countries' prevention and control programmes. This includes work on vaccine confidence and uptake, guidance on effective COVID-19 prevention and control policies, guidance for evidence-based policies for prevention programmes (HIV, TB, antimicrobial stewardship and infection prevention, control activities in healthcare settings), increase of awareness through dedicated events, and the monitoring of control programmes and country preparedness for a range of infections (e.g. foodborne outbreaks, influenza, etc.). ECDC will prepare to carry out assessments of the main prevention needs of the Member States (including the area of behavioural science) and start developing a roadmap of joint prevention activities to address the needs. In the area of microbiology, ECDC will provide technical support to public health reference laboratory networks across the EU, benchmark microbiological capacities in countries, facilitate the development of rapid e-communication of laboratory-based information, and support the strengthening of the Member States microbiology capacity, based on gaps identified by the EULabCap indicators and external quality assessments (EQA) schemes. The Centre will scale up the use of whole genome sequencing (WGS) and organise workshops on bioinformatics and WGS data management. The Centre will continue to support the Member States' access to urgent whole genome sequencing in response to cross-border outbreaks. ECDC will offer scientific guidance on the added-value of the whole genome sequencing (WGS), and integrate surveillance WGS data for pathogens and antimicrobial resistance threats.
ECDC will further include behavioural aspects as part of its support to prevention and control programmes, with specific emphasis on COVID-19 and vaccine hesitancy, and in coordination with other relevant bodies such as the Joint Research Centre (JRC) and the Joint Action on Vaccination (JAV).

2.3. Training: Provide adequate training opportunities taking into account the changing environment for infectious disease prevention and control

ECDC will continue supporting the strengthening of workforce capacity in the Member States and at the EU level, through relevant training of public health professionals. The overall goal is to reach a sufficient number of trained public health specialists in each Member State to cover all needs in the field of communicable disease prevention and control. ECDC will assist countries by providing assessment tools and support for the development of national training programmes. Through the ECDC Virtual Academy, trainers and learners will have access to training materials, online courses, webinars, and communities of practice. Knowledge transfer will be promoted and facilitated. Joint activities with the network of European and global training partners will be strengthened.

2.4 Emergency preparedness: Support countries in emergency preparedness and response

ECDC will continue supporting the European Commission and the Member States with the implementation of Art. 4 of Decision 1082/2013/EU and any other relevant EU legal acts. The support to Member States will also be reinforced by collaborating with the implementation of specific Joint Actions funded by the European commission, in particular the Joint Action to strengthen preparedness in the EU against serious cross-border threats to health and support to the implementation of the International Health Regulations (SHARP), the Joint Action on Points of Entry (EU healthy gateways) and the Joint Action to strengthen health preparedness and response to biological and chemical terror attacks (~~BICTRA~~ JA TERROR).

ECDC will work on health emergency preparedness planning, identification of gaps and strengthening system capacities and capabilities, based on countries' needs, and in synergy with WHO to support the full implementation of the International Health Regulation (IHR) and any amended provision at EU level. The Centre will coordinate investigations of multi-country public health events and threats when assistance is requested, provide technical support and facilitate field missions in response to requests from the Member States, the European Commission and GOARN. In collaboration with the affected Member State(s), ECDC will conduct in/after-action reviews after cross-border outbreaks, which triggered a Rapid Risk Assessment. ECDC will assist Member States, on request, for the development of Public Health Emergency Operation Centres (EOC) operating procedures. It will further improve the Early Warning and Response System (EWRS), ~~continue to~~ moderate the Event- and Threat Management System (integrated into Epipulse) and continue to perform rapid risk/outbreak assessments.

Strategic objective 3. Future outlook: Prepare for the future through foresight and innovation assessments

3.1. Foresight: Work with partners to identify and address key knowledge gaps and areas of uncertainty, and develop new multidisciplinary approaches to prevent and control infectious diseases

ECDC will establish mechanisms for anticipating future needs for evidence. The Centre will identify key knowledge gaps of relevance for policy formulation and implementation. Gaps in evidence, relevant to existing public health policies and practice, will be identified through findings from scoping, systematic reviews, and expert panel consultations. As part of the Foresight Programme, determinant and intervention parameters will be defined for simulation models for infectious diseases of public health priority ~~will be developed, including their drivers,~~ determinants that will be used to forecast baseline scenarios compiled along with uncertainty projections. ~~Interventions will be simulated to assess their potential impact. The relative effectiveness of different measures will be evaluated, allowing an ongoing discussion on policy options, with scenario-based intervention analyses.~~

3.2. Engage: Promote innovation through active engagement with EU research and innovation initiatives

ECDC will provide advocacy and support for research to address knowledge gaps relevant to the prevention and control of infectious disease. ECDC will establish a process for the identification of research priorities in the domain of its mandate, and develop a synthesis of its findings. The content and format will help to advocate these priorities to relevant research funding authorities. The Centre will establish stronger links through representation on the advisory boards of relevant EU-funded research projects.

3.3. Support transformation: Provide leadership and support to countries in adapting, adopting, and exploiting new technologies for infectious disease prevention and control

ECDC will start ~~obtain the first results from~~ the eHealth proof-of-concept studies focussing on Severe Acute Respiratory Infections (SARI) with laboratory confirmation for COVID-19 and influenza ~~on antimicrobial resistance and risk factors for severe influenza, pertussis and invasive pneumococcal infection~~. The Centre will deliver to the eHealth Network, the European Commission and Member States, an initial assessment of current ~~obstacles~~ gaps and limitations for the use of electronic health information for infectious disease surveillance. ECDC will launch a new surveillance portal (EpiPulse) which will be prepared to host in the future data from the electronic health records and act as a 'node' for the European Health Data Space (EHDS). ECDC will also assess the impact of new digital and laboratory diagnostic technologies on public health key functions and develop a roadmap for their gradual integration in routine practice.

Strategic objective 4. Increase the health security in the EU through strengthened cooperation and coordination between ECDC and partners in non-EU countries

4.1. Neighbourhood: Develop and implement, together with partners, a comprehensive programme to support the Western Balkans and Turkey and ENP partner countries to strengthen their infectious disease prevention and control systems and public health workforce

ECDC will implement a programme to support Western Balkans and Turkey in their preparation to participate in the ECDC upon their accession to the EU. The activities will aim at strengthening surveillance and data sharing; supporting public health microbiology laboratory system capacities; supporting public health emergency preparedness; advancing One-Health responses against AMR. The Centre will also support the European Neighbourhood Policy (ENP) partner countries to improve health security through training of field epidemiologists, capacity building activities on epidemic intelligence, risk assessment, preparedness and response, as well as their gradual integration into ECDC activities. These activities will be implemented with the support of a grant provided by DG NEAR.

4.2. Major CDCs: Increase ECDC's collaboration with major centres for disease prevention and control

ECDC will foster bilateral cooperation with ~~major~~ CDCs with which ~~according to the existing~~ collaboration agreements are in place such as the United States Centers for Disease Control and Prevention (U.S. CDC), the Chinese Center for Disease Prevention and Control (China CDC), the Public Health Agency of Canada (PHAC) and the Israel Center for Disease Control and requests for formal ~~new~~ bilateral relations ~~agreements~~ from CDCs in Mexico, Caribbean and South Korea will be evaluated and – if positive – ~~their signature will be~~ prioritised.

The COVID-19 pandemic underlined the importance of close collaboration not only on a bilateral but also multilateral basis to effectively respond to new threats. The Network of major CDCs, established in 2019, proved to be very useful and should continue its work.

Depending on external funding, a technical four-year partnership with Africa CDC will be initiated and to contribute to improving health security in Africa, by sharing EU practices and strengthening Africa CDC capacities.

4.3. Coordination: Ensure seamless coordination with EU and international partners to enable achievement of common objectives

ECDC will continue providing technical support and scientific advice to the EU Member States, coordinate with the EU Institutions and bodies, particularly the European Commission and the European External Action Service (EEAS), to ensure its actions are coherent with the EU's priorities and policy objectives. ECDC will continue to strengthen its collaboration with the European Parliament and with other EU agencies to look for enhanced synergies, in particular with the European Food Safety Authority (EFSA), the European Medicines Agency (EMA), European Chemicals Agency (ECHA), the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), the European Agency and Health and Occupational Safety (EU-OSHA) and the European Environment Agency (EEA). Strengthening collaboration with WHO will be further intensified: messages will be aligned and double reporting by Member States reduced.

Strategic objective 5. Transform the organisation to the next generation ECDC

5.1 Integrated management framework: Increase organisational effectiveness and efficiency through improved processes and enhanced monitoring of organisational performance

ECDC will continue to review its present management framework and make necessary changes and improvements to have in place an integrated management framework, including the necessary IT systems. The aim is to improve the Centre's ability to work in a more effective and efficient way, through optimised processes and enhanced project management. ECDC should also be able to monitor its overall performance against its strategic goals through a new set of Key Performance Indicators (KPIs). To ensure an adequate response to the COVID-19 pandemic, a temporary ad hoc Disease Programme will be set up for one year to better support the PHE Team. A roadmap for the IT applications will be implemented to support the improvement of the overall performance management of the organisation and the Centre's ability to better steer and support its operations while better managing ECDC information assets. The management system will be enhanced, ensuring that the Centre responds to current and future environmental needs.

5.2. Engaged staff: Recruit and retain capable, motivated, and resilient staff

Human Resources management services will capture and respond to current and future capacity needs of Units by supporting the development of staff through effective and efficient recruitment services, supported by a comprehensive framework to enhance well-being and a healthy work-life balance of staff. In particular, the Centre will develop its systems, policies and support measures for staff to work remotely and for managers to lead virtual teams.

5.3. Stakeholders and external communication: Enhance the transparency, visibility, and availability of ECDC's outputs

The Centre will disseminate its content through an array of communication channels, including web and social media, and in close partnership with communication experts across Europe. ECDC will publish information about its work in a transparent manner to maintain its reputation and build visibility, as well as will support national authorities and other stakeholders in their efforts to reach their citizens. In 2021, ECDC will focus on developing further its online presence on the web and social media. In order to reach out with ECDC messages and content, a comprehensive stakeholder's engagement programme will be set up and complemented by a public relations plan.

6. Support services:

6.1 Digital services

After the achievement of the handover of ECDC's IT products and infrastructure to external providers in 2020, the Centre will focus on developing state-of-the-art IT tools, with high quality and availability and good user support. This includes a reliable data centre, data communications, overall security, business continuity capabilities, as well as a disaster recovery site.

6.2 Resource management

The successful implementation of ECDC's strategy and ultimately its mandate is contingent on an effective and efficient backbone of resource management services. The Agency will develop its systems and processes with the aim of ensuring shorter planning and execution cycles across all services, while maintaining compliance with regulations.

ECDC work in disease areas in 2021

Note: the values in the brackets in blue below refer to the strategic objectives under which the work is conducted.

COVID-19

ECDC will continue to provide relevant technical support to the European Commission , Member States and Western Balkan, with regular Risk Assessments, provision of data and maps, timely evidence-based scientific assessments, technical guidance and in/after action reviews, to help inform the national response plans and to improve a collaborative European approach to the pandemic. In addition to supporting the EU Member States, ECDC will continue to strengthen the response and preparedness plans in neighbouring countries. As this is a new disease, the routine data remains sub-optimal, so ECDC will further strengthen the newly established coronavirus laboratory and surveillance networks and will build on the experience and the model applied to the influenza networks. Once the long anticipated vaccine/s is/are on the market, ECDC will, in collaboration with the National Immunization Technical Advisory Groups (NITAGs), introduce EU-level monitoring of vaccine impact, effectiveness and vaccination coverage, to help Member States reach optimal vaccination coverage rates. Finally, a careful analysis of the Member States in/after-action reviews for the COVID-19 pandemic and exchange of experiences between Member States should highlight lessons learnt that will be used to improve the next series of pandemic plans that should cover more than just influenza.

Antimicrobial resistance (AMR)

In 2021, ECDC will support Member States to further strengthen the surveillance of AMR and antimicrobial consumption, publish annual reports and in particular a joint report with WHO/Europe on surveillance of AMR in Europe, as well as use other formats such as the ECDC Surveillance Atlas of Infectious Diseases, in collaboration with the WHO Global Antimicrobial Resistance Surveillance System (GLASS) and the WHO global surveillance of antimicrobial consumption (1.2). ECDC will continue supporting the standardisation of antimicrobial susceptibility testing in the EU/EEA (1.1), and the integration of molecular surveillance through the European Antimicrobial Resistance Genes Surveillance Network (EURGen-Net) (2.1). ECDC will continue supporting Member States, the European Commission and WHO in implementing the European One Health Action Plan against AMR, the WHO European strategic action plan on AMR and the Global Action Plan on AMR (WHO). In particular, ECDC will, in collaboration with EFSA and EMA, ~~more synergies will~~ continue developing synergies with the veterinary sector as part of the one-health approach (2.2). ECDC, EFSA and EMA will publish the third Joint Interagency Antimicrobial Consumption and Resistance Analysis (JIACRA) report, and ECDC will contribute to the advice provided by other EU agencies to the Commission. ECDC will also perform one country visit jointly with DG SANTE/F in a one-health perspective, as per Member State request (2.1). ECDC will also contribute to the Transatlantic Task Force on AMR (TATFAR – new work plan 2021-2025) and the Actions "Working together to Fight AMR" in Latin America and in Asia (4.3.1).

Healthcare-associated infections

ECDC supports the Member States in implementing the Council Recommendation on patient safety, including the prevention and control of HAIs[10]. In 2021, ECDC will support Member States to further strengthen surveillance of HAIs and publish annual reports and use other formats such as the ECDC Surveillance Atlas of Infectious Diseases. ECDC will finalise the preparation of the next point prevalence surveys of HAIs and antimicrobial use in acute care hospitals and long-term care facilities in the EU/EEA to take place in 2022 and 2023, respectively (1.2). To support the Member States in implementing the Council Recommendation on patient safety, including the prevention and control of HAIs[11], ECDC will continue exploring the relationship between the level of implementation of structure and processes of infection prevention and control (IPC) and of antimicrobial stewardship (AMS) and HAI rates in European acute care hospitals and long-term care facilities (2.2).

[10] Council Recommendation of 9 June 2009 on patient safety, including the prevention and control of healthcare associated infections (2009C 151/01)

[11] Council Recommendation of 9 June 2009 on patient safety, including the prevention and control of healthcare associated infections (2009C 151/01)

Emerging, zoonotic and vector-borne diseases

ECDC will continue collecting and analysing surveillance data on vector-borne diseases in Europe and monitor emergencies of novel pathogens worldwide. ECDC will also continue analysing global epidemiological trends and assess the risk of introduction, establishment and spread of emerging and vector-borne diseases in Europe (1.2). ECDC will support the Member States to improve their preparedness, surveillance and response abilities and to assess vector control strategies. ECDC will facilitate inter-sectoral communication and cooperation on EU and Member State level to apply the One Health approach for the detection and management of vector-borne and other zoonotic diseases (2.2). The determinants and drivers of emerging and vector-borne diseases, influencing pathogen transmission and vector abundance, and genetic factors of pathogen virulence will be analysed in ECDC-funded projects. Monitoring and forecasting the long-term impacts of global changes, including climate changes and intensifying international travel and trade will stay in the focus of the agency's activities. ECDC will provide scientific advice, and analytical tools (i.e. predictive models) to support decisions on public health policies and practises (2.2).

Food- and Waterborne diseases (including foodborne zoonoses)

ECDC continues to promote integrated analyses of TESSy data with that of food and veterinary sector, including ECDC-EFSA surveillance reports (European Union Summary reports on zoonoses and AMR). EQA schemes will be offered to support the quality of reported data and with focus on the integration of whole genome sequencing to EU-wide surveillance of FWD and zoonotic AMR (1.2). The 4th joint ECDC and EFSA networks meeting is planned to be held in 2021 (2.1). The WGS-enhanced detection of cross-border foodborne outbreaks has led to a need for improving joint outputs with EFSA as well as agreeing on operational guidance to Member States on how to effectively respond to multi-country foodborne events. Assessment of the risk of environmental and climate factors on water-borne diseases (e.g. seasonal risk of vibrio infections in the Baltic see) will be continued. In 2021, ECDC will have integrated the optimal actions in MSs to the actions at EU level in operational guidance for responding to foodborne outbreaks (2.2). Expert exchange programme (FWDEEP) will be offered to any expert in Member States if supported by the CCB policy (2.3).

Legionnaires' disease

ECDC will continue to work with Members States through the ELDSNet network activities, particularly near real-time travel-associated Legionnaires' disease surveillance scheme and continue the Legionella EQA scheme (started 2019). ELDSNet annual network meeting in 2021 will provide the forum to discuss surveillance scheme developments and current challenges in prevention and control of Legionnaires' disease (2.1). The ELDSNet network will support Member States programmes on prevention and control of Legionnaires' disease through the routine TALD surveillance scheme and topical technical discussions at the annual meeting. In 2021, a technical meeting is foreseen to scope integration of molecular data to TALD surveillance and outbreak response (2.2). Expert training based on ad hoc needs will continue through the established expert exchange programme (FWDEEP) pending development of other formats (2.3).

HIV and AIDS

In 2021, ECDC will support Member States to further strengthen HIV/AIDS surveillance and produce the annual 'HIV/AIDS surveillance in Europe' report jointly with WHO Europe. Together with the Member States, ECDC will further develop the surveillance of HIV drug resistance. ECDC will collect other information to monitor progress towards the international targets for HIV/AIDS and report on the monitoring results to support Member States in identifying areas for action (2.1). ECDC supports the Member States and the European Commission in reaching the SDG target for HIV/AIDS, i.e. end the epidemic of AIDS by 2030. ECDC will coordinate the HIV and provide support on issues that are of relevance to the Member States, including trainings, workshops, and exchange visits on topics identified by Member States (2.1). To support Member States in reaching the SDG target for HIV/AIDS ECDC will provide scientific advice and technical support targeted to the specific needs of Member States in the EU/EEA by providing tools, scientific advice and technical support for modelling the incidence of HIV infections and other key indicators (2.2). An update of the 'ECDC-EMCDDA Joint guidance on prevention and control of infectious diseases among people who inject drugs' (2020) will be published in 2021 (2.1).

Sexually transmitted infections

In 2021, ECDC will support Member States to further strengthen sexually transmitted infection surveillance and publish the relevant analysis. ECDC will continue its support to Member States on gonococcal antimicrobial resistance, including with whole genome sequencing (1.2). The Member States are currently facing rising epidemics of syphilis, chlamydia and gonorrhoea. The global health sector strategy on sexually transmitted infections refers also to SDG goal 3 and aims at ending sexually transmitted infections epidemics as major public health concerns. ECDC will coordinate the sexually transmitted infections network and the Euro-GASP network and provide support on issues that are of relevance to the Member States including trainings, workshops, and exchange visits on topics identified by Member States (2.1). To support Member States in reaching the global health sector strategy goal of ending sexually transmitted infections epidemics as major public health concerns, ECDC will provide scientific advice and technical support as requested by Member States and other stakeholders (2.2).

Viral hepatitis (including hepatitis A and E)

In 2021, ECDC will collect hepatitis surveillance data in TESSy and through sentinel surveillance, and support Member States with collecting data on hepatitis prevalence by providing support with the implementation of studies. ECDC will monitor progress towards the international targets for hepatitis and support Member States in identifying areas for action (1.2). ECDC supports the Member States and the European Commission in reaching the SDG target for hepatitis, i.e. combat hepatitis by 2030. The global health sector strategy on viral hepatitis addresses SDG goal 3 and aims at eliminating viral hepatitis as a public health threat by 2030. ECDC will coordinate the hepatitis network and provide support on issues that are of relevance to the Member States including trainings, workshops, and exchange visits on topics identified by Member States. Work on hepatitis E continues by assessing the severity of chronic disease as well as the zoonotic exposure to infection (2.1). To support Member States in reaching the SDG target for hepatitis and the target of eliminating viral hepatitis, ECDC will provide scientific advice for specific risk groups, and the public health approach for testing and control. In 2021, ECDC will continue to support the Member States in measuring progress towards the SDG and technical support for modelling the prevalence of hepatitis B and C (2.2).

Substances of Human Origin (SoHO)

ECDC will monitor disease outbreaks that are relevant to substances of human origin and the supply impact through Epidemic intelligence. ECDC will provide support to the overall building of national emergency planning, monitoring and rapid risk assessments through ECDCs preparedness and response work. The Centre will provide advice to the Commission and Member States on new technologies and their impact on safety and quality when a need is identified and resources are available. ECDC will establish an expert group in ETMS to assess and propose management of risks that are relevant for substances of human origin. ~~ECDC will consider expanding SoHO activities when additional resources are made available.~~

Tuberculosis

In 2021, ECDC will support Member States to further strengthen tuberculosis surveillance and publish the annual 'Tuberculosis surveillance and monitoring in Europe' report jointly with WHO Europe (1.2). ECDC supports the Member States and the European Commission in reaching the SDG target for tuberculosis, i.e. end the epidemic of tuberculosis by 2030. ECDC will continue its support to Member States on tuberculosis diagnosis and implementing and standardization of whole genome sequencing in the EU/EEA (1.1). By coordinating the tuberculosis network, the tuberculosis surveillance subnetwork and the European Reference Laboratories for Tuberculosis network, ECDC will interact closely with the Member States and support Member States with trainings, workshops, and exchange visits on topics identified by Member States (2.1). To support Member States in reaching the SDG target for tuberculosis ECDC will provide scientific advice that aims to support Member States to deal with the health system challenges related to a decrease in tuberculosis incidence. ECDC will also provide support to Member States with the implementation of the ECDC guidance 'Programmatic management of latent tuberculosis infection in the European Union' (2.2).

Influenza

ECDC will continue to drive the high-quality surveillance of influenza and other respiratory viruses at the European level, in close collaboration with the WHO Regional Office for Europe and the National Focal Points (1.2). Seasonal influenza continues to be a communicable disease with one of the highest morbidity and mortality impacts on the EU population. ECDC will further strengthen flu laboratory and surveillance capacity in the network through training and laboratory support. Country support will be provided in the format of trainings, workshops, and exchange visits on topics identified by Member States (2.1). ECDC will support national influenza vaccination programmes/ strategies with evidence-based scientific advice and EU-level monitoring of influenza vaccine impact and effectiveness as well as vaccination coverage, to support Member States to reach target vaccination coverage rates and to support the work of the National Immunization Technical Advisory Groups (NITAGs) collaboration. The strengthening and monitoring of evolutions in seasonal influenza vaccination policies across the EU/EEA will be even more critical in concomitance with the COVID-19 pandemic. ECDC will further develop tools, training material, and evidence-based guidance for Member States, to support the national and regional stakeholders in their communication campaigns around influenza vaccination, focusing on increasing vaccination uptake by healthcare workers (2.2).

Vaccine preventable diseases

It is likely that in 2021 one or more of the COVID-19 vaccines currently in the development pipeline will become available for use by national immunisation programmes. Work will be required to conduct horizon scanning activities, as well as to carefully assess and provide scientific advice to the Commission and Member States on such vaccines and their recommended use. Evidence will likely become available on a rolling basis, and thus the set-up of appropriate structures to monitor disease surveillance as well as the impact and effectiveness of any given COVID-19 vaccine approved by regulators will be critical to inform policies. ECDC will establish an EU Vaccine Monitoring Framework, and set-up a rapid system for the generation of COVID-19 vaccination coverage data at EU level, to be ready for use once one or more vaccine(s) become available, and continue to support the Commission with the identification of priority target groups and possible vaccination strategies, incl. on the basis of modelling studies.

The Centre will further implement the Council Recommendation on Strengthened Cooperation against Vaccine-Preventable Diseases, especially in fostering sustainable vaccination policies in the EU (2.1). ECDC will continue to support countries to strengthen the performance of the immunisation programs. As requested by the Council Recommendation, ECDC will conduct a feasibility study on a core EU vaccination schedule. The Centre will also start preparation of an EU-wide vaccination coverage monitoring system, building upon the experience in coverage data collection for seasonal influenza and human papillomavirus (HPV) vaccination, and in line with the Council Recommendation. ECDC will also develop training tools and materials to help Member States counter online misinformation, and strengthen the training of healthcare professionals to increase vaccine acceptance. The EU Vaccination Information System (EVIS) jointly developed with the European Medicine Agency (EMA) will be updated to provide authoritative information on vaccines and vaccination in use in the EU. ECDC will also continue its collaboration with EMA on the set up of coordinated studies to monitor vaccines and vaccination effectiveness, safety and impact in the post-authorisation phase.

ECDC will further consolidate activities within the established platform/collaboration between National Focal Points for vaccine preventable diseases (VPD) / National Immunization Technical Advisory Groups (NITAGs) for a more effective and efficient provision of scientific advice to countries on key VPD and immunisation issues, in line with the Council Recommendation, and with a particular focus on issues related to COVID-19 vaccine. ECDC will also support national vaccination programmes/strategies with evidence-based scientific advice, being particularly mindful of the need to carefully assess the impact of the pandemic on routine immunisation programmes. Evaluations are expected to be conducted on the overall EU-wide surveillance of measles, mumps and rubella, and efforts will be invested in strengthening capacities for the whole genome sequencing of *Neisseria meningitidis*. Finally, ECDC will continue to work together with the Joint Action on Vaccination, and WHO in the implementation of: Immunisation Agenda 2030 (global, WHO HQ); Post-2020 Measles and Rubella Strategic Framework (global, WHO HQ); European Regional Immunization Strategy and Vaccine Action Plan 2021-30 (2.2).

Strategic objective 1. Strengthen and apply scientific excellence in all ECDC's activities and outputs to inform public health policy and practice

ECDC will further strengthen the relevance, accessibility, and timeliness of its scientific outputs. More in-depth analyses of data collected, better assessment of their use and impact, and the development of standards will be used to inform decision-making by Member States and other partners.

1.1. Standards: Promote standard setting to facilitate the use of data and the implementation of public health policies in practice

Overview

ECDC will coordinate actions to identify and catalogue relevant existing standards, advocate at the EU level for the adoption of standards, and identify gaps, for the identification, assessment, prevention and control of infectious disease threats to public health.

The Centre will strengthen and promote the principles of scientific excellence, and define, in consultation with relevant stakeholders, standards that the Centre will adhere to for demonstrating scientific independence. ECDC will work with the National Focal Points (NFP) for Scientific Advice, to promote the use of relevant standards in the development of evidence-based public health guidance.

The evidence provided by the EPHESUS surveillance system evaluations and the experience gained from the COVID-19 pandemic will enable the development of surveillance standards, i.e. the definition of appropriate surveillance methods for addressing key surveillance objectives and for achieving the expected impact, in the form of EU surveillance protocols publicly available. The first standards to be developed will address the surveillance of Severe Acute Respiratory Infections (SARI), through the development and implementation of a common protocol in fifteen volunteering countries. This should lead to the ongoing reporting of population-based data (e.g. providing an accurate and comparable estimate of severe disease incidence) for COVID-19 and influenza to ECDC.

Threat detection as per event-based surveillance will be continuously improved, and the surveillance system-reengineering programme (SSR) will allow the integration of the surveillance and epidemic intelligence data, enhancing the detection and validation of signals.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
1.1.1	**Operationalise the results of EPHESUS project and the lessons learnt from the COVID-19 pandemic**	Proposal for EU surveillance standards for all diseases. Compliance of EU Member States with the standards. Improved quality and consistency of information for public health action on serious cross-border communicable disease threats	Number of diseases for which surveillance standards are available	Proposal for EU surveillance standards	Yes
1.1.2 *	~~**Catalogue relevant existing standards, and**~~ **Identify and define existing methods that should be used to establish standards** ~~**key gaps in standards**~~ **for scientific processes and outputs to identify, assess, prevent and control infectious**	ECDC staff and partners in EU Member States are aware of the explicit methods ~~standards~~ by which ECDC's scientific ~~activities and outputs~~ standards are ~~conducted and produced~~ defined.	Publication of ~~catalogue~~ list of defined methods: Implementation according to project plan (schedule, resources and scope)	- ~~Catalogue~~ List of defined methods for establishing ~~existing~~ standards to be adopted in ~~and revision of~~ relevant ECDC policies and procedures	Yes

	disease threats to public health	Improved transparency; consistency with international and national bodies for scientific methods; reduced duplication of effort from Member States to comply with conflicting standards used by international organisations.			
1.1.3	**Ensure and demonstrate scientific independence in all ECDC activities in consultation with relevant stakeholders** [on standards for safeguarding and demonstrating scientific independence]	Transparent rationale for ECDC decisions related to safeguarding and demonstrating its scientific indeperdence Improved trust in the indeperdence of ECDC scientific advice, reducing the need for Member States to require duplication of activities by Competent Bodies	Position paper for Advisory Forum: Implementation according to project plan (schedule, resources and scope)	- Draft position paper for Advisory Forum	No

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
1.1.1	Number of diseases for which surveillance standards are available	n/a	2021: standard for integrated surveillance of pandemic-prone respiratory viruses (flu, COVID-19) published on website	Publication of standard on the ECDC website
1.1.2	Publication of defined methods: ~~catalogue:~~ Implementation according to project plan (schedule, resources and scope)	n/a	Publication in Q4 2021 Less than 20% deviation from the duration, resources and scope of the initial baseline	Publication of ~~catalogue~~ defined methods on website Quarterly ECDC Portfolio Steering Committee reporting
1.1.3	Position paper for Advisory Forum: Implementation according to project plan (schedule, resources and scope)	n/a	Standards endorsed by Advisory Forum in Q4 2021 Less than 20% deviation from the duration, resources and scope of the initial baseline	Advisory Forum minutes Quarterly ECDC Portfolio Steering Committee reporting

Resources allocation:

1.1 Standards	Operational staff and budget (T3)	Horizontal FTE admin support[12]	Total staff and budget
Total FTEs for this activity	~~3.0~~3.0FTE	0.9 FTE	~~4.8~~3.9 FTE
Total budget for this activity	€ 30,000	-	€ 392,451

1.2 Evidence: Provide partners with robust evidence and guidance for public health policies and practice

Overview

As shown with the COVID-19, ECDC should work in close collaboration with the Commission and Member States towards robust surveillance systems at EU and national level that provide reliable and timely data also in a crisis situation. An integrated surveillance system for viral respiratory infections prone to pandemics (influenza, coronavirus) should be established by 2022, addressing some main surveillance objectives at EU level: monitoring of incidence and impact for primary and secondary care surveillance, describing of the natural disease history and spectrum, measuring of the effectiveness and impact of pharmaceutical and non-pharmaceutical interventions, and monitoring of the virus evolution. An increased level of digitalisation will make parts of the surveillance continuum independent from the time public health experts can spend on it *(see 3.3)*.

The Centre will continue to perform threat detection through event-based surveillance, expanding the range of data sources. Surveillance and epidemic intelligence data will be better integrated to enhance the detection and validation of signals, in a systematic 'One Health' approach.

ECDC will establish mechanisms for ensuring that the evidence and guidance it has developed are relevant and useful to EU/EEA Member States. The IRIS instrument for consultation on priority setting for all scientific advice, analytical work and knowledge creation, will be further developed. In addition, ECDC will formally engage with national Competent Bodies to identify priorities for scientific advice and knowledge outputs (*in coordination with the general mechanism for country support under 2.1*). ECDC will also coordinate actions to facilitate the sharing of evidence and good practice between Member States, through the establishment and promotion of a repository of quality-assured guidance developed by national authorities and professional bodies in EU Member States.

ECDC disease surveillance, conducted in close collaboration with its disease networks, remains key to improve the epidemiological evidence for any prevention and control programmes. ECDC will continue to coordinate data collection, analysis and dissemination, striving to fully implement the Commission implementing decision 2018/945. ~~A new version of TESSy will be released, with a lower reporting burden for Member States and increased timeliness of outputs.~~ At the same time, ECDC will continue to perform threat detection through event-based surveillance, expanding the range of data sources and increasing the automation of searches. ECDC will work with the Member States to provide more timely surveillance data, based on reliable processes, improved data quality and completeness, broader delivery of outputs, more in-depth analyses and more useful reports for policy advisors and technical policy makers. ECDC will identify opportunities for collaborative, in-depth analysis of existing surveillance data (targeting specific areas or public health questions) and publish results involving ECDC and Member State experts.

ECDC will continue to provide technical support to public health reference laboratory networks across the EU/EEA and enlargement countries, taking into account WHO networks reference laboratory activities. The Centre will benchmark microbiological capacities in countries, facilitate the development of rapid e-communication of

[12] In this column (as indicated in the ABB on p. 74) is added the support staff (management, administration, ICT) that are directly contributing to the operational work of ECDC (e.g. development of operational IT system, procurement of operation…), according to the benchmarking methodology used by all agencies and agreed with the European Commission. Support staff have been added proportionally to the number of operational full time equivalents (FTE).

laboratory-based information for surveillance and alert, and support the Member States strengthening their microbiology capacity, based on gaps identified by the EULabCap indicators and external quality assessments (EQA) schemes. ECDC offers 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 customised protected workspaces for WGS data management. ECDC will continue to collaborate with EFSA on the detection and assessment of foodborne outbreaks through WGS, ensuring the necessary maintenance of the joint database. Workshops on bioinformatics and WGS data management, visualisation and interpretation based on multinational outbreak experiences, will help improving the use of WGS and will be open to ECDC and Member States staff.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
1.2.1	**Ensure timely and effective monitoring of potential threats from infectious diseases**	Any serious cross border health threat to Europe and worldwide is timely detected through epidemic intelligence and proactively communicated to the Commission and Member States to allow for rapid action.	Proportion of stakeholders (European Commission + Member States) rating positively the daily and weekly CDTR and the RRA.	- Daily Round Table report and weekly Communicable Diseases Threat Report (CDTR) available on EpiPulse. - Stakeholders access real-time information on current signals, events and threats via EpiPulse and the ETMS.	No
1.2.2	**Carry out routine indicator-based surveillance, including generation of high-quality, relevant, and timely outputs**	Smooth execution of routine surveillance activities Timely availability of data and analyses for assessing cross-border threats and for benchmarking national policy impact	- Time from the closure of data collection to the publication of the results in the Surveillance Atlas - Proportion of diseases in the Atlas with updated data for year N-1	- Data on reportable diseases collected in a consistent way, according to implementing decision 2018/945 - AER published for all diseases under surveillance - Atlas of infectious diseases updated with newest data	Partially[13]
1.2.3	**Coordinate EU level surveillance of all EU notifiable diseases and special health issues (incl. coordinated lab support)**	ECDC activities informed by surveillance analysis results Member States epidemiological situation overview to better inform public health policies and practices	Proportion of surveillance reports published according to agreed timelines	- Stand-alone surveillance reports (including HIV/AIDS report, TB surveillance and monitoring report, Euro GASP report, weekly FluNewsEurope bulletin (incorporating COVID-19), regular influenza and coronavirus characterisation reports, Monthly Measles and Rubella monitoring report, monthly ELDSNet report, Zoonoses and zoonotic AMR monitoring reports, AMR, antimicrobial consumption, HAIs - EU protocol for the use of WGS and exposure data in surveillance of listeriosis in EU/EEA - Seasonal, real-time surveillance of vector-borne diseases to support blood safety measures	Partially[14]
1.2.4	**Provide evidence to support Member States to increase public health microbiology capacity**	Strengthened public health microbiology systems in Member States	Proportion of countries reaching sufficient capacity for at least 10 out of 12 microbiology system targets in the EULabCap assessment	- External Quality Assessments (EQA) reports (Euro GASP, Legionnaires' disease EQA-report, [redacted] activities, COVID-19, AMR for EARS-Net participating laboratories, and in the area of	Partially

[13] This depends on the availability of Member States to report data in case of a public health emergency.
[14] This depends on the availability of Member States to report data in case of a public health emergency.

				VPDs with specific focus on diphtheria, pertussis, invasive bacterial diseases, as well as schemes of Salmonella, Campylobacter, Listeria monocytogenes, and STEC) - EU Laboratory Capability Monitoring System (EULabCap) reports - Public Health microbiology training sessions ([redacted] activities, ERLI-Net activities) - Other outputs (e.g. Technical Reports and Handbooks)	
1.2.5	**Produce consistently high-quality scientific work and advice within agreed deadlines to support evidence-informed decision and policy-making**	ECDC scientific advice produced, following good scientific practice and evidence-based principles to increase consistency, transparency and reliability, demonstrating its scientific independence Availability of high quality scientific outputs at EU level increases the impact and consistency of evidence-based prevention and control activities across the EU, and reduces the need for Member States to invest in undertaking similar scientific work	- Proportion of scientific outputs in the planned publication list delivered within the programming year - Uptake of ECDC outputs by its stakeholders	- High-quality ECDC scientific advice outputs published on the Centre's website and/or as open access publication if published in peer-review scientific journals.	Partially
1.2.6	**Ensure that all Public Health related ECDC actions, are reviewed through the IRIS instrument for consultation on priority setting**	ECDC scientific actions are prioritised according to the Advisory Forum's assessment of their importance, feasibility, impact, and their EU added value and equity Ensures that ECDC scientific outputs and activities meet public health priorities at EU and Member State levels	Proportion of Public Health related actions in the SPD 2021 presented to Advisory Forum as IRIS proposals	- IRIS proposals and the Advisory Forum assessments	No
1.2.7	**Establish formalised mechanism for engagement with national Competent Bodies in establishing priorities for scientific advice and knowledge outputs** *(in coordination with 2.1)*	ECDC scientific advice and knowledge outputs aligned with Member State priorities Ensures that ECDC scientific outputs and activities meet public health priorities at Member State level	Consultation mechanism with Competent Bodies ~~established for~~ establishing priorities for scientific advice and knowledge outputs ~~Proportion of ECDC Public Health related outputs for which proper consultation took place with relevant stakeholders~~	- Minutes of first consultation meeting ~~Report on outcome of consultation~~, including listing of scientific advice and knowledge output priorities for national Competent Bodies	No
1.2.8	**Establish a repository for collation of quality-assured guidance developed by national authorities and professional bodies in EU Member States**	Improved sharing between Member States of guidance and experience in the effective prevention and control of infectious disease	Repository for quality-assured guidance: Implementation according to project plan (schedule, resources and scope)	- Repository available and the procedures (including quality standards) for inclusion of documents agreed with Advisory Forum	Yes

		Reduced need for Member States to invest in undertaking similar scientific work			
1.2.9	**Whole Genome Sequencing (WGS) services**	Increased support to Member States' WGS for cross-border outbreaks.	Proportion of requests from Member States for sequencing services accepted by ECDC	National isolates sequenced by ECDC in the context of multinational outbreaks	No

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
1.2.1	Proportion of stakeholders (European Commission – Member States) rating positively the daily and weekly CDTR and the RRA.	n/a	80%	Standard survey conducted during NFP meeting
1.2.2	- Time from the closure of Member States data collection to the publication of the results in the surveillance Atlas Proportion of diseases in the Atlas with updated data of N-1	3 months for 75% of diseases	3 months 80%	TESSy Statistics from Atlas
1.2.3	Proportion of surveillance reports published according to agreed timelines	n/a	90%	
1.2.4	Proportion of countries reaching sufficient capacity for at least 10 out of 12 microbiology system targets in the EULabCap assessment	70% (source: 2018 survey)	75%	EuLabCap surveys
1.2.5	- Proportion of scientific outputs in the planned publication list delivered within the programming year - Uptake of ECDC outputs by its stakeholders	75% n/a	90% 70%	Comparison between list published on ECDC website and list of outputs published on the website by 31 Dec Stakeholder survey or standard survey conducted during NFP meetings
1.2.6	Proportion of Public Health related actions in the SPD presented to Advisory Forum as IRIS proposals	n/a	80%	Presentation of IRIS proposals to Advisory Forum compared to approved SPD 2021
1.2.7	Consultation mechanism with Competent Bodies established for establishing priorities for scientific advice and knowledge outputs ~~Proportion of ECDC Public Health related outputs for which proper consultation took place with relevant stakeholders~~	n/a	~~80%~~ Mechanism established	Minutes of first consultation meeting ~~Standardised survey conducted during NFP meetings~~
1.2.8	Repository for quality assured guidance: Implementation according to project plan (schedule, resources and scope)	n/a	Repository available on ECDC website in Q4 2021 Less than 20% deviation from the duration, resources and scope of the initial baseline	ECDC website Quarterly ECDC Portfolio Steering Committee reporting
1.2.9	Proportion of requests from MS for sequencing services accepted by ECDC	100%	100%	ECDC surveillance section statistics; invoices from contracted laboratory

Resources allocation:

1.2 Evidence	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	55.142.0 **FTE**	**13.1**	68.255.1
Total budget for this activity	**€ 4,180,500**	-	**€ 9,720,349**

1.3 Methodologies: Contribute to the development and implementation of methodologies to increase the impact of actions targeted to reduce the burden of infectious diseases

Overview

ECDC will further investigate the benefits offered by technological advances, by assessing relevant methods and tools for analysing big data (e.g. the use of big data for event detection and monitoring). The centre will continue managing and monitoring all its scientific outputs in its Scientific Advice Repository and Management System (SARMS). ECDC will continue to deliver and further develop advice and support on evidence-based public health methods, and identify, develop, and promote relevant analytical methodologies, including in-depth and advanced bio-statistical and mathematical modelling analyses, to gain greater insight from existing data sources, deliver more informative outputs, better support interventions and broaden the basis for decision making, using the ECDC data warehouse that integrates diverse data streams (determinants, genomic typing, microbial resistance, past events and threats).

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
1.3.1	**Develop and assess standards and processes that support the transparent, consistent and efficient production and clearance of scientific work and advice.**	Consistency, reliability and transparency of ECDC scientific work and advice that are compliant with internal policies, processes and procedures, and allow a timely response to external requests. High quality scientific outputs at EU level increases the impact and consistency of evidence-based prevention and control activities across the EU, and reduces the need for Member States to invest in undertaking similar scientific work	Proportion of ECDC scientific outputs processed through SARMS, following the respective workflows and template	- The Scientific Advice Repository and Management System (SARMS) is the sole support platform for the production and 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, standards and processes/procedures[15] and monitors responsiveness to external requests to the Centre.	No
1.3.2	**Develop guidance on options and application of enhanced statistical methods for trend analysis of surveillance data**	Strengthened capacity to analyse temporal trends in data, including in circumstances of incomplete data series	Guidance document: Implementation according to project plan (schedule, resources and scope)	- Guidance document on statistical methods for trend analysis	Yes

[15] e.g. ECDC independence policy, ECDC open access policy

		Increased quality and consistency of information for prevention and control activities across the EU			
1.3.3	**Further develop and deliver advice and support on evidence-based public health methods**	ECDC and its partners in Member States maintain and strengthen their capabilities for producing robust evidence-based public health advice	- Proportion of participants that consider the training useful - Proportion of Member States that consider the training useful	- Training course in evidence-based public health methods	Yes

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
1.3.1	Proportion of ECDC scientific outputs processed through SARMS, following the respective workflows and template	tbc	90%	SARMS
1.3.2	Guidance document: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
1.3.3	- Proportion of participants that consider the training useful - Proportion of Member States that consider the training useful	n/a n/a	80% 80%	Course evaluations Assessment performed during the annual NFP meeting based on list of trainings conducted in year N-1

Resources:

1.3 Methodologies	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~3~~ 2.4 FTE	0.6 FTE	~~3.63~~ FTE
Total budget for this activity	€ 136,200	-	€ 735,765

1.4 Knowledge transfer: Bridge the gap between science, policy, and practice to ensure sustainable impact on prevention and control of infectious diseases

Overview

ECDC will consult with Competent Bodies and other partners on ways to promote and facilitate bridging the gap between science, policy, and practice, to ensure sustainable impact on prevention and control of infectious diseases. ECDC will consult on how it can further tailor its scientific advice and technical reports to make them more relevant for Competent Bodies and other relevant bodies that use them to advise on public health policy and practice in their country. The Centre will also establish and promote the use of a repository of quality-assured guidance and examples of good practice developed by national authorities and professional bodies in EU Member States. As per recommendation from the Advisory Forum, ECDC will also establish a mechanism to monitor and assess evidence from implementation science studies for the prevention and control of infectious disease threats to human health, and assess the feasibility and added-value of adopting these methodologies at EU or Member State levels (*see also 1.3*).

ECDC will also promote and support the transfer and translation of knowledge through actions that will foster greater sharing of information and experience within its networks, including by piloting knowledge management approaches for strengthening community of practice within ECDC networks (of NFPs and OCPs), and by upgrading ECDC extranet services, or replacing them with alternative ways of communication, to support these exchanges.

The journal *Eurosurveillance* has served public health experts/scientists and policy makers with high quality, open access (OA) information and data relevant for timely public health action since 1996. In the production of the journal, the editorial team applies intensive quality control to ensure that the widely accessible and distributed scientific information is sound, reliable, understandable and actionable for a diverse audience. 2021 marks the 25th anniversary of *Eurosurveillance* and this will be reflected in communications and a dedicated scientific seminar on the margins of an international scientific conference. Social media and scientific gatherings will be used to support dissemination of content and interact with a variety of stakeholders to rest abreast with new developments both in science and publishing. *Eurosurveillance* should continue to rank among the leading journals in its field. Eurosurveillance will also initiate the set-up of a community of practice among editors of journals published by major centers for disease prevention and control to identify commonalities and synergies.

Eurosurveillance editors have held seminars and workshops on topics related to science reporting (how to get published, use of reporting guidelines) and publication ethics (authorship). In order to further support capacity-building activities in the field of communicable diseases and publication ethics, *Eurosurveillance* will expand its educational activities with focus on experts' critical appraisal skills and awareness of research integrity, in particular publication ethical matters.

ECDC will continue to coordinate the organisation and the scientific programme of the European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE), which brings together around 600 professionals in the EU/EEA and globally, to share scientific knowledge and experience in infectious disease epidemiology, public health microbiology and related scientific fields.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
1.4.1 *	**Pilot knowledge management approaches for strengthening the community of practice within and outside ECDC**	Improved sharing of information, knowledge and experience between members of ECDC networks Improved sharing of best practices and greater consistency of prevention and control between Member States	Pilot for knowledge management: Implementation according to project plan (schedule, resources and scope)	- Inventory of existing practices - Pilot initiated	Yes

1.4.2	**Organise the annual European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE), in cooperation with the Member States, the European Commission (including SANTE, CHAFEA, JRC) and other EU agencies, and include a 'knowledge for policy and practice' track in the ESCAIDE conference**	- Dissemination of scientific knowledge in the area of communicable disease epidemiology, prevention and control and complementary disciplines (e.g. health economics, mathematical modelling, new technologies). - Improved knowledge and awareness among ESCAIDE participants of knowledge needed for policy and practice	Percentage of attendees that rate ESCAIDE as 'good' or 'excellent'	- 2021 edition of ESCAIDE to be hosted in ~~Stockholm~~ Warsaw, Poland. - ESCAIDE track on knowledge for policy and practice	No
1.4.3	**Ensure production and wide dissemination of Eurosurveillance as a high quality journal with good visibility**	The journal remains among the leading journals in its field, attractive for a wide audience (authors and readers) and supports knowledge transfer. Availability of new scientific findings of relevance to public health and other health professionals in Member States	- Journal in the first quartile for all metrics among journals in its category (impact factor, cite score, SCImago) - Articles submitted for publication from countries represented on the surveillance editorial board	- 50 issues of Eurosurveillance, - Scientific seminar with focus on 25th anniversary, - Board meeting with action points for 2022.	- No
1.4.4	**Promote transparency and reproducibility in generating scientific information among Eurosurveillance contributors/audience through respective editorial policies**	Increased awareness and use of reporting guidelines; compliance with editorial standards/requirements by authors and reviewers; use of repositories for additional information Improved quality and consistency of scientific evidence published as peer review manuscripts	- Proportion of submissions with checklists (where applicable) - Where applicable, proportion of articles with genetic data deposited	- Up-to-date editorial policies, further increased completeness of articles - Workshop on the margins of ECDC-organised events (ESCAIDE,ECDC summer school, traineeship project review module) or at national Public health institutes	- Partially
1.4.5 *	**Develop communication formats and tools for effective delivery of information and evidence to specific audiences**	Tailored communications that can be used by ECDC and its partners for disseminating knowledge to target audiences to be used to lead to change Increased utility and relevance of ECDC outputs for policy makers and public health professionals in Member States	Pilot for a tailored communication model: Implementation according to project plan (schedule, resources and scope) Number of accesses to pilot communication model	- Proposal for one tailored communication model piloted with a selected audience	- Yes
1.4.6	**Strengthen the dissemination and communication of ECDC key scientific outputs to ensure they reach their target audience, and are accessible at no cost for the user.**	Increased awareness and outreach of ECDC key scientific outputs Greater use of high quality scientific outputs increases the impact and consistency of evidence-based prevention and control activities across the EU, and reduces the need for Member States to invest in undertaking similar scientific work	- Access to ECDC scientific outputs: o number of access, o number of download o number of citations - Impact factor of ECDC articles in peer reviewed journals - Proportion of ECDC peer reviewed articles available in gold standard open access	- All ECDC scientific outputs published on the website	- No

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
1.4.1	Pilot for knowledge management: Implementation according to project plan (schedule, resources and scope)	n/a	Pilot initiated in Q4 2021 Less than 20% deviation from the duration, resources and scope of the initial baseline	ECDC annual report Quarterly ECDC Portfolio Steering Committee reporting
1.4.2	Percentage of attendees that rate ESCAIDE as 'good' or 'excellent'	tbc	> 75%	ESCAIDE Programme and conference attendee satisfaction survey results
1.4.3	- Journal in the first quartile for all metrics among journals in its category (impact factor, cite score, SCImago) - Articles submitted for publication from countries represented on the surveillance editorial board	tbc	- First quartile - 60% from Eurosurveillance countries, and minimum two continents	Basket of metrics (impact factor, SciMago journal rank, CiteScore percentile), Source: Claviate analytics, Scopus Eurosurveillance submission system.
1.4.4	- Proportion of submissions to Eurosurveillance with checklists (where applicable) - Proportion of relevant articles with genetic data deposited	n/a	> 90%, - 90%	Records in Eurosurveillance submission system
1.4.5	- Pilot for a tailored communication model: Implementation according to project plan (schedule, resources and scope) - Number of accesses to pilot communication model	tbc	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
1.4.6	- Access to ECDC scientific outputs: o number of access, o number of download o number of citations - Impact factor of ECDC articles in peer reviewed journals - Proportion of ECDC peer reviewed articles available in gold standard open access	tbc tbc 30.55 (2018) 7.36 (2018) 85% (2018)	n/a n/a >20 in the 5 years following publication >5 100%	Website statistics Website statistics ECDC library bibliometric review ECDC library bibliometric review ECDC library bibliometric review

Resources:

1.4 Knowledge transfer	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~27~~ 21.3 FTE	5.7 FTE	~~32.7~~27 FTE
Total budget for this activity	€ 1,136,400	-	€ 3,584,346

Strategic objective 2. Support the countries to strengthen their capacities and capabilities to make evidence-based decisions on public health policies and practices

The capacities and capabilities to address infectious diseases across Europe vary among Member States. ECDC will apply a tailored approach, based on better understanding the countries' needs and constraints, while keeping the general EU perspective of ECDC's work. Strengthened mechanisms for sharing of experience and best practices, support to the implementation of decision 1082/13 on cross border threats to health and the International Health Regulations, as well as the support by ECDC for capacity building in countries are key elements where lessons learnt from the COVID-19 pandemic will be applied, in coordination with the European Commission, as well as the coordination of deployments of teams within and outside the EU.

2.1 Country focus: Use country information to better target ECDC activities and country support

Overview

Based on a proposal presented to the National Coordinators (NCs) of the Coordinating Competent Bodies (CCBs) in 2019, ECDC will:

a) Continue to collate, integrate and analyse country-specific information from a variety of sources (by integrating internal quantitative and qualitative data and additionally integrating data from external sources, such as WHO, OECD, Eurostat) in a more systematic ~~fashion~~ approach, to gain better understanding of the main ~~strengths~~ vulnerabilities and needs ~~and challenges faced by~~ of the Member States. ~~to implement evidence-based policies and guidance in practice.~~ This information will form the basis for ECDC work to support the countries, to efficiently target most in need Member States and relevant topics.

ECDC gathers a wealth of quantitative and qualitative data through its various IT tools, e.g. TESSy/Epipulse, surveys (e.g. EULAbCap) or through various interactions (e.g. country visits, network meetings). This information will be integrated to provide a meaningful overview at Member State level. An IT solution build on existing IT tools will allow to visualise the integrated information collected and collated at Member State level. Complementarily, a methodology to identify vulnerabilities and needs and a prioritisation mechanism will be developed to target most in need Member States for the highest priority topics. As starting point, several Network meetings will provide opportunities for ECDC to learn and collect Member States' priority needs.

b) In 2021, ECDC will revise its process for conducting country visits (virtual or face to face), to ensure a corporate, harmonised approach of country visits, and create a central repository of country visit reports. This will make reports more easily retrievable to monitor any required follow-up. Country visits will be carried out at the invitation of a country, or following up a dialogue between ECDC and the country experts. ECDC will investigate implementing a consolidated programme of country visits with defined steps. In 2021, ECDC will organise several country visits (face to face or virtual) to carry out after/in-action reviews of the national response to COVID-19 to help inform the national response plans and to improve a collaborative European approach to the pandemic.

c) Compile a list of potential funding sources, shared with the Member States. As ECDC doesn't have the capacity to address all Member States' needs, because of insufficient resources or as the need is outside of its remits, a list of possible sources of EU funding will be compiled and shared with the Member States, to facilitate participation in relevant EU projects for improving their health systems and indicators.

d) Concrete support projects targeting specific needs in the Member States. ECDC will continue to follow-up on the requests received from the Member States during the annual country support calls in 2017 and 2018 and will implement two projects: Hospital-Associated Infections (HAI) outbreak investigation course (online) and Curriculum development for a training of frontline healthcare professionals in addressing vaccine hesitancy, vaccinology module via e-learning and communication for behaviour change module via blended format).

Additionally, projects on TB country support will continue, and a new project for providing support to EU/EEA countries in conducting hepatitis C prevalence surveys will start.

All these activities will be carried out in close dialogue with the Member States, particularly through the CCBs.

~~Several Network meetings (face-to-face or virtual) in 2021 will provide opportunities for ECDC to learn about Member States' priority needs and share best practices. Country missions organised as per request from Member States will provide direct support to the Member States most in need.~~

~~ECDC will continue setting up a mechanism to identify challenges and needs in the Member States. Using data identified in 2020 to get a comprehensive overview at country level, ECDC will decide on and start deploying the most relevant IT solution, and test the requirements on practical country support activities.~~

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
2.1.1	**Networks Interactions**	Increased Member States experts capabilities through best practice sharing	- Rate of participations to ECDC meeting and activities - Rate of expectations met and objectives fulfilled with meetings	- Diseases Network meetings and Public Health functions Network meetings - Disease Network and Public Health Functions Network Coordination Committees meetings - Other meetings (inter-sectoral meeting(s) with key stakeholders)	Partially
2.1.2	**Country Support**	Increased Member States capacities and capabilities to prevent and control infectious disease ECDC provides support to most in need Member States high priority topics, they cannot address alone	~~- Mapping of Member States' needs: Implementation according to project plan~~ ~~- Proportion of requested country visits that were conducted by ECDC~~ - Number of countries supported and projects set up, following the 2017-2018 requests to ECDC - New country visit process/corporate approach in place and tested	~~To support countries as requested under the new country support framework:~~ ~~- Country visits, including country visits with DG SANTE, to discuss and assess the level of implementation of the EU legislation on AMR in a one-health perspective~~ ~~- IT platform to enable user-friendly access to all country support work for ECDC internal users~~ - Methodology for collection of needs from Networks meetings - IT requirements defined and finalised - Country visits, with a focus on after/in-action reviews in relationship with Covid-19 response, conducted - Hospital-Associated Infections (HAI) outbreak investigation course delivered - E-learning vaccinology module delivered	Partially

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
2.1.1	- Average rate of participations to ECDC meeting and activities	n/a	75%	SRM
	- Rate of expectations met and objectives fulfilled with meetings	n/a	75%	Standard questionnaire to participants during meeting

2.1.2	~~- Mapping of Member States' needs: Implementation according to project plan (schedule, resources and scope)~~ - Proportion of requested country visits that were conducted by ECDC	~~tbc~~	~~tbc~~ 100%	~~Quarterly ECDC Portfolio Steering Committee reporting~~ European and International Coordination section

Resources:

2.1 Country focus	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~11.1~~8.5 FTE	2.6 FTE	~~13.7~~11.1 FTE
Total budget for this activity	€ 1,491,900	-	€ 2,612,565

2.2 Prevention and control programmes: Support and strengthen capacity to deliver programmes targeted at the prevention and control of infectious diseases

Overview

- **Strengthen ECDC's support to targeted prevention and control programmes.**

Based on robust surveillance data, ECDC will continue to support countries to enhance their targeted prevention and control programmes to varying degrees depending on the disease. The basis for this work is the production of timely and relevant evidence-based advice and risk assessments on communicable disease prevention and control to the European Commission and the EU Member States.

Specific efforts will include work to strengthen vaccination programme delivery and vaccine confidence, providing guidance to develop evidence-based policies for prevention programmes such as on COVID-19, HIV, TB, antimicrobial stewardship and infection prevention and control-related activities in healthcare settings, raising awareness of the issues (e.g. European Antibiotic Awareness Day, World Antibiotic Awareness Week, HIV/hepatitis Testing Week, World Hepatitis Day, World AIDS Day, World TB Day, European Immunization Week and Influenza Awareness Week) and monitoring control programmes and country preparedness for a range of infections (e.g. foodborne outbreaks, influenza, etc.).

Throughout the ongoing COVID-19 pandemic, ECDC will provide relevant and high-quality pandemic monitoring data and scientific advice on COVID-19 prevention and control in support of the European Commission and the EU Member States. In 2021, major efforts will be done to integrate and enhance the surveillance of COVID-19 and influenza in healthcare settings as well as in the community. With the introduction of COVID-19 vaccines, systems to monitor the effectiveness of these vaccines need to be put in place.

ECDC will support the implementation of the 2018 Council Recommendation on Strengthened Cooperation against Vaccine Preventable Diseases. ECDC will in 2021 start the preparation to continue to further develop the work necessary to establish and coordinate a European Vaccine Information Sharing System (EVIS) in line with Art. 9 of Council Recommendation on Strengthened Cooperation Against Vaccine-Preventable Diseases and supporting the National Immunisation Technical Advisory Groups (NITAGs).

Country support will be provided through country visits (upon Member State invitation), to enhance the prevention and control of AMR and improve the implementation and effectiveness of national actions plans in line with the objectives set in Council Recommendation 2002/77/EC and the latest Council Conclusions on AMR, as well as the Global Action Plan on AMR (WHO), the WHO European strategic action plan on antibiotic resistance and the European One Health Action Plan on AMR. To provide comparable information for the benchmarking of EU/EEA countries' structures, resources and processes for the implementation of infection prevention and control (IPC) and antimicrobial stewardship (AMS) programmes in acute care hospitals, a questionnaire will be finalised and pilot

tested for an annual survey of IPC and AMS structure and process indicators in European acute care hospitals. In addition, ECDC will establish, jointly with WHO/Europe, a list of selected monitoring indicators based on the FAO/OIE/WHO Tripartite Monitoring and Evaluation framework, so these indicators can, in the future, be reported as part of the joint ECDC-WHO/Europe on AMR surveillance in Europe and similar annual report for AMC surveillance. Such analytic information on the level of response to AMR is intended to assist the Member States to better understand where they should prioritise efforts to prevent and control AMR.

The monitoring of indicators and comprehensive progress reports for the Member States, to measure how far they have managed to achieve the UN Sustainable Development goals (SDGs) in the area of HIV/AIDS, hepatitis and TB, will provide important feedback and data for countries to help them benchmark and plan better use of resources.

ECDC will collect information (scientific evidence and applied methods) on vector control programmes, their implementations and effectiveness and provide guidance to the Member States for development and/or evaluation of vector control programmes.

The ECDC's prevention activities as a whole will be better coordinated to improve the impact of ECDC prevention work with the Member States. To this effect a new prevention framework will start to be developed in 2021 ~~and discussed and agreed with the AF and CCBs~~.

- **Address the behavioural aspects that are needed for national programmes to be successful.**

ECDC will continue to address the behavioural aspects and effective risk communication of importance to the prevention and control of specific diseases. In 2021, these efforts will mainly be focused on COVID-19 and vaccine hesitancy. Coordination with other relevant organisations, such as Joint research Centre (JRC) and the Joint Action on Vaccination (JAV), will be ensured in order to ensure an effective and efficient process.

- **Emphasize a general 'One Health' approach to relevant ECDC work**.

ECDC aims to further identify and develop its role in prevention and control of infectious diseases in a zoonotic and One-Health perspective. In 2021, work will start to develop an ECDC One-Health framework with strategic objectives. In cooperation with EFSA, ECDC will provide relevant and high-quality monitoring data and scientific advice for food and waterborne disease outbreak prevention and control to support the European Commission and the EU Member States.

Trends in AMR in infections from zoonotic bacteria will be monitored and compared with those from livestock and food in a One Health approach. Work will continue to identify emerging strains with AMR of particular concern, such as MDR, ESBLs and/or carbapenemases.

Information on the diversity, ecology and epidemiology of vector-borne human pathogens, vectors and reservoir hosts, and possibilities for improved/integrated surveillance, response and prevention methods will be collected and analysed. Monitoring and assessing the effects of global changes (e.g. environmental and climatic changes) will be continued (e.g. biannual updates of vector distribution maps in Europe, integrated human and animal West Nile virus infections surveillance with weekly updates in the transmission season, monitoring the environmental conditions appropriate for vibrio propagation in the Baltic sea in the summer period.)

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
2.2.1	**Develop scientific advice on communicable disease prevention and control measures**	Member States better equipped to make informed decisions that target the prevention and control of infectious diseases at programme and policy level	Uptake of ECDC scientific outputs by Member States	- Expert Opinions - Public Health Guidance (Public health guidance on prevention of infections in PWID (jointly with EMCDDA)	No, but refocussed to COVID-19 and other priority diseases.

				- Technical reports (e.g. on a core EU vaccination schedule; piloted case studies on vaccination coverage) - Systematic Reviews - Scoping Reviews (Literature review of available influenza antiviral treatment options) - Other scientific outputs (vaccine effectiveness and impact analyses on COVID-19 and seasonal influenza, vaccine coverage estimates for COVID-19 and influenza - Training materials (in the field of vaccine hesitancy, training curriculum targeting HCPs on communications with hesitant members of the public); - Reporting on WGS framework for invasive meningococcal disease	
~~2.2.2~~	~~**Assessment of the main prevention needs in Member States, for a future roadmap of joint activities**~~	~~Need identification of common needs for prevention at country and EU level~~	~~Assessment of prevention needs in Member States and sub regions: Implementation according to project plan (schedule, resources and scope)~~	~~Initiation of the assessment of prevention needs in Member States and sub regions~~ [Note: postponed to 2022]	~~tbc~~

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
2.2.1	Uptake of ECDC scientific outputs by Member States	n/a	tbc	ECDC stakeholder survey or consultation during NFP meetings
~~2.2.2~~	~~Assessment of prevention needs in Member States and sub regions: Implementation according to project plan (schedule, resources and scope)~~	~~n/a~~	~~Less than 20% deviation from the duration, resources and scope of the initial baseline~~	~~Quarterly ECDC Portfolio Steering Committee reporting~~

Resources:

2.2 Prevention and control programmes	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~46.8~~35.7 **FTE**	**11.1 FTE**	~~57.946.8~~ **FTE**
Total budget for this activity	**€ 4,449,900**	-	**€ 9,196,027**

2.3. Training: Provide adequate training opportunities taking into account the changing environment for infectious disease prevention and control

Overview

ECDC will continue supporting the strengthening of workforce capacity in the Member States and at the EU level through relevant training of public health professionals, to ensure adequate performance for communicable disease preparedness and response, prevention, detection, assessment and control nationally and cross-border. The overall goal is to reach a sufficient number of trained public health specialists in each Member State to cover all needs in the field of communicable disease prevention and control.

Through the ECDC Virtual Academy, trainers and learners will have access to training materials, online courses, webinars, and communities of practice, through a common virtual infrastructure. Feasibility of accrediting EVA under EUPHA will be explored.

Knowledge transfer will be promoted and facilitated by tools and support provided to participants in training activities to allow the dissemination of the acquired knowledge.

The network of European and global training partners will be maintained and strengthened. Participation in joint activities, based on the establishment of collaboration mechanisms (e.g. collaboration agreements) will continue with partners like the European Commission, WHO, ASPHER, EUPHA, Africa CDC, US CDC, IANPHI (the International Association of National Public Health Institutes) and Public Health Agency of Canada, among others.

ECDC will start implementing the roadmap for changes in the ECDC Fellowship programme, following the programme external evaluation in 2019. Under the Health Security Initiative, MediPIET will start training its 4th Cohort, aligned with the Fellowship Programme.

ECDC will assist countries, by providing tools for the assessment of their public health workforce capacity, training resources and needs. The Centre will invite countries to express interest to collaborate in the development of national training programmes, Field Epidemiology Training Program (FETP) or others, and provide guidance upon request.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
2.3.1	**Improvements of ~~Reform~~ the Fellowship Programme, based on the results of the external evaluation 2019**	Implementation of roadmap stemming from the recommendations of the external evaluation initiated. ~~implemented~~ ~~Key changes decided applied for the Select on of Cohort 2022.~~ The improved Fellowship programme strengthens the workforce capacity in the Member States.	- Number of scientific articles of public health relevance by ECDC fellowship programme (EPIET/EUPHEM) during and 2 years after graduation.	- Based on the recommendations from the 2018/2019 external evaluation of the Fellowship Programme, ECDC will start implementing the roadmap for an improved ~~reformed~~ programme, by launching the call for applications for Cohort 2022 the first changes will be incorporated ~~changes (including pilot)~~ in the Administrative Decision. Curricular updates will be reflected in Administrative Decision 2022.	No
2.3.2	**Offer a Continuous Professional Development (CPD) that responds to the needs identified by the ECDC networks, and provide tools and support for the**	The CPD training targets professionals in the CCB networks, supervisors of the Fellowship Programme, and experts identified by the Member States, while a wider audience benefits from ECDC e-learning.	- Proportion of trainings that include a session to support participants knowledge transfer - Proportion of participants that consider the training useful	- CPD offer is further developed, and reflects the new needs identified, targeting professionals in the CCB networks and supervisors of the ECDC Fellowship Programme - Offer presented in annual catalogue and delivered including on RRAs, whole genome sequencing (WGS)	No

	transfer of knowledge at European, national and sub-national levels, with special attention to COVID-19 related needs	Collaborations with European (e.g. ASPHER) and international stakeholders allow to align and expand the offer.	- Proportion of Member States that consider the different trainings useful - Response to requests from EC, including COVID-19 trainings, fulfilled.	Vaccine preventable diseases, preparedness, e-health... Two key training to trainers modules on Emergency Preparedness delivered with participation of at least ten Member States	
2.3.3	**Keep continuous quality improvement activities, accreditation and evaluation as an essential part of ECDC training programmes and activities.**	- Accreditation of short courses under EACCME[16] and APHEA[17]. - Exploration of the feasibility of accrediting the ECDC Virtual Academy through APHEA. - Increased quality and value of ECDC training programmes offered to Member States. ~~- Accreditation of the Fellowship Programme under TEPHINET[18] explored.~~ ~~- Academic recognition of the Fellowship Programme: partnerships with schools of public health with an interest in communicable disease (ECDC ASPHER network) to establish a Master's Degree in Applied Epidemiology.~~	Proportion of short courses accredited under UEMS/APHEA.	- Courses in ECDC training programmes, accredited. - Accreditation of the ECDC Virtual Academy itself, explored.	Yes
2.3.4	**Maintain the ECDC Virtual Academy (EVA) as a learning system that includes training materials, and the administration of all ECDC training offer (face-to-face, online and blended) for the different training programmes and activities**	- Gradual optimisation of e-learning offers and increased access to training material in the ECDC Virtual Academy (EVA) - e-learning in open access leads to better outreach, efficiency and impact. - Information and promotion of training materials / online courses improves their impact.	- Number of enrolments in EVA - Satisfaction by participants on the usability of the EVA platform	- Interactive catalogue of all CPD activities for 2022 available in EVA	No
2.3.5	**Identify country capacity gaps and training needs through the triennial assessment surveys (CCBs and NFPT[19]), to tailor trainings and reduce inequalities in capacity across Europe**	- Results of capacity and training needs assessment analysis informs the CPD offer and ECDC training priorities - Harmonised tools to analyse training needs within ECDC networks to support the prioritisation and scoping of the training offer Trainings tailored to the needs of the Member States and reducing inequalities in capacity across Europe.	Response rate of the survey	- Survey conducted, following the recommendation from the internal audit service (IAS) of the European Commission. - Tools for ECDC annual network meetings available, and their use promoted.	Yes

[4] Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

[16] European Accreditation Council for Continuing Medical Education
[17] Agency for Public Health Education Accreditation
[18] ~~Global Network of Field Epidemiology Training Programs~~

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
2.3.1	- Number of scientific articles of public health relevance by ECDC fellowship programme (EPIET/EUPHEM) during and 2 years after graduation.	n/a	> 50% increase compared to the 2-year period before entering the programme.	Bibliometric analysis in PubMED, Scopus (ECDC library)
2.3.2	- Proportion of trainings that include a session to support participants knowledge transfer - Proportion of participants that consider the training useful - Proportion of Member States that consider the different trainings useful	n/a 86% n/a	100% 80% 80%	ECDC Public Health training statistics Course evaluations Assessment performed during the annual NFP meeting based on list of trainings conducted in year N-1
2.3.3	Proportion of short courses accrecited under UEMS/APHEA	n/a	50%	Number of accepted accreditations (ECDC Public Health Training statistics) for all trainings conducted across ECDC
2.3.4	- Number of enrolments in EVA - Satisfaction by participants on the usability of the EVA platform	tbc n/a	+10% 80%	EVA platform statistics EVA platform survey among participants that completed the course
2.3.5	- Response rate of the survey	50%	70%	Results of the survey

Resources:

2.3 Training	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~17.8~~13.6 FTE	4.2 FTE	~~22~~17.8 FTE
Total budget for this activity	€ 4,316,800	-	€ 5,958,744

2.4 Emergency preparedness: Support countries in emergency preparedness and response including by deployment of public health teams as requested

Overview

With focus on emergency preparedness and response, Decision 1082/2013/EU and its upcoming amendments, and the International Health Regulations, will continue to be the policy frameworks under which ECDC operates for emergency preparedness and response.

ECDC will continue supporting the European Commission and the Member States with the implementation of Art. 4 of the Decision 1082/2013/EU on serious cross-border threats to health and other relevant legal provisions. ECDC will particularly work in key areas, such as health emergency preparedness planning, including identification of gaps and strengthening system capacities and capabilities. ECDC actions will primarily address countries or groups

of countries based on their needs, and in synergy with WHO, their efforts to support the full implementation of the International Health Regulation (IHR, 2005), and in collaboration with relevant ongoing Joint Actions (SHARP, Healthy Gateways, BICTRA).

ECDC will support activities to identify and rank risks, collect evidence and provide expert consultations on preparedness and response planning, organise and advise on simulation exercises for cross border health threats, evaluation of events and revision of public health emergency plans, based on lessons learned.

The Centre will continue to provide expert support to the EU Member States, the European Commission and other relevant key stakeholders in response to serious cross-border health threats, or EU Member States requests.

ECDC will coordinate investigations of multi-country relevant public health events and threats when its assistance is requested. The Centre will provide technical support both remotely and through field deployment, strengthening the effectiveness and quality of outbreak response at European level. ECDC will also provide expertise and facilitate field missions in response to requests from the Member States, the European Commission (DG ECHO, DG SANTE) and GOARN.

In collaboration with the affected Member State(s), ECDC will conduct After-Action Reviews to analyse and learn from the actions performed during an outbreak of cross-border relevance, which triggered the development of a Rapid Risk Assessment. The COVID-19 pandemic has forced countries to review their preparedness and response plans and increase their capacities in critical areas, such as monitoring and surveillance, microbiology, hospital care and infection prevention and control, the implementation of unprecedented non pharmaceutical measures such as social distancing, school closures with distance learning and work-from-home, affecting multiple sectors of the society, with an effort to balance the mitigation of the pandemic with social and economic disruption. There is a need to better understand the effectiveness of these measures and/or what could have been done better. In 2021, ECDC will collaborate with countries to develop standard lesson learning methodology and carry on after action reviews to identify actions to strengthen public health preparedness and response for better readiness to future public health emergencies.

Despite all Member States having preparedness plans, the part related to hospital preparedness will require reviewing and strengthening, in terms of monitoring ICU beds, human capacities, testing capacities, stockpiles of essential medicines and equipment. Dedicated training on preparedness and risk communication activities should take place. Part of the strengthening of preparedness plans may also mean to clearly establish essential parts of national health programmes that need to be preserved ~~if any possible~~.

The Emergency Operation Centre (EOC) is the main ECDC infrastructure for preparedness and response activities. The EOC maintains its readiness to address any Public Health Emergency (PHE) of cross-border relevance and to support the implementation of the ECDC Public Health Emergency plan allowing timely response. ECDC will assist Member States that request the development of Public Health EOC operating procedures, with reference to international standards. ECDC EOC will also continue to support teams deployed in the field for preparedness and response activities.

ECDC will ensure the proper functioning of the Early Warning and Response System (EWRS) and implement further improvements of the platform according to the needs of the European Commission and the Member States. The incident management module designed to follow up the response measures taken by Member States will be revisited to better address long term threats and pandemics.

ECDC will continue to perform rapid risk/outbreak assessments. The Rapid risk assessment methodology will be continuously updated and upgraded and ECDC will perform trainings for internal experts and EU Member States in order to standardise the use of methodology for assessment of threats. In order to support all the above listed activities ECDC will maintain robust response duty roster and support disease programme duty rosters. Furthermore, to address the One Health approach in response to cross-border foodborne threats through joint ECDC-EFSA public health risk assessments, EU level analyses of data will be performed in cooperation with EFSA, European Union Reference Laboratories, Member States and other relevant parties.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
2.4.1	**Provide technical support in the three phases of the preparedness and response cycle: anticipation, response, recovery**	Improved awareness by NFP for Preparedness and Response on integration of key sectors in national preparedness and response planning. Improved effectiveness and quality of outbreak response at European level.	- Rate of participations to ECDC meeting and activities - Rate of satisfaction with meetings and activities (on the added value of the meeting and on the knowledge and skills improved) - Implementation according to project plan (schedule, resources and scope)	- Simulation exercises - After action reviews - Case studies Public Health Emergency Preparedness (PHEP) plans assessment - Literature reviews - Expert meetings on emerging topics - Outbreak investigation protocols and tools ready and available - Field deployments upon requests from the Member States, the European Commission (DG ECHO, DG SANTE) and GOARN - Collaboration agreement with DG ECHO to provide expertise and facilitate field deployments in response to requests from the Member States and the European Commission - EWRS properly functioning and further improved according to the needs of the Commission and the Member States.	No
2.4.2	**Provide support for strengthening competencies in the area of preparedness and response**	Improved skills and abilities of national Public Health emergency managers on specific competencies for preparedness and response	- Proportion of participants that consider the training useful - Proportion of Member States that consider the training useful	Preparedness and response training modules in ECDC virtual academy (FVA) - Bio-risk awareness workshops - Use of ECDC tools – risk ranking, HEPSA, SIMEX handbook in work with key stakeholders	Partially
2.4.3	**Produce and disseminate Rapid Risk Assessments, and response related duties**	ECDC produces high quality RRAs to support the Commission and the Member States in responding to cross-border public health threats. Response duties always covered by trained staff.	- Average number of downloads per RRA/ROA - Number of RRAs for which after action reviews (AAR) have been conducted	- Response related rosters functional - RRAs and Joint ECDC-EFSA public health risk assessments (rapid outbreak assessments), including joint notification summaries	No
2.4.4	**Managing requests for technical and scientific assistance to support EU response actions in the field**	- Improved organisational and procedural processes for effective management of requests for technical and scientific assistance to support EU response actions in the field.	Proportion of field requests to respond to cross-border Public Health emergencies for which support is provided to Member States and the European Commission	- Reviewed set of processes for managing requests for technical and scientific assistance to support EU response actions in the field	No
2.4.5	**Maintain and network for the EOC and Public Health Event (PHE) tools**	- EOC functional at high standards and PHE tools ready and tested - Participation to the international network of EOCs. - EOC ready to address Public Health Emergencies (PHE) of cross-border relevance and to support the	- PHE training organised as per plan - Rate of satisfaction of ECDC partners with collaboration	- PHE training internal and external - EOC equipment upgraded - Organisation of an international EOC meeting	No

		Commission and the Members States in providing a timely response.			

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
2.4.1	- Rate of participations to ECDC meetings and activities	n/a	75%	Stakeholder Resource Management System (SRM)
	- Rate of satisfaction with meetings and activities (on the added value of the meeting and on the knowledge and skills improved)	n/a	75%	
	- Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
2.4.2	- Use of ECDC tools by Member States	n/a	On average >50%% of Member States use ECDC tools	Assessment performed during the annual NFP meeting based on list of tools available
	- Proportion of participants that consider the training useful	n/a	80%	Course evaluations in EVA
	- Proportion of MS that consider the training useful	n/a	80%	Assessment performed during the annual NFP meeting based on list of trainings conducted in year N-1
2.4.3	- Average number of downloads per RRA/ROA	tbc	Tbc	ECDC annual report / web statistics
	- Number of RRAs for which after action reviews (AAR) have been conducted	n/a	Tbc	Survey among NFPs
2.4.4	Proportion of field requests to respond to cross-border Public Health emergencies for which support is provided to Member States and the European Commission	100%	100%	EOC
2.4.5	- PHE training: all milestones timely implemented as per roadmap	n/a	100%	EOC
	- Rate of satisfaction of ECDC partners with collaboration	n/a	75%	Dedicated survey

Resources:

2.4 Emergency preparedness and response	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~38.9~~29.6 FTE[20]	9.3 FTE	~~48.2~~38.9 FTE
Total budget for this activity	€ 680,700	-	€ 4,670,828

[20] The FTEs include 19.47 FTEs for the COVID-19 PHE roster. FTEs for the preparation for rapid risks assessments other than COVID cannot easily be planned, as the skills requested depend on the nature of the threat that cannot be anticipated. In addition to the 15 FTEs, it is estimated that on average another 5.5 experts FTE are mobilised yearly for the preparation of the RRA content during the year (taken from their unplanned buffer time).

Strategic objective 3. Future outlook: Prepare for the future through foresight and innovation assessments

It is key for ECDC to understand future public health opportunities and threats, support enhancements in methods and technologies and their transition in the EU and Member States. ECDC will gradually capitalise on the digital transformation of the health sector (e-health), new technologies and methods to tackle more effectively the spread of communicable diseases and respond to threats swiftly. Key issues to be solved include data exchange formats and interoperability between countries, data protection and data sharing.

3.1. Foresight: Work with partners to identify and address key knowledge gaps and areas of uncertainty, and develop new multidisciplinary approaches to prevent and control infectious diseases

Overview

In view of the long lead-time for developing or implementing public health interventions, and the robust evidence to underpin such interventions, ECDC will establish mechanisms for anticipating future needs for evidence. The Centre will identify key knowledge gaps of relevance to policy formulation and implementation. Gaps in evidence relevant to existing public health policies and practice will be identified, through the findings from scoping and systematic reviews, and from expert panel consultations. The need to inform new policy and practice through knowledge will be identified using forward-looking activities that will consider 'foresight' and horizon-scanning findings, consultations with Competent Bodies and others on policy-relevant questions, and the evidence needed.

During 2021 ECDC will take forward work deferred from 2020 due to the need to focus on COVID-19. The work in 2021 will provide the foundation for developing ~~Based on the results from the work done in 2020 for the Foresight Programme,~~ simulation models for infectious diseases of public health priority ~~are developed~~ and their drivers and determinants, including factors such as climate change, technological, behavioural, medical, policy and others. ~~Forecast baseline scenarios are compiled along with uncertainty projections.~~ During 2021, ECDC will assess the results of a systematic review of Foresight approaches to infectious diseases, and on the evidence they provide on the modifying effects of drivers and interventions, which will inform future simulation work on interventions, ~~will be simulated~~ to assess their potential impact on disease incidence and inequality over the short and long-term time horizon. ~~The relative effectiveness of different measures will be evaluated, allowing an ongoing discussion of policy options. Scenario based intervention analyses for defined priority diseases will be conducted, estimating the potential impact of control measures together with a rigorous evaluation of uncertainty. An assessment will be made of the forecasts available for the drivers identified in Phase 1. Where quality is deemed to be low, or no forecasts exist, predictions will be made.~~ Based on the findings of the systematic review, expert opinion will be elicited in choosing relevant data sources and in the handling of missing data or knowledge gaps. ~~These forecasts can also be used for situational awareness, intervention planning, projections, epidemiological explanations, and structured reasoning.~~

An expert consultation will be organized, consisting of international experts from different sectors. The overall aim will be to identify blind gaps that were omitted from the literature and expert review.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
3.1.1	**Prediction modelling for foresight programme initiated**	Data required on drivers and determinants obtained for the development of simulation models ~~developed with their drivers and determinants~> Comprehensive assessment of drivers to ensure the validity and generalisability	Data content defined for models ~~developed~~ for priority public health infectious diseases drivers: Implementation according to project plan (schedule, resources and scope)	- Data content ~~Models developed~~ for priority public health infectious diseases drivers	Yes

		of forecasts for use at EU and Member States levels, thereby reducing need to duplicate activity in Member States			
3.1.2	**Expert consultation on simulation models developed by ECDC**	Expert consultation held and additional drivers for infectious diseases to be covered by simulation mocels Comprehensive assessment of drivers ensures the validity and generalisability of forecasts for use at EU and Member States levels, thereby reducing the need to duplicate activity in Member States	Expert consultations: Implementation according to project plan (schedule, resources and scope)	- Meeting report	Yes
3.1.3	**Develop a mechanism for identifying evidence-synthesis needs and knowledge gaps**	ECDC will anticipate needs for scientific advice at an earlier stage and use it in its planning cycle to strengthen the evidence-base for future policy and practice	Protocol established for the mechanism: Implementation according to project plan (schedule, resources and scope)	- Protocol established for the mechanism	No

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
3.1.1	Data content developed for models ~~developed for~~ specified infectious disease drivers: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
3.1.2	Expert consultations: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
3.1.3	Protocol established for the mechanism: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting

Resources:

3.1 Foresight	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~1.2~~0.9 FTE	0.3 FTE	1.~~5~~2 FTE
Total budget for this activity	€ 450,600	-	€ 628,368

3.2. Engage: Promote innovation through active engagement with EU research and innovation initiatives

Overview

ECDC will provide advocacy and support for research to address knowledge gaps relevant to the prevention and control of infectious disease. ECDC will establish a process for the identification of research priorities in the domain of the Centre's mandate, and develop a synthesis of its findings. The content and format will help to advocate these priorities to relevant research funding authorities. This will require that the Centre establishes links with EU research initiatives, and provides expert advice and support to EU research through representation on the advisory boards of relevant EU-funded research projects.

ECDC will also collaborate with other EU Agencies, particularly through the EU Agency Network on Scientific Advice (EU-ANSA), to develop joint statements of need for research in areas of mutual interest, and innovative approaches to address issues of mutual interest, through scientific collaboration and sharing of expertise in research clusters.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
3.2.1	**Develop a way for identifying and communicating research priorities relevant to the prevention and control of infectious disease**	ECDC will anticipate needs for research proposals earlier and be able to communicate this to research commissioners Increased relevance of research activities and outputs to the needs of public health policy makers and practitioners in Member States	- Protocol: Implementation according to project plan (schedule, resources and scope)	- Protocol	No
3.2.2	**Contribute to EU Joint Actions and EU Research projects**	Actions and outputs of EU projects will benefit from ECDC input and will be complimentary to, and not duplicative of, ECDC actions. Efficient use of EU resources; reduced duplication of demands to Member States to support or provide input to projects	Proportion of EU joint actions in the field of Communicable Diseases to which ECDC contributed	- ECDC contributions to ongoing projects, including expert advice, data, and technical support (subject to resource availability and concordance with ECDC mandate)	No
3.2.3	**Establish stronger links with EU research initiatives, through appropriate engagement with EU research commissioning bodies in priority-setting and evaluation of research proposals**	EU research initiatives more closely aligned to knowledge gaps for public health policy and practice as it relates to infectious disease, and the likelihood of duplication between research or development initiatives and the work of ECDC will be reduced	Identification of research priorities within the domain of ECDC mandate: Implementation according to project plan (schedule, resources and scope)	- Report to ECDC Advisory Forum and Management Board on conclusions of consultation	No
3.2.4	**Collaborate with other EU Agencies, through the EU Agency Network on Scientific Advice (EU-ANSA), to develop:** **- Identification and communication of need for research in areas of mutual interest,**	Greater influence on research commissioners of joint statements of research priority. Synergies and efficiencies achieved through collaborative scientific activities between Agencies Increased relevance of research activities and	Statement on shared priorities for research : Implementation according to project plan (schedule, resources and scope)	- Statement on shared priorities for research	Yes

	- Innovative approaches to address issues of mutual interest through scientific collaboration and sharing of expertise in research clusters	outputs to the needs of public health policy makers and practitioners in Member States			

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
3.2.1	- Protocol: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting (Protocol approved by AF and MB by Q4 2021)
3.2.2	Proportion of EU joint actions in the field of Communicable Diseases to which ECDC contributed	Proportion of EU joint actions in the field of Communicable Diseases to which ECDC contributed	n/a	List of Joint Actions
3.2.3	Identification of research priorities within the domain of ECDC mandate: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
3.2.4	Statement on shared priorities for research : Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting

Resources:

3.2 Engage	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~1.1~~0.8 FTE	0.3 FTE	1.~~4~~1 FTE
Total budget for this activity	€ 6,200	-	€ 116,592

3.3. Support transformation: Promote and contribute to the Digital Health actions and support Member States in adapting, adopting, and exploiting new technologies for infectious disease prevention and control

Overview

ECDC aims to assess and make use of new technologies to modernise its approach to surveillance and risk assessment, in light of the infrastructural development fostered by the European Commission and of the changes in clinical public health practice in Member States.

In 2021, all new surveillance tools will be interoperable through a new ECDC surveillance portal, EpiPulse, which will offer seamless access to the full spectrum of EU/EEA indicator-based, event-based and genomic surveillance

operations including data and outputs. EpiPulse will also enable ECDC to establish fora where disease networks can review analyses from indicator and event-based surveillance, exchange opinions, assess risks, and propose options for risk management. At the same time, ECDC will improve threat detection through event-based surveillance, expanding the range of data sources and increasing the automation of searches.

ECDC will scale up the use of whole genome sequencing (WGS) to better detect and investigate multinational outbreaks to foster EU and national prevention control strategies. 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 whole genome sequencing (WGS), and integrate under the EU surveillance the WGS data for pathogens and antimicrobial resistance threats.

As shown during the COVID-19 pandemic, automated collection of surveillance and laboratories data, based on electronic health records could speed up their gathering and analysis and free up time of professionals in countries for other tasks and provide quickly available data to support the response to threats. Further implementation of electronic health records standardisation and use (and the inclusion of parameters important for public health) is needed, as well as the ~~application~~ support of Artificial Intelligence for data validation, analysis and automated reporting.

In particular, ECDC aims at realising the European Commission vision stated in the *Communication from the Commission on enabling the digital transformation of health and care in the Digital Single Market; empowering citizens and building a healthier society*, and of benefiting from *Commission Recommendation on a European Electronic Health Record exchange format*, specifically in the area of laboratory data and vaccination data. ECDC will pay particular attention to supporting an informed interpretation of the GDPR when it comes to the secondary use of data for public health research and surveillance, taking advantage of the actions foreseen in the *Commission Communication on 'A European strategy for data'* and the implementation of the Common European health data space programme and digital solution. Furthermore, ECDC will provide the European Commission with an initial set of surveillance and public health requirements for:

a. the development of a Code of Conduct for processing personal data in the health sector as foreseen in the above-mentioned Commission Communication,
b. provision on epidemiological requirements and standards for the integration, analysis and use of relevant data. This work should enable ECDC to act as a 'node' to the ~~Common~~ European Health Data Space, once this is operational.
c. ~~Definition~~ Design of appropriate epidemiological validation studies for electronic health records data ~~in the Common European health data space~~ to be performed ahead of using such data for public health decision making.

Furthermore, we will assess how novel laboratory diagnostic technologies can contribute to more timely and effective surveillance and provide Member States and the European Commission with a roadmap for their gradual integration in routine practice.

In 2021, ECDC will achieve the following milestones:

1. Obtain the first insights on epidemiological, technical and legal challenges when querying electronic health record data and pooling these in the context of EU-level disease surveillance (initial findings from eHealth proof-of concept studies to be piloted in 2021).
2. Deliver to the eHealth Network, the European Commission and Member States, an initial assessment of current obstacles and limitations for the use of electronic health information for infectious disease surveillance.
3. Assess the impact on public health key functions of new digital and laboratory diagnostic technologies and develop a roadmap for their gradual integration in routine practice.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
3.3.1	**Explore the feasibility and added public health value of surveillance, based on electronic health records for few diseases in selected countries**	- Data on feasibility - Data on limitations and weaknesses - Initial recommendations for informing health information system developments in the Member States.	- E-health programme: Implementation according to project plan (schedule, resources and scope)	- Initial Proof of Concept results delivered to ECDC - Initial assessment on obstacles and limitations for the use of electronic health information systems for infectious disease surveillance	Yes
3.3.2	**Modernise and integrate EU/EEA surveillance platforms**	- Interoperable EU/EEA indicator-based, event-based and genomic surveillance - Better user experience for the Member States.	- System downtime - EpiPulse internal and external user rating	- EpiPulse and new data warehouse up and running; - Smooth Atlas update and AER production	No
3.3.3	**Assess the potential impact on public health key functions of recent advances in digital technology and microbiological diagnostics to guide the future technical direction of the Centre.**	- Gradual implementation of relevant technological advances in public health functions to support the prevention and control of infectious diseases. - Improved efficiency and/or effectiveness of prevention and control of infectious diseases at EU and Member State level through the adoption of new technologies	Roadmap for gradual integration of new technologies; Implementation according to project plan (schedule, resources and scope)	- Mapping of technologies that have the potential to impact public health key functions. - Roadmap for gradual integration of new technologies in routine practice.	No
3.3.4	**Implement the molecular surveillance strategic framework**	Molecular typing surveillance schemes are operational for diseases prioritised under the ECDC molecular surveillance strategic framework. Improved efficiency and/or effectiveness of prevention and control of infectious diseases at EU and Member State level through the implementation of molecular surveillance.	Proportion of diseases with integrated WGS surveillance schemes as per strategic framework	- Ongoing molecular typing surveillance for all diseases planned for implementation in 2021	Yes
3.3.5	**Automate signal detection from social networks**	ECDC able to automatically detect and monitor events and threats through social media Improved detection of cross border public health threats allowing the Commission and Member States to act rapidly.	- Number of events and threats detected automatically from social media	- Tool for detecting and monitoring events from social networks	Yes

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
3.3.1	- E-health programme: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting

3.3.2.	- Indicator-based surveillance platform downtime - EpiPulse internal and external user rating		- Downtime reduced by ≥50% compared with baseline - User satisfaction ≥80%	- IT statistics - User survey
3.3.3.	Roadmap for gradual integration of new technologies: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
3.3.4	Proportion of diseases with integrated WGS surveillance schemes as per strategic framework	n/a	>50%	WGS data reported to ECDC
3.3.5	Number of new events and threats detected automatically from social media	n/a	24 (~ 2 per month)	Epidemic Intelligence tool

Resources:

3.3 Support transformation	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~11.89~~ **FTE**	**2.8 FTE**	~~14.6~~11.8 **FTE**
Total budget for this activity	**€ 840,600**	-	**€ 1,993,094**

Strategic objective 4. Increase the health security in the EU through strengthened cooperation and coordination between ECDC and partners in non-EU countries

As reminded by the COVID-19 pandemic, by nature, and with increased global mobility, pathogens and communicable diseases do not respect borders. International coordination and cooperation has been reaffirmed as a critical aspect of handling and controlling the pandemic. This is relevant for the immediate neighbourhood of the EU and the rest of world. Therefore, cooperation with international partners, such as WHO, other centres for disease prevention and control, the European Commission and the other EU Institutions is more than ever of foremost importance to protect the European citizens. The most effective way to protect EU citizens against communicable disease outbreaks is to contain them at the source before they spread further, through strengthened resilience and capacities of countries outside the EU, and to get as early as possible the most reliable information through active networking.

4.1. Neighbourhood: Develop and implement, together with partners, a comprehensive programme to support the Western Balkans and Turkey and ENP partner countries to strengthen their infectious disease prevention and control systems and public health workforce

Overview

With the external financial assistance by DG NEAR under IPA and ENI ECDC will implement a comprehensive programme of two ECDC Actions, one aimed to support Western Balkans and Turkey in their preparation to participate in the ECDC upon their accession to the EU and second – to support ENP partner countries in accordance with the Association Agreements between several ENP partner countries and the EU, based on their interest in further deepening cooperation with ECDC. The programme activities will aim at strengthening capacities, skills and institutional mechanisms for prevention, preparedness and response to health threats; supporting implementation and approximation of the EU acquis, standards and best practices; and contributing to training programmes in field epidemiology. The programme will include the following ECDC actions:

- a technical cooperation action for Western Balkans and Turkey under the EU Instrument of Pre-accession Assistance, to support: (a) their preparations for participation in ECDC activities, networks and systems and (b) their advancement on 'One-Health' approach against AMR; pending approval for additional financial assistance by DG NEAR, additional ECDC activities will aim to boost the capacities of national authorities in Western Balkans to respond to public health emergencies based on lessons learned from COVID-19 pandemic;
- an action on strengthening health security in EU neighbourhood which covers Western Balkans, Turkey, ENP East and ENP South regions financed by the European Commission under ENI to support setting up a regional competent workforce for the prevention and control of challenges posed by communicable diseases and to enhance regional cooperation to tackle cross-border health security threats – EU Initiative on Health Security. The programme will focus on:

  (a) Workforce oriented capability building, to be delivered through Mediterranean and Black Sea Programme for Intervention Epidemiology Training (MediPIET) ~~increasing capabilities including through the continuation of the existing EU-funded MediPIET~~;

  (b) Strengthening public health systems and capacities to assess, detect, respond and prevent threats from communicable diseases. This will include activities such as: assessment of partner countries' levels of preparedness to public health emergency preparedness, support with public health emergency preparedness and response planning, development of protocols for after-actions review, training on epidemic intelligence and rapid risk assessment, organisation of scenario-based workshops and simulation exercises;

  (c) ~~supporting participation in ECDC activities~~ Integration into ECDC systems, knowledge sharing and networking that will include participation in the meetings of National Focal Points for Threat Detection,

Preparedness and Response, in different ECDC organised events and to a possible extent integration of partner countries into ECDC systems;

(d) Enhancing regional cooperation.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
4.1.1	**Gradually integrate Western Balkans and Turkey into ECDC systems and networks via enhanced technical cooperation and support their preparations for participation in ECDC activities and their advancement on 'One-Health' approach against AMR**	- National experts from Western Balkans and Turkey participate in ECDC technical cooperation activities as described in the ECDC-IPA6 Action description - Increased technical communication and networking among Western Balkans and Turkey, EU Member States and ECDC	- Participation rate and satisfaction in ECDC activities by Western Balkans and Turkey - Technical cooperation on One health against AMR: Implementation according to project plan (schedule, resources and scope	- ECDC pre-accession assistance activities to prepare Western Balkans and Turkey for their participation in ECDC - Technical cooperation activities initiated on the One-Health approach against AMR.	No
4.1.2	**Support the progressive integration of ENP partner countries into ECDC activities and enhance health security through improving public health systems capacities and capabilities, including training through the continuation of MediPIET to respond to health threats related to communicable diseases and enhancing regional cooperation**	- ENP countries and ECDC jointly implements activities as described in the EU Initiative on Health Security	- Activities as described in the EU Initiative on Health Security: Implementation according to project plan (schedule, resources and scope	- Development of work plan to deliver Epidemic intelligence, risk assessment, preparedness and response capacity building activities ~~Activities to set up a regional competent workforce for the prevention and control of challenges posed by communicable diseases and to enhance regional cooperation to tackle cross-border health security threats.~~ - Develop criteria for integration of ENP partner countries into ECDC systems and networks - Perform baseline measurement on vulnerabilities and needs of ENP countries	No
4.1.3	**Following the request from European Commission, continue assessment of partner non-EU countries and follow-up the assessment of Western Balkans and Turkey and ENP partner countries**	- Subject to European Commission's request, at least one country assessment finalised and follow-up the assessment of Western Balkans and Turkey.	- Uptake of ECDC recommendations by countries - Number of countries who have developed a post-assessment action Plan	- Technical assessment reports and initiation of national post-assessment action plans	No
4.1.4	**Manage MediPIET, under the ECDC action on strengthening health security in EU neighbourhood financed by the European Commission**	- MediPIET part of Health Security Initiative, funded by DG-NEAR covering Western Balkans and Turkey European Neighbourhood Policy (ENP) countries. - Increased synergy with EPIET - MediPIET will complement capacity building with the participation of alumni into operational cross-border activities	- Number of MEDIPIET enrolled fellows per country - Proportion of participants that consider the training useful - Proportion of countries that consider the training useful	- Fourth Cohort of MediPIET, selected and training started, with on the job projects and modules implemented. - Annual meeting of steering committee - MediPIET managed by ECDC, and aligned with ECDC fellowship programme and other ECDC training approaches	No

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
4.1.1	- Participation rate and satisfaction in ECDC activities by Western Balkans and Turkey	75% participation	85% participation and 80% satisfaction	This includes: - Attendance to meetings (source: SRM) - Participation in surveys (e.g. ENLabCap) - Data reporting (e.g. ETMS)
	- Technical cooperation on One health against AMR: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
4.1.2	- Activities as described in the EU Initiative on Health Security: Implementation according to project plan (schedule, resources and scope		Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
	- Attendance rate and satisfaction in meetings and ECDC activities by ENP countries	75% participation	85% participation and 80% satisfaction	SRM system, and international relations statistics
4.1.3	- Uptake of ECDC recommendations by countries	49	65	International relations section
	- Number of countries who have developed a post-assessment action Plan	4	tbc	tbc
4.1.4	- Number of MEDIPIET enrolled fellows per country	tbc	Tbc	MEDIPIET statistics
	- Proportion of participants that consider the training useful	n/a	80%	Satisfaction forms
	- Proportion of countries that consider the training useful	n/a	80%	Assessment performed during the annual meeting

Resources:

4.1 Neighbourhood	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~19.7~~15.0 FTE	4.7 FTE	~~20.8~~19.7
Total budget for this activity	€ 114,000	-	1,805,908
ECDC-IPA6 grant	€ 1M	FTEs integrated under the relevant strategic objectives	
EU Initiative on Health Security grant	€ 9M EUR		

4.2. Major CDCs: Increase ECDC's collaboration with major centres for disease prevention and control

Overview

ECDC will foster bilateral cooperation with major CDCs for which cooperation arrangements are in place, such as the U.S. CDC, China CDC, Public Health Agency of Canada and the Israel CDC. In addition, potential benefit of initiating new administrative arrangements in particular with the Caribbean Public Health Agency (CARPHA), the Ministry of Health of Mexico, Korea Disease Control and Prevention Agency, the Ministry of Health and Welfare and the Ministry of Health of Singapore will be explored.

~~Depending on~~ With external funding from European Commission, DG DEVCO, a technical four-year partnership with Africa CDC will be initiated that will aim to contribute to improving health security in Africa, by sharing EU practices and strengthening Africa CDC capacities in preparedness, surveillance, and response to health threats posed by communicable diseases ~~subject to the external EU funding by the European Commission~~. This development cooperation project ECDC4Africa CDC will serve as a foundation for the signature of ECDC and Africa CDC/African Union Commission collaboration agreement in pre-defined areas of mutual benefit.

The Agency will increase collaboration with major CDCs via a Network of major CDCs. Areas of possible multi-lateral cooperation will include: (a) global health security and in particular supporting the implementation of the International Health Regulations (IHR) core capacity standards in close collaboration with WHO; (b) workforce development on infectious diseases; (c) sharing experience and best practice on emergency response including on deployments and training; (d) information sharing in real time and in a structured way; and (e) sharing good practice/information including coordination in field and consultation on projects.

The missions of scientific journals/bulletins published by global centres for disease prevention and control differ from those of non-commercial publishers. In particular, in times of public health crisis they may play an important role in public health, supporting decision making by sharing emerging evidence, openly and in a timely manner. At the same time, they may face similar challenges with regards to following new developments in reporting and publishing standards, and visibility and in positioning themselves as reputable and high-quality information sources. A community of practice among editors of journals published by global organisations/ centres for disease prevention and control would allow to identify commonalities and synergies e.g. when communicating during times of crises.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
4.2.1	**Strengthen the bilateral and multilateral collaboration with major CDCs for which cooperation agreements are signed and with potential new bilateral cooperation partners**	- 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 between ECDC and those organisations. - Implementation of joint action plans in specific work areas.	- Rating of meetings organised with CDCs; - Number of MoUs/Administrative Arrangements evaluated; - Rate of implementation of joint plans	- ~~Monitoring framework of collaboration agreements~~ - ~~Joint action plans elaborated, if applicable.~~ - Regular exchange of information and practices through face- to-face meetings and teleconferences. - Cooperation with CDCs having formal bilateral arrangements with ECDC (MoU, administrative arrangements) evaluated; - Joint Action Plans, based on the MoUs; - ~~Possibilities to e-~~Establishment of processes and procedures for the rapid exchange of information in	No

				outbreak situations explored and taken forward.	
4.2.2.	**Evaluation and consolidation of the cooperation within the Network of major CDCs, and expansion of the network**	- Regular interaction with the Network of major CDCs and regular exchange of good practices in outbreak situations allows a more efficient global assessment and response to outbreaks and pandemics; - Network extended to additional CDCs;	Number and rating of meetings of the Network of major CDCs organised; Number of additional CDCs interested to join the Network.	- Regular exchange of information and practices through face- to-face meetings or teleconferences; - Assessment of the added value of multilateral collaboration among major CDCs; - Consolidation and further expansion of the Network to other CDCs explored; - Good practices/control options in outbreak situations or approaches in the prevention and control of infectious diseases threats identified.	No
4.2.2	**Initiate the implementation of a 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**	- Defined technical activities of the ECDC partnership with Africa CDC in preparedness, risk assessment, rapid response, and emergency operations, as well as support to continental harmonised indicator- and event-based surveillance of infecticus diseases	- ECDC4Africa CDC' project: Implementation according to project plan, as agreed with Africa CDC (schedule, resources and scope)	- Agreed cooperation framework between ECDC and Africa CDC for implementation of technical partnership over defined period of time	No

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
4.2.1	Rate of implementation of Joint action plans, when available	n/a	80%	Joint action plans
4.2.2	Attendance rate in ECDC meetings		85%	Attendance to both virtual and physical meetings organised by ECDC
4.2.3	- ECDC4Africa CDC' project: Implementation according to project plan, as agreed with Africa CDC (schedule, resources and scope)	n/a	Inception report with plan of activities	Quarterly ECDC Portfolio Steering Committee reporting

Resources:

4.2 Major CDCs	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~12.5~~9.5 FTE	3 FTE	~~15.5~~12.5 FTE
Total budget for this activity	€ 45,000	-	€ 1,108,930
ECDC4Africa CDC grant	€ 9M	FTEs integrated under the relevant strategic objectives	

4.3. Coordination: Ensure seamless coordination with EU and international partners to enable achievement of common objectives

ECDC will strengthen coordination and collaboration with key partners, both at the EU level and at the global level. This will include:

- Coordinating with the EU Institutions and bodies particularly the European Commission (DG SANTE, DG ECHO, DG NEAR, DG DEVCO) and the European External Action Service (EEAS), to ensure ECDC international actions are coherent with the EU's priorities and policy objectives. ECDC will continue to strengthen its collaboration with the European Parliament, and in particular with the Committee for Environment, Public Health and Food Safety (ENVI) and the Council. Collaboration with other EU agencies in particular with environmental and health agencies such as the European Food Safety Authority (EFSA), the European Medicines Agency (EMA), European Chemicals Agency (ECHA), the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and the European Environment Agency (EEA) to be further enhanced and potential synergies with additional agencies and partners will be explored.
- Strengthening collaboration with WHO will be further intensified towards building a productive and efficient partnership in addressing serious cross-border threats to health posed by infectious diseases and contributing to health security. Messages will be aligned and double reporting by member States will be reduced.
- Investing in further developing organisational and procedural issues for managing requests for technical and scientific assistance submitted to ECDC, including the mobilisation of experts and/or fellows of ECDC Fellowship Programme by ECDC to support EU response actions in the field.

ECDC also nurtures the relationship with its host country, Sweden, and with key stakeholders at the EU-level, such as the collaboration with the European Health Forum Gastein (EHFG).

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
4.3.1	**Nurture the collaboration and coordination with the EU Institutions and bodies particularly the European Commission (DG SANTE, DG ECHO, DG NEAR, DG DEVCO) and the European External Action Service (EEAS) and other EU agencies in particular with the European Food Safety Authority (EFSA) and the European Medicines Agency (EMA)**	- Strengthen further collaborative and coordination interaction with the EU Institutions and in particular the European Commission for increased sharing of information, effective communication and alignment of actions. - Enhance collaboration with other EU Agencies aiming at sharing knowledge and best practices and potential synergies and joint activities	- Number and proportion of requests from the European Commission and Member States answered within agreed deadlines - Number of reference to ECDC in the EU legislation or in EU policy documents	- Enhanced channels of close collaboration for effective coordination and interaction with the European Commission, the EEAS, the European Parliament and the Council Secretariat. - Identification of potential areas of collaboration and joint work with other EU Agencies. - Optimisation of ECDC's strategic communication and capacity building to relevant policy stakeholders in the EU Institutions	No
4.3.2	**Invest in maintaining appropriate relationships with the European Parliament, in particular with the Committee for the Environment, Public Health and Food Safety (ENVI).**	- Ensure continuous and smooth relations with the European Parliament and its Members, and provide information and support on infectious disease specific topics	- Number and proportion of requests from the European Parliament answered within agreed deadlines - Participation by ECDC to European Parliament events and meetings	- ECDC Director's annual exchange of views with the ENVI Committee and hearings before Parliamentary Committees upon request. - Provision of scientific opinions as requested by EP. - Information of ECDC activities and of the Centre's disease specific areas in a format useful for making decisions.	No

4.3.3	**Enhance further collaboration with WHO to ensure complementarity of actions and avoid duplication of efforts**	- Added value to the countries through collaborative and joint efforts of ECDC and WHO/Europe experts and decreased burden for the Member States for reporting (to avoid double reporting) and ensure synergy and complementarity of effort	- Rate of implementation of annual joint action plan	- Reviewed set of processes for joint activities under the bilateral administrative arrangements and finalising the publications agreement - Revision of the Administrative arrangement between ECDC and WHO/Europe	Partially

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
4.3.1	- Number and proportion of requests from the European Commission and Member States answered within agreed deadlines	tbc	95%	SARMS
	- Number of references to ECDC in the EU legislation or in EU policy documents	n/a	tbc	Bibliometric analysis
4.3.2	- Number and proportion of requests from the European Parliament answered within agreed deadlines	tbc	tbc	SARMS
	- Participation by ECDC to European Parliament events and meetings			Stakeholder Relations Management system (SRM)
4.3.3	- Rate of implementation of annual joint action plan	75%	90%	Monitoring of Annual Joint action plan

Resources:

4.3 Coordination	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	~~2.2~~1.7 FTE	0.5 FTE	2.~~7~~ 2 FTE[21]
Total budget for this activity	€ 12,000	-	€ 247,013

[21] These FTEs are only for the coordination of the activities. All operational and scientific work is difficult to estimate beforehand as it depends of the nature of the requests.

Strategic objective 5. Transform the organisation to the next generation ECDC

To implement the ECDC strategy 2021-2027 and achieve its vision, ECDC will gradually streamline and strengthen the efficiency of its structure, systems and processes, and adapt the skills and competencies of its staff. ECDC will reinforce its communication, the awareness and visibility of its outputs, products and tools for health professionals and citizens, as well as the strategic relations with its main stakeholders.

5.1 Integrated management framework: Increase organisational effectiveness and efficiency through improved processes and enhanced monitoring of organisational performance

Overview

To enhance the overall organisational management, ECDC will review its present management framework and make necessary changes and improvements to have in place an integrated management framework, including laying the foundations for the necessary IT systems. The aim is to improve the Centre's ability to work in a more effective and efficient way, through optimised processes and enhanced project management. ECDC should also be able to continuously monitor its overall performance against its strategic goals through new set of Key Performance Indicators (KPIs), based on the ECDC intervention logic, and also provide more accurate and timely information on the use of its human and financial resources. The overall organisational effectiveness and efficiency will increase through the establishment of a quality assurance and continuous improvement system for the Centre, as well as ~~With a continuous improvement approach in mind, e.g.~~ through the systematic use of lessons learnt and other assessments.

In order to achieve the objective of transforming the organisation, a roadmap for the IT applications for the steering and supporting activities will be initiated in 2020, leading to a start of the implementation of a revised architecture in 2021. This will support the ongoing work to improve the overall performance management of the organisation, improve the Centre's ability to better steer and support its operations while better managing ECDC information assets.

ECDC also aims at transforming the administrative services provided to the operational units. This will entail targeted work in specific areas or sections, as well as reaching broad goals, such as developing integrated strategic plans for support services; agreeing on expected service levels with clients, improving planning and execution of supportive services; reducing the quantity of transactions required for work plan implementation; ensuring an active and nuanced management of risk across the organisation and its support services; deploying fully paperless support services based on electronic workflows and aligned/integrated systems; and developing easier-to-access support tools, facilitating knowledge and capacity building.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
5.1.1	**Review and mapping ~~optimise a subset~~ of ECDC key processes**	- Improved quality, timeliness, and reduced cost through optimised key processes of the Centre	- Processes reviewed and ~~optimised~~ mapped - Proportion of processes digitalised as per roadmap for digitalisation	- Library of ~~optimised~~ ECDC key processes mapped - Two key processes ~~re-engineered and~~ digitalised	Yes
5.1.1	**Introduce an integrated management framework *(including frameworks for governance,***	- Increased effectiveness and efficiency of ECDC work practices - Increased implementation of ECDC key activities	- Proportion of activities implemented in the SPD* - Rate (%) of external and accepted internal audit recommendations implemented within	- Agreed system for instructional documents - Identified areas for improvement through a gap analysis - Improved monitoring system	Yes, partially

	***performance management, quality management system and internal controls)* and a learning culture**	- Learning culture gradually diffused within the Centre	agreed deadlines (excluding 'desirable')* - Implementation of the integrated management framework as per roadmap	- IT support in place Baseline for administrative services strategy and goals defined, agreed service levels with clients, and assessment of current services and gap analysis performed. - Learning culture framework introduced to increase the acceptance and use of different assessments (e.g. evaluations, audits, lessons learned etc.)	
5.1.2	**Initiate the implementation of the selected Quality Management system at ECDC**	- A quality assurance system strengthens the quality of ECDC work and its continuous improvement	- Implementation of the selected Quality Management system at ECDC: Implementation according to project plan (schedule, resources and scope)	- Gap analysis of ECDC current practices versus the selected standard - Approach for the implementation of the QM standard	Yes
5.1.3	**Implement integrated system of Key Performance Indicators to support the achievement of Strategic Objectives**	- Improved achievement of set targets through enhanced KPIs and their monitoring	- Management of Key performance indicators: Implementation according to project plan (schedule, resources and scope) - Rate of completeness of the results reported in the annual report - Percentage of indicators reaching the target	- KPI tree based on ECDC intervention logic - Scorecard concept, with graphical representation of the different levels of reporting. - IT tool to manage multiannual and annual KPIs.	Nc
5.1.4	**Gradual implementation of the roadmap for the IT Integrated Management Systems**	Integrated management framework operational with integrated and automated IT tools	- Roadmap for IT Integrated Management Framework systems: all milestones timely implemented as per roadmap	- Document describing the applications architectural roadmap for integrated steering and support systems at ECDC - Developed "To-Be" Applications landscape poster	- Nc
5.1.5	**Implement the action plan stemming from ECDC third external evaluation**	- ECDC operations, effectiveness and efficiency improved	- Action plan implemented according to the proposed timeline	- Action plan approved by the Management Board and implemented	No

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
~~5.1.1~~	- Proportion of key processes reviewed ~~and optimised~~ mapped	n/a	20%	Monitoring of the list of key processes
	- Proportion of processes digitalised as per roadmap for digitalisation	n/a	100% as per roadmap	Monitoring of the roadmap for process digitalisation
5.1.1	- Proportion of activities implemented of the annual work programme*	89%	85%	Annual report
	- Rate (%) of external and accepted internal audit recommendations implemented within agreed deadlines (excluding 'desirable')*	80%	90%	Internal control
	- Integrated management framework: proportion of deliverables timely implemented as per project plan	n/a	100%	Project plan

5.1.2	- Implementation of the selected Quality Management system at ECDC: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
5.1.3	- Key performance indicators management process: Implementation according to project plan (schedule, resources and scope)		Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
	- Rate of completeness of the KPI results reported in the annual report	tbc	100%	ECDC annual report
	- Percentage of indicators reaching the target (90%)	tbc	90%	ECDC annual report
5.1.4	- Roadmap for IT Integrated Management Framework systems: all milestones timely implemented as per roadmap	n/a	90%	Project/programme documentation
5.1.5	- Action plan implemented according to the proposed timeline	n/a	Implementation according to project plan (schedule, resources and scope)	Action plan as approved by the Management Board

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

Resources:

5.1 Integrated Management Framework	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	**1.9 FTE**	-	**1.9 FTE**
Total budget for this activity	-	-	**€ 1,930,328,**

5.2. Engaged staff: Recruit and retain capable, motivated, and resilient staff

Overview

Human Resources management services are designed to capture and respond to current and future capacity needs of Units by supporting the development of staff and through effective and efficient recruitment services and supported by a comprehensive framework to enhance well-being and a healthy work-life balance of staff. In the long-term, ECDC will work to achieve the results articulated in the multi-annual programme above, with the below objectives, results and outputs in 2021.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
5.2.1	**Transform human resources management and provide effective and efficient**	- ECDC has a sufficient number of skilled staff to ensure the implementation of the work programme	- Proportion of organisational entities (units, sections, groups)	- Skills gaps analysis supporting the strategy 2021-2027 with specific focus on the expert competencies finalised (to be used for recruitment and training plans)	Yes

	Human Resources services	- Foundation for developing an agile workforce; - Enhanced effectiveness of management; - Enhanced wellbeing at all levels and healthy work environment for staff;	covered by the Skills gap analysis - Timeliness of recruitment process - Percentage of staff satisfaction/engagement* - Number of (short term and long term) sick leaves* - Average vacancy rate (post occupied)*	- Internal mobility framework taking into account the Centre's strategic priorities, staff development and the applicable regulatory context. - Management training as well as targeted management coaching to support the development of the concept management by objectives - Stress Prevention Programme – further activities accomplished to build up staff resilience in view of the Next Generation ECDC (linked to new strategy) - Timely adoption of new implementing rules	

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

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

Measurement of objective above	**Performance indicator**	**Baseline 2019**	**Target**	**Means of verification**
5.2.1	- Proportion of organisational entities (units, sections, groups) covered by the Skills gap analysis	n/a	100%	Results of the skill gap analysis
	- Timeliness of recruitment process	10.7 weeks	12 weeks as from vacancy notice deadline	HR services statistics
	- Percentage of staff satisfaction/engagement	51%	75%	Biannual staff survey
	- Number of (short-term and long-term) sick leaves*	1.82% (short-term) 3.28% (long-term)	<2% (short-term) <3% (long-term)	HR statistics (Short term up to 4 weeks; long-term: 4 weeks and longer)
	- Average vacancy rate for Temporary Agent posts (post occupied)	3.3 % (96.7 % occupied)	5%	% of authorised posts of the annual establishment plan (temporary agents) which are vacant at the end of the year, including job offers sent before 31st December

Resources:

5.2 Engaged staff	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	**11.6 FTE**	-	~~2.411.6~~ **FTE**
Total budget for this activity	-	-	**€ 1,457,241**

5.3. Stakeholders and external communication: Enhance the transparency, visibility, and availability of ECDC's outputs

Overview

ECDC has an important role in reaching health professionals and policymakers across Europe, enabling them to act on the basis of the best available information and evidence.

The Centre disseminates its content through an array of communication channels, including web and social media, and in close partnership with communication experts across Europe. ECDC publishes information about its work in a transparent manner to maintain its reputation and build visibility, as well as supports national authorities and other stakeholders in efforts to reach their citizens.

In 2021, ECDC will focus on developing further its online presence on the web and social media. In order to reach out with ECDC messages and content, a comprehensive stakeholder's engagement programme will be set up and complemented by a public relations plan.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
5.3.1	**Develop a comprehensive stakeholder engagement programme to identify, engage and mobilise institutional and non-institutional stakeholders**	- Increased visiblity of ECDC among stakeholders, and mobilisation for them to act as ambassadors of ECDC's messages	Mapping of stakeholders: Implementation according to project plan (schedule, resources and scope)	- Stakeholder Engagement Programme	Yes
5.3.2	**Improve and further develop ECDC online presence strategically, ensuring that the content on its main website and its sub-sites is driven by audience-oriented content strategy, improving the transparency, visibility and availability of ECDC outputs**	- Improved website	- Number of visitors and sessions - Number of downloads on the website (measures users re-use ECDC data and publications) - Proportion of returning vs new visitors on the website (measures visitors' loyalty and engagement)	- Improved ECDC website	No
5.3.3	**ECDC will redefine and enhance its social media presence and engagement**	- ECDC visibility enhanced	- Number of followers and rate of engagement and interaction with of ECDC social media channels - Number of participants to online and offline events - Number of participants in online campaigns and discussions - Number of multimedia content produced	- Enhanced Social Media presence, activities and engagement - Rise of the ECDC brand knowledge, familiarity and reliability - Recognition of ECDC's communication online and offline - Production of multimedia content	No
5.3.4	**Develop and implement a Public relations plan to foster ECDC's**	- Public relation plan approved	Public relations plan: Implementation according	- Public relation plan developed	Partially

	reputation management		to project plan (schedule, resources and scope)		
5.3.5	**Maintain and enhance the cooperation with key stakeholders at the EU-level, including relations with our host country**	- Collaboration with stakeholders and host country enhanced. Policy-makers, public health professionals and NGOs get scientific evidence for decision making through organised events	Satisfaction of participants at Gastein seminar	- Session organised by ECDC at the European Health Forum Gastein 2021 - Liaison and actions as per the agreement regarding strategic co-operation between ECDC and the Swedish Government, including sharing of experiences, and expertise with the Swedish authorities	yes

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
5.3.1	Mapping of stakeholders: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
5.3.2	- Number of visitors and sessions - Number of downloads on the website (measures users re-use ECDC data and publications) - Proportion of returning vs new visitors on the website (measures visitors' loyalty and engagement)	Visitors 14% Sessions 7% 10% 48 %	+10% +5% +7% Above 40%	Website statistics
5.3.3	- Number of followers and rate of engagement and interaction with of ECDC social media channels - Number of participants to online and offline events - Number of participants in online campaigns and discussions - Number of multimedia content produced	tbc tbc tbc tbc	+20% +20% +20% +20%	Social media statistics
5.3.4	Public relations plan: Implementation according to project plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	Quarterly ECDC Portfolio Steering Committee reporting
5.3.5	Satisfaction of participants at Gastein seminar	tbc	80%	Participants survey

Resources:

5.3 Stakeholders and external communication	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	**4.7 FTE**	-	**4.7 FTE**
Total budget for this activity	**€ 503,200**	-	**€ 1,970,343**

6. Support services

1. Digital Transformation Services

Overview

ECDC provides digital solutions for the Commission, Member States and other stakeholders. It is also ECDC's legal duty to host and maintain EU's cross-border public health threats Early Warning and Response System (EWRS). Digital solutions and common initiatives at EU level like European Health Data Space (EHDS) are instrumental for the operation of the Centre.

ECDC provides its staff with a digital workplace that addresses the needs for mobility, flexibility, communication and collaboration.

In order to provide state of the art IT solutions and services, DTS builds and maintains business acumen in addition to its technology expertise.

Taking stock of the Target Operating Model and the ECDC IT Governance implemented in 2020, IT product and service portfolios are fit for purpose to address business needs.

ECDC continuously improves its digital infrastructure so that its critical underlying systems are kept secure and in a good shape.

After the achievement in 2020 of the handover of ECDC's IT products and infrastructure to external providers, the focus in 2021 will be on developing state-of-the-art IT tools, with high quality and availability and good users support. This includes a reliable data centre, data communications, overall security, business continuity capabilities, as well as a disaster recovery site. ECDC will sustain its contribution to open source with a joint initiative with DIGIT on Cloud security and also promote the awareness on available reusable solutions of the Commission by delivering a centralized repository for shared solutions.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
6.1.1	**ECDC supports public health by providing digital solutions for the Commission, Member States and other stakeholders. In addition, the Centre's operations are enabled with the necessary digital solutions for the steering and support of the Next Generation ECDC.**	- Enable ECDC to strengthen and apply scientific excellence in its activities and outputs by providing experts with the solutions they need. - Enable ECDC, by providing IT services and solutions, to support the countries to strengthen their capacities and capabilities to make evidence-based decisions on public health policies and practices. - Support and strengthen cooperation between ECDC and partners in non-EU countries by providing proper collaboration and communication solutions - Enable the organizational transformation to Next Generation ECDC by providing digital transformation services	- Business owners satisfaction - Implementation of the IT work programme according to plan (schedule, resources and scope) - Quality of software products	~~- Country support IT tool Phase 1: integrate and visualise data collected through various IT tools and mechanisms; including the external reference data sources already included through ECDC's Surveillance Data Warehouse.~~ ~~- Initiation of project to replace intranet, extranets and DMS by an Enterprise Content Management Platform~~ ~~- Continuation of Surveillance Systems Re-engineering project with the initiation of the Newly Integrated Data Validation Analysis and Access, and further development of the Surveillance Datawarehouse and ETMS.~~ ~~- Further development of EWRS based on the lessons learned from COVID-19~~ ~~- Finalize architecture roadmap for Steering and Support processes and initiate roadmap implementation~~ - New IT solutions and further development of IT products - IT product basic maintenance - IT quality, PMO, enterprise architecture and IT security services are provided	Yes No No

				with high quality	
6.1.2	**ECDC provides its staff with a digital workplace that addresses the needs for mobility, flexibility, communication and collaboration. Users can easily access the IT services they need via the front-office or self-service.**	- Ensure modern and sufficient equipment is available in order to increase efficiency. - Office 365 is rolled-out - Improved virtual meetings	- End-users satisfaction - Proportion of ICT Front-Office requests and incidents resolved as per SLA	- Continuation of Office 365 rollout, including OneDrive and Exchange online	Yes
6.1.3	**Prepare ECDC for the future through technology foresight and innovation**	- Adopt Artificial Intelligence (AI) and working on shared AI platforms - Develop competencies relevant to core business and maintain Institutional memory - Monitor and assess new technologies	- Number of Feasibility Studies performed per year - Number of Feasibility studies derived from the Technology Watch Report	- ~~Initiation of proof of concept for a COVID-19 Big Data repository and data analysis platform~~ - IT studies and advice	No
6.1.4	**ECDC continuously improves its digital infrastructure so that its critical systems fulfil business needs.**	- ECDC reaps the benefits of the cloud, the cost of infrastructure remains stable and the move to the cloud is based on security and DPIA risk assessments. - ECDC cyber resilience strengthened with the Implementation of an Information Security Management System - User identity and access management is redesigned to take into account new possibilities and business needs. - Coverage of Disaster Recovery is extended	- Availability of hosted applications under SLA	- Completion of a feasibility study for the review of ECDC Identity and Access Management - Initiation of the implementation of an Information Security Management System - IT operations and infrastructure services	Yes No No

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
6.1.1	- Business owners satisfaction	52%	57% (10% increase)	DTS dashboard
	~~- Schedule deviation (measured only completed projects and maintenances)~~			
	~~- Resources deviation~~			
	- Implementation of the IT work programme according to plan (schedule, resources and scope)	n/a	Less than 20% deviation from the duration, resources and scope of the initial baseline	
	- Quality of software products: Number of Critical and High severity defects for IT Products with high business impact (BIP = 1, 2)	For IT products with BIP 1 or 2: 0 Critical and 0 High	For IT products with BIP 1 or 2: 0 Critical and 0 High	

6.1.2	- End-users satisfaction surveys - Proportion of ICT Front-Office requests and incidents resolved as per SLA	75% 97% for requests and 96% for the incidents	At least 78% Above 95% for requests and above 95% for incidents	DTS dashboard
6.1.3	- Number of Feasibility Studies performed per year	n/a	at least 10	DTS dashboard
6.1.4	Availability of hosted applications under service level agreement (SLA)	~~99%~~	99% End-users: 78%; Business Owners: 62%	DTS Dashboard

Resources:

6.1 Digital Transformation	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	**6.9 FTE**	-	**6.9 FTE**
Total budget for this activity	**€ 5,743,000**	-	**€ 10,243,945**

2. Resource Management

Overview

Strategic and operational support services in human resources management, finance and accounting, corporate services as well as legal services and procurement are key to support the smooth running of ECDC operations.

The successful implementation of ECDCs strategy and ultimately its mandate is contingent on an effective and efficient backbone of resource management services. The Agency will develop its systems and processes with the aim of ensuring shorter planning and execution cycles across all services, while maintaining compliance with regulations.

Human Resources objectives, outputs and expected results are covered under 5.2 above and hence not repeated under support services.

Objectives, main outputs, and expected results in 2021

Nb.	Objective 2021	Expected result and EU added value	Performance indicator	Main outputs 2021	Can be depr.*
6.2.1	**Provide effective and efficient Procurement services**	- ECDC has services and goods available in the right quality and quantity and on time to pursue its mandate, by facilitating effective planning and execution of procurement and grants procedures	- Percentage of procurement/grant procedures launched at planned launch date - Percentage of changes made in the procurement plan throughout the year - Percentage of procurement/grant procedures completed within indicative minimum procurement/grant timelines	- All internal procurement approvals paperless (including contract signature) - Number of negotiated procedures/direct contracts reduced	No

6.2.2	**Provide effective and efficient Legal services**	- ECDC receives effective and efficient legal advice in matters related to the operational as well as administrative field of the Centre's activities	- Proportion of reviewed annual and specific declarations of interest for: o delegates to Governing Bodies; o invited experts and ECDC staff members before participation to meetings with scientific outputs; o invited experts and ECDC staff members before participation to Rapid Risk Assessments. - Proportion of replies to requests to document access within the legal deadline	- Legal Intranet page with key information available - Update existing Memoranda of Understanding (MoU) with other Agencies to comprehensively regulate areas of cooperation - Full compliance and establishment of routines for the implementation of the new Independence Policy for Staff - Development of an effective ex-post control strategy for the application of the Independence Policy and the Data Protection Regulation and dissemination of the results in the Technology watch reports	No
6.2.3	**Provide effective and efficient Corporate services**	- ECDC has established a sustainable, secure and healthy workplace that fosters innovation, and creativity, where staff and partners are equipped with the right tools, the adequate processes and environment they need to collaborate and deliver	- EU Eco-Management and Audit Scheme (EMAS): all milestones implemented as per project plan - ECDC's greenhouse gas emissions (CO_2) - Percentage of meetings launched at planned launch date - Percentage of changes made in the meeting plan throughout the year - Proportion of issues solved as per SLA [add one indicator for environment]	- Define a corporate services strategy or framework that aligns the Corporate Services structure and framework of services with ECDC long-term plan for enhancing efficiency and effectiveness; - Establish service level agreements for facilities management services; - Improve efficiency of registration of travel participants to ECDC events; - Reduce ECDC environmental footprint according to set objectives; - Develop building analytics, intelligent buildings and remote monitoring; - Increase the digitalisation of mailroom and archives.	- No
6.2.4	**Provide effective and efficient Financial Management services**	- ECDC ensures correct, sound, and efficient management of its financial resources	- Percentage of budget committed (C1) and percentage of payments executed (C1) in the same year as the commitment* - Percentage of invoices paid within the time limits of the ECDC Financial Regulation* - Rate of cancellation of payment appropriations* - Rate of outturn*	- Consolidation of the use of electronic commitments in Speedwell; - Further on-boarding suppliers into e-invoicing; - Enhance the financial reporting, forecasting and monitoring of the budget implementation throughout the Centre - Further support and monitor the decrease of payment delays throughout the Centre	- No

* Objectives/key outputs that could be deprioritised in case of emergency (yes/no)

Measurement of objective above	Performance indicator	Baseline 2019	Target	Means of verification
6.2.1	- Percentage of procurement/grant procedures launched at planned launch date	tbc	80%	Management information system
	- Percentage of changes made in the procurement plan throughout the year	tbc	20%	

	- Percentage of procurement/grant procedures completed within indicative minimum procurement/grant timelines	tbc	85%	Minimum timelines published on ECDC intranet per type of procedure
6.2.2	Proportion of reviewed annual and specific declarations of interest for: - delegates to Governing Bodies; - invited experts and ECDC staff members before participation to meetings with scientific outputs; - invited experts and ECDC staff members before participation to Rapid Risk Assessments. Proportion of replies to requests to document access within the legal deadline	- MB: 96% - AF: 89% - Senior managt: 100% - Ext. experts at meetings: 99% - Ext. experts for RRA: 100% n/a	100% for each category 100%	Report from the compliance officer Statistics from e-workflow (K2)
6.2.3	- EU Eco-Management and Audit Scheme (EMAS): all milestones implemented as per project plan - ECDC's greenhouse gas emissions (CO2) - Percentage of meetings launched at planned launch date - Percentage of changes made in the meeting plan throughout the year - Proportion of issues resolved as per SLA	n/a n/a tbc tbc n/a	100% Tbc 80% 20% 90%	Project plan Energy meters (electricity consumption), combined with consumption invoices Management Information System Ivanti system
6.2.4	- Percentage of budget committed (C1) and percentage of payments executed (C1) in the same year as the commitment* - Percentage of invoices paid within the time limits of the ECDC Financial Regulation* - Rate of cancellation of payment appropriations* - Rate of outturn*	98.5% committed 81.2% paid 93% 2.41% 3.23%	100% committed minimum 80% paid minimum 95% 2% 5%	ABAC

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

Resources:

6.2 Resources management	Operational staff and budget (T3)	Horizontal FTE admin support	Total staff and budget
Total FTEs for this activity	**7.3 FTE**	-	**7.3 FTE**
Total budget for this activity	-	-	**€ 2,457,116**

Annexes

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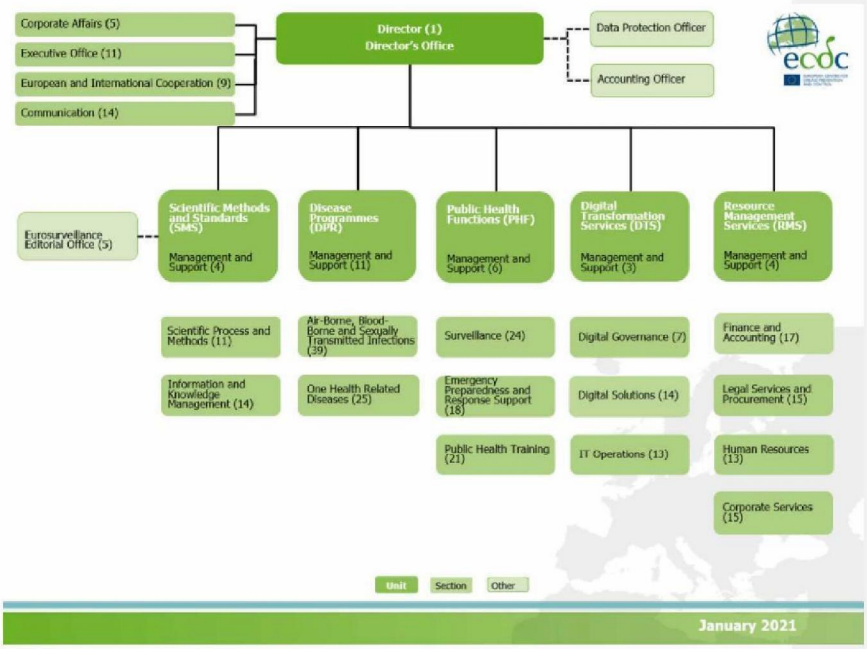
Annex I: Organisation chart N+1*



* Please note that PHF, DTS and RMS each have a Deputy Head of Unit who is also a Head of Section and therefore not included in the number of staff counted under "Management and Support". DPR has a Deputy Head of Unit (listed under "DPR Management and Support") who is also Deputy Chief Scientist.

** The number of posts allocated to the sections includes temporary posts allocated to respond to the COVID-19 pandemic as well as project posts which will be recruited in accordance with the needs to the project.

Annex II: Resource allocation per Activity N+1 – N+3

The resource allocation split by activities of the Centre is a provisional estimation based on figures from 2021. See details under Activity Based Budget (ABB) on p.77 below.

	2021		2022		2023	
Activities	FTE	Total Budget	FTE	Total Budget	FTE	Total Budget
1. Strengthen and apply scientific excellence	79.4	14,367,915	79.4	14,367,915	79.4	14,367,915
2. Support the countries to strengthen their capacities and capabilities	106.1	22,473,899	106.1	22,473,899	106.1	22,473,899
3. Future outlook	13.6	2,855,181	13.6	2,855,181	13.6	2,855,181
4. Cooperation and coordination with non EU countries	31.5	3,118,955	31.5	3,118,955	31.5	3,118,955
5. Transform the organisation	27.1	6,009,796	27.1	6,009,796	27.1	6,009,796
6. Support services	33.3	11,490,767	33.3	11,490,767	33.3	11,490,767
9. Neutral category as per benchmarking	28	3,000,487	28	3,000,487	28	3,000,487
Grand Total	**319**	**65,642,000**	**319**	**65,642,000**	**319**	**65,642,000**

Annex III: Financial Resources (Tables) N+1 – N+3

Annex III: Table 1: Expenditure

Expenditure	N (2020)		N+1 (2021)	
	Commitment appropriations	Payment appropriations	Commitment appropriations	Payment appropriations
Title 1	34 021 000	34 021 000	33 500 000	33 500 000
Title 2	8 603 000	8 603 000	8 005 000	8 005 000
Title 3	21 566 000	21 566 000	24 137 000	24 137 000
Total expenditure	**64 190 000**	**64 190 000**	**65 642 000**	**65 642 000**

EXPENDITURE	Commitment and payment appropriations						
	Executed Budget N-1 (2019)	Budget N (2020)	Draft Budget N+1 (2021)		VAR N+1 (2021) / N (2020)	Envisaged in N+2 (2022)	Envisaged N+3 (2023)
			Agency request	Budget Forecast			
Title 1 Staff Expenditure	**31 908 166**	**34 021 000**	**33 500 000**		-1.5%		
11 Salaries & allowances	28 137 860	29 705 000	29 685 000				
- of which establishment plan posts	*21 927 468*	*22 519 800*	*21 970 000*				
- of which external personnel	*6 210 392*	*7 185 200*	*7 715 000*				
12 Expenditure relating to Staff recruitment	430 524	435 000	393 000				
13 Mission expenses	565 365	390 000	550 000				
14 Socio-medical infrastructure	144 993	180 000	160 000				

15 Training	363 255	400 000	500 000		+25%		
16 External Services	2 235 379	2 872 000	2 177 000		-24.2%		
17 Receptions and events	30 790	39 000	35 000		-10.2%		
Title 2 Infrastructure and operating expenditure	**7 473 284**	**8 603 000**	**8 005 000**		-6.9%		
20 Rental of buildings and associated costs[22]	3 559 060	4 469 000	4 275 000		-4.3%		
21 Information and communication technology	2 501 869	2 465 000	2 800 000		+13.5%		
22 Movable property and associated costs	292 441	275 000	65 000		-76.3%		
23 Current administrative expenditure	217 364	290 000	230 000		-20.6%		
24 Postage / Telecommunications	132 528	185 000	185 000				
25 Meeting expenses	770 022	919 000	450 000		-51%		
26 Running costs in connection with operational activities							
27 Information and publishing							
28 Studies							
Title 3 Operational expenditure	**19 369 424**	**21 566 000**	**24 137 000**		+11.9%		
to be specified by chapter	**19 369 424**	**21 566 000**	**24 137 000**				
TOTAL EXPENDITURE	**58 750 874**	**64 190 000**	**65 642 000**		**+2.2%**		

[22] 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	Unit	Section	Final total allocation 2021 and 2022
BL 3000 - Integrated Surveillance, including Epidemic intelligence and Microbiology	Public Health Unit	Surveillance	**1,308,500**
BL 3001 - Preparedness and Response	Public Health Unit	Emergency preparedness and response support	**980,700**
BL 3002 - Scientific Processes and Methods	Scientific Methods and Standards Unit	Scientific process and methods	**900,000**
BL 3003 - Public Health Training	Public Health Unit	Public Health Training	**4,275,000**
BL 3004 - External communication	Director Office	Communication	**463,600**
BL 3005 - Information and Communication technologies	Digital Transformation Unit	all DT sections	**5,743,000**
BL 3006 - Information and Knowledge Management	Scientific Methods and Standards Unit	Information and knowledge management	**570,000**
BL 3007 - Air-Borne, Blood-Borne and Sexually Transmitted Infections	Disease Programmes Unit	Air-Borne, Blood-Borne and Sexually Transmitted Infections	**5,894,900**
BL 3008 - One Health related diseases	Disease Programmes Unit	One Health related diseases	**2,510,100**
BL 3009 - EU and external cooperation	Director Office	European and international Cooperation	**310,600**
BL 3010 - New health technologies assessment	Transversal activity	-	**730,000**
BL 3011 - Foresight assessment of future trends and threats	Transversal activity	-	**450,600**
TOTAL			**24,137,000**

Activity Based Budget 2021:

Strategic activity / Action / Expense / Resources	FTEs	Admin support	Title 1	Title 2	Title 3	TOTAL
⊟1. Strenghten and apply scientific excellence	90.5	20.8	7,631,194	1,553,723	5,483,100	14,668,017
⊞1.0 Management	1.5	0.4	213,732	21,375	-	235,107
⊞1.1 Standards	3.9	0.9	307,038	55,413	30,000	392,451
⊞1.2 Evidence	55.1	13.1	4,760,120	779,729	4,180,500	9,720,349
⊞1.3 Methodologies	3.0	0.6	304,743	294,821	136,200	735,765
⊞1.4 Knowledge transfer	27.0	5.7	2,045,561	402,385	1,136,400	3,584,346
⊟2. Support the countries to strenghten their capacities	116.5	27.8	10,166,026	1,649,721	10,939,300	22,755,048
⊞2.0 Management	2.0	0.5	288,073	28,810	-	316,883
⊞2.1 Country focus	11.1	2.6	963,837	156,829	1,491,900	2,612,565
⊞2.2 Prevention and control programmes	46.8	11.1	4,084,078	662,049	4,449,900	9,196,027
⊞2.3 Training	17.8	4.2	1,390,554	251,391	4,316,800	5,958,744
⊞2.4 Emergency preparedness	38.9	9.3	3,439,485	550,643	680,700	4,670,828
⊟3. Future outlook	15.0	3.6	1,381,744	212,241	1,297,400	2,891,385
⊞3.0 Management	1.0	0.2	139,390	13,940	-	153,331
⊞3.1 Foresight	1.2	0.3	161,040	16,728	450,600	628,368
⊞3.2 Engage	1.1	0.3	95,406	14,986	6,200	116,592
⊞3.3 Support transformation	11.8	2.8	985,907	166,587	840,600	1,993,094
⊟4. Increase EU health security through cooperation wit	34.6	8.2	2,541,294	490,445	171,000	3,202,739
⊞4.0 Management	0.3	0.1	37,171	3,717	-	40,888
⊞4.1 Neigbourhood	19.7	4.7	1,413,334	278,574	114,000	1,805,908
⊞4.2 Major CDCs	12.5	3.0	886,561	177,369	45,000	1,108,930
⊞4.3 Coordination	2.2	0.5	204,228	30,785	12,000	247,013
⊟5. Transform the organisation	19.6		4,356,745	947,528	503,200	5,807,473
⊞5.0 Management	1.4		429,738	19,823	-	449,562
⊞5.1 Integrated management framework	1.9		1,233,867	696,461	-	1,930,328
⊞5.2 Engaged staff	11.6		1,292,990	164,251	-	1,457,241
⊞5.3 Stakeholders and external communication	4.7		1,400,150	66,993	503,200	1,970,343
⊟6. Support services	14.8		4,493,324	2,755,527	5,743,000	12,991,851
⊞6.0 Management	0.6		282,293	8,496	-	290,789
⊞6.1 Digital Transformation Services	6.9		2,081,067	2,419,878	5,743,000	10,243,945
⊞6.2 Resource management	7.3		2,129,963	327,153	-	2,457,116
⊟9. Benchmarking	28.0		2,604,673	395,814	-	3,000,487
⊟9.0 Neutral category as per Benchmarking Methodol	28.0		2,604,673	395,814	-	3,000,487
⊟	28.0		2,604,673	395,814	-	3,000,487
⊞4556-1. Human Resources (Benchmarking)	1.7		170,031	24,071	-	
⊞4557-2. Finance and Accounting (Benchmarking)	17.0		1,512,392	240,713	-	1,753,105
⊞4558-3. Legal and procurement (Benchmarking)	3.2		315,435	45,364	-	360,798
⊞4559-4. Integrated Management Framework (Be	2.3		268,987	31,859	-	300,847
⊞4562-5. Corporate Services (Benchmarking)	3.3		299,169	46,727	-	345,896
⊞4563-6. Management and administrative suppor	0.5		38,658	7,080	-	45,738
Grand Total	319.0		33,175,000	8,005,000	24,137,000	65,317,000
SNEs			325,000	-	-	325,000
Grand Total	319.0		33,500,000	8,005,000	24,137,000	65,642,000

Annex III: Table 2 - Revenue

Revenues	N (2020)	N+1 (2021)
	Revenues estimated by the agency	Budget Forecast
EU contribution	62 701 000	63 955 000
Other revenue	1 489 000	1 687 000
Total revenues	64 190 000	65 642 000

REVENUES	N-1 (2019)	N (2020)	N+1 (2021)		VAR N+2 (2022) /N+1 (2021)	Envisaged N+2 (2022)	Envisaged N+3 (2023)
	Executed Budget	Revenues estimated by the agency	As requested by the agency	Budget Forecast			
1 REVENUE FROM FEES AND CHARGES							
2. EU CONTRIBUTION	57 387 854	60 821 653	62 485 694				
of which Administrative (Title 1 and Title 2)	38 467 078	40 387 321	39 509 289				
of which Operational (Title 3)	18 920 776	20 434 332	22 976 405				
of which assigned revenues deriving from previous years' surpluses	0	1 879 347	1 469 306				
3 THIRD COUNTRIES CONTRIBUTION (incl. EFTA and candidate countries)	1 363 020	1 489 000	1 687 000				
of which EFTA	1 363 020	1 489 000	1 687 000				
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	58 750 874	64 190 000	65 642 000				

Annex III: Table 3 Budget outturn and cancellation of appropriations

Calculation budget outturn

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

Budget outturn	N-4* (2017)	N-3* (2018)	N-2* (2019)
Revenue actually received (+)	58 553 000	58 069 000	60 316 000
Payments made (-)	47 792 000	47 369 000	48 441 000
Carry-over of appropriations (-)	10 986 000	10 304 000	11 671 000
Cancellation of appropriations carried over (+)	953 000	792 000	880 000
Adjustment for carry-over of assigned revenue appropriations from previous year (+)	402 000	498 000	259 000
Exchange rate differences (+/-)	-51 000	+193 000	+126 000
Adjustment for negative balance from previous year (-)			
Total	1 079 000	1 879 000	1 469 000

Descriptive information and justification on:

- Budget outturn

First estimate of the 2019 surplus to be reimbursed to the EU budget (as assigned revenue): EUR 1,469,305.57.

The Centre cashed its budget of EUR 59,206,000 in 2019.

The expenditures of 2019, including the carry-forward to 2020, equals to EUR 60,113,447.28.

The amount of cancelled unused payment appropriations carried forward from previous year of EUR 880,323.42, the adjustment for carry-over from the previous year of appropriations available at 31.12 arising from assigned revenue of EUR 259,409.37 and the exchange rate gains for the year 2019 of EUR 126,213.24 have resulted in a positive budget outturn 2019.

In 2019, ECDC reimbursed the budgetary positive balance from 2018 of EUR 1,879,347.62.

Because of the above, EUR 1,469,305.57 has to be reimbursed in 2020 to the EU budget (as assigned revenue) related to the Centre's 2019 budget.

- Cancelation of commitment appropriations

The total implementation of commitment appropriations for ECDC in 2019 reached 99.23%, with a total of EUR 455,125.46 cancelled for all three Titles, compared to EUR 855,884.81 cancelled in 2018. 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 2021. The commitment of appropriations for the operational expenditure on Title 3 reached 98.73% in 2019.

- Cancelation of payment appropriations for the year

See cancelation of commitment appropriations

- Cancelation of payment appropriations carried over,

The Centre has carried forward EUR 10,045,871.62 from 2018 to 2019, of which EUR 9,165,548.20 was paid (fund source C8).

This corresponds to 91.24% of the amount carried forward.

Annex IV: Human Resources (quantitative)

Provisional FTE allocation for 2021 per organisational entity

Recapitulative of FTEs, including the additional temporary allocated FTEs (COVID + external grants for international relations activities):

Unit	Section	Disease Programmes	ECDC FTEs	Support for COVID	International Relations			Total
				COVID CA	IPA6	Africa CDC	Health Security Initiative	
Director Office	Director		1					1
	European and international cooperation		7		1	1		9
	Communication		12	2				14
	Executive Office		11					11
	Corporate Affairs		5					5
Disease Programmes	Management/support		11					11
	Air-borne, blood-borne and sexually transmitted infections	COVID and influenza	9	4				13
		VPD and immunisation	10	3				13
		STI, blood-borne and TB	13					13
	One health related diseases	AMR and healthcare associated infections	11	1				12
		Emerging food and vector-borne diseases	13					13
Public Health Functions	Management/support		6					6
	Public health training		15			1	5	21
	Surveillance		20	2		2		24
	Emergency preparedness and response support		13	2		1	2	18
Scientific Methods and Standards	Management/support		4					4
	Scientific processes and methods		8	3				11

	Information and knowledge management		14					14
	Eurosurveillance		5					5
Resource Management Services	Management/support		4					4
	Finances and accounting		15			1	1	17
	Human resources		13					13
	Legal services and procurement		13	1		1		15
	Corporate services		13			1	1	15
Digital Transformation	Management/support		3					3
	IT operations		11	2				13
	Digital governance		7					7
	Digital solutions		14					14
		TOTALS	**281**	**20**	**1**	**8**	**9**	**319**

Annex IV. Table 1 – Staff population and its evolution; Overview of all categories of staff

Staff population		Actually filled as of 31.12.2018[24]	Authorised under EU budget 2019	Actually filled as of 31.12.2019[23]	Authorised under EU budget for year 2020	n draft budget for year 2021	Envisaged in 2022	Envisaged in 2023
Officials	AD							
	AST							
	AST/SC							
TA	AD	123	126	121	126	126	126	126
	AST	52	52	50	51	51	51	51
	AST/SC	2	2	3	3	3	3	3
Total		**177**	**180**	**174**	**180**	**180**	**180**	**180**
CA GF IV		47	50	50	50	61	61	61
CA GF III		35	36	36	37	40	40	40
CA GF II		10	12	11	12	12	12	12
CA GF I		2	2	2	2	2	2	2
Total CA		**94**	**100**	**99**	**101[25]**	**139[26]**	**139**	**139**
SNE		2	5	1	5	5	5	5
Structural service providers		12		6				
TOTAL		**285**		**280**				
External staff for occasional replacement		28		28				

[23] Posts filled at 31.12.2019 include 5 offers made and accepted (2 AST/SC 1, 2 CA IV, 1 CA III)

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

[25] Takes into account 1 additional contract agent for projects with funding from external revenue.

[26] From 2021 to 2023: takes into account around 18 additional contract agents for projects with funding from external revenue as well as an additional 20 contract agents for the response to COVID-19. These COVID-19 posts are for 24 months with different start dates ranging from 1.9.2020 until possibly February 2021.

Annex IV: Table 2 – Multi-annual staff policy plan Year N+1-Year N+3

Category and grade	Establishment plan in EU Budget 2019		Filled as of 31/12/2019[27]		Modifications in year N-1 in application of flexibility rule		Establishment plan in voted EU Budget 2020		Modifications in year N in application of flexibility rule		Establishment plan in Draft EU Budget 2021		Establishment plan 2022		Establishment plan 2023	
	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		2		1				2				2		2		2
AD 13		3						3				3		3		3
AD 12		7		5				9				9		12		16
AD 11		8		5				12				12		15		17
AD 10		23		9				23				23		24		25
AD 9		24		16				26				26		27		28
AD 8		22		29				23				23		22		20
AD 7		26		12				21				21		16		10
AD 6		10		17				6				6		4		2
AD 5				27												

[27] Posts filled at 31.12.2019 include 2 offers made and accepted (2 AST/SC 1)

Total AD		**126**		**121**				**126**				**126**		**126**		**126**
AST 11																
AST 10		1						2				2		3		4
AST 9		2						2				2		3		4
AST 8		3		3				5				5		6		7
AST 7		11		2				11				11		11		11
AST 6		10		9				11				11		12		12
AST 5		15		13				13				13		11		10
AST 4		5		15				5				5		4		3
AST 3		5		3				2				2		1		
AST 2				2												
AST 1				3												
Total AST		**52**		**50**				**51**				**51**		**51**		**51**
AST/SC1				3												
AST/SC2																
AST/SC3		2						3				3		3		3
AST/SC4																
AST/SC5																
AST/SC6																
Total AST/SC		2		**3**				**3**				**3**		**3**		**3**
TOTAL		**180**		**174**				**180**				**180**		**180**		**180**

Annex V: Human resources (qualitative)

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 are foreseen to form the core capacity, that is, operating the Centre; and in addition, contract agents are recruited with a primary focus on support functions and 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 seen as 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. In this implementing rule, it is a provision for internal selection, which the Centre uses. 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 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 belonging.

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 principal expert staff (AD 5 and AD 8) is in line with the objective to attract experienced principal experts while at the same time aiming at recruiting experts who can grow professionally along with the Centre, and who normally have a broader profile which supports the Centre's aim of ensuring a flexibility in its workforce in view of possible changing operational priorities. This will enable the Centre to have a well-balanced staffing as 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 when 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 is the aim of recruiting experienced senior administrative support staff at AST 4 level to coordinate the contract staff.

Contract duration

The contract duration for temporary agents is initially five years with a possibility of renewal of 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.

At its 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	Principal Experts in operational units, Heads of Section, etc;
AD 10	Deputy Heads of Unit;
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.

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 belonging.

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/project.

At its 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.

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 Principal 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

Table 1 - Reclassification of temporary staff/promotion of officials (2019 exercise)

Category and grade	Staff in activity at 1.01.Year N-2 (2018)		How many staff members were promoted / reclassified in Year N-1 (2019)		Average number of years in grade of reclassified/promoted staff members[28],[29]
	officials	TA	officials	TA	
AD 16					
AD 15					
AD 14		1			
AD 13					
AD 12		5			
AD 11		3		1	5.9
AD 10		8		1	5.0
AD 9		12			
AD 8		34		3	5.2
AD 7		7		1	2.9
AD 6		17		1	4.1
AD 5		29		7	4.8
Total AD		**116**		**14**	
AST 11					
AST 10					
AST 9					
AST 8		2			
AST 7		2		1	5.5
AST 6		5			
AST 5		13		2	5.4
AST 4		17			
AST 3		2			
AST 2		3			
AST 1		4			
Total AST		**48**		**3**	
AST/SC1		2			

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

[29] Average number of years is calculated based on the Director's decision on reclassified staff in year N. However, some staff members' reclassification have not taken effect due to the third language requirement.

AST/SC2					
AST/SC3					
AST/SC4					
AST/SC5					
AST/SC6					
Total AST/SC		2			
Total		**166**		**17**	

Table 2 - Reclassification of contract staff (2019 exercise)

Function Group	Grade	Staff in activity at 1.01.Year N-2 (2018)	How many staff members were reclassified in Year N-1 (2019)	Average number of years in grade of reclassified staff members
CA IV	18			
	17	1		
	16	4		
	15	11		
	14	24	4	4.8
	13	7	4	3.1
CA III	12	1		
	11	2		
	10	11	1	5.8
	9	19		
	8	3	2	2.6
CA II	7			
	6	2		
	5	8		
	4	2		
CA I	3			
	2	2		
	1			
Total		97	11	

C. Mobility policy

a) Internal mobility along with quantitative evolution;

In 2019, 19 % of vacancies (4 out of a total of 21) were filled by internal staff members who were successful in external recruitment procedures.

b) Mobility between agencies

In 2019, four staff members left ECDC to be employed by another agency. Two new staff members joined ECDC from another agency including one through inter-agency mobility. In total, the Centre now has 20 staff members who previously worked for an EU agency.

c) Mobility between agency and Institutions.

In 2019, one staff member left ECDC to be employed by an institution (European Commission including its missions, representations and executive agencies) and four staff members joined ECDC from an institution. In total, ECDC now has 17 staff members who previously worked for an EU institution.

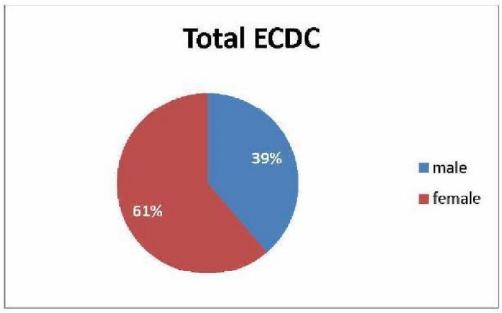
D. Gender and geographical balance

Gender balance

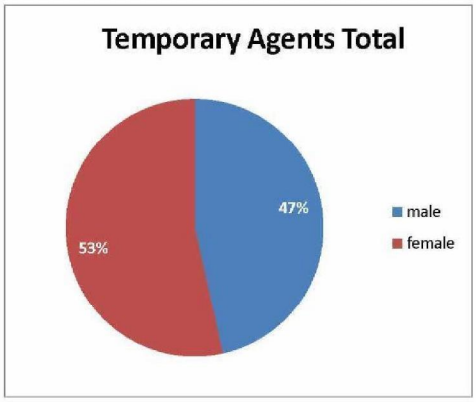
The gender balance in the Centre as of 31 December 2019 is as follows (offers not included):

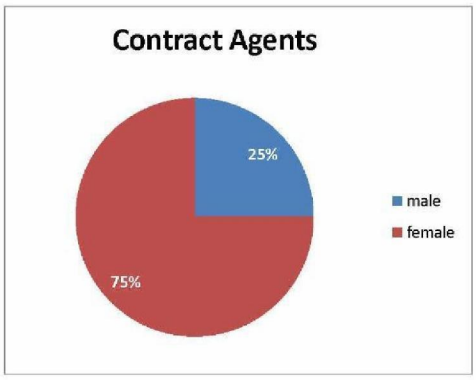
	CA	AST	AD	Total TA	Total ECDC
male	24	19	61	80	104
female	72	32	60	92	164
Total	96	51	121	172	268

In total, the Centre employs 61% women and 39% men (TAs and CAs).



The gender balance within the different contract types is for temporary agents 53% women and 47% men and for contract agents 75% women and 25% men.





The gender balance is considered as important, and is taken into account by the appointing authority in recruitments. One of the organisational HR objectives is to further strengthening 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, the gender balance is taken into account when appointing selection committees in recruitment processes as to further strengthen the view of both genders and encourage a mixed collaboration in the important work of finding the most competent candidates.

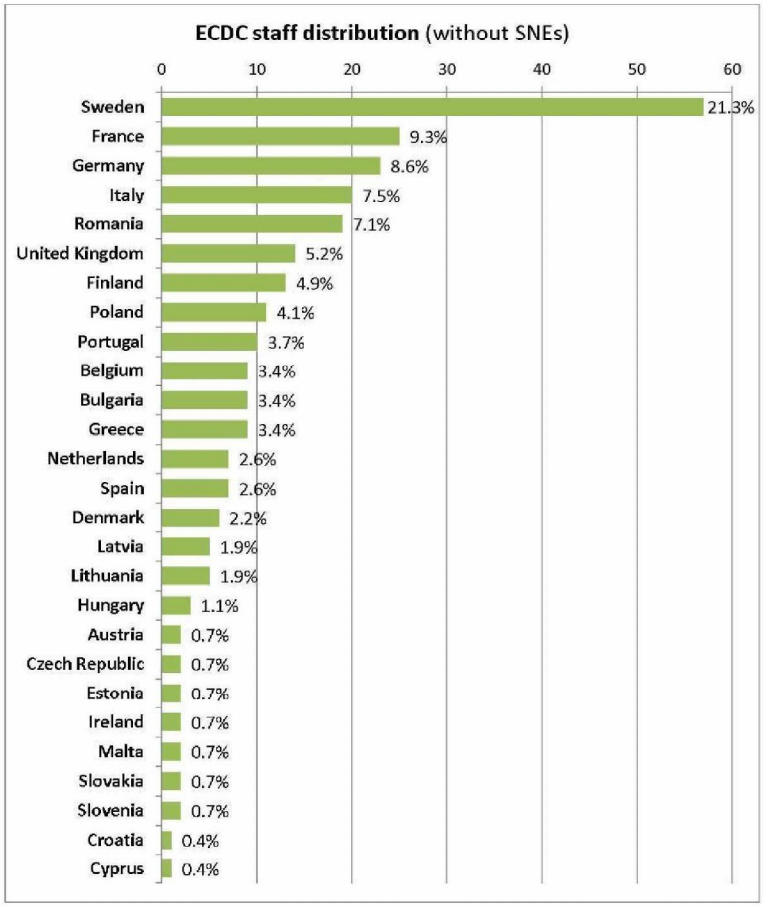
The Centre is fully committed to the provision of equal opportunity for its entire staff through its employment practices. It is aiming at developing an environment taking into account diversity and ensuring that no one is treated inequitably due to gender, marital status, age, nationality, sexual

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 2019, ECDC employs staff from 27 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	3		9
Croatia		0	1	1	0		1
Cyprus		1	0	1	0		1
Czech Republic		0	1	1	1		2
Denmark		3	2	5	1		6
Estonia		0	0	0	2		2
Finland		1	9	10	3		13
France		3	15	18	7		25
Germany		6	13	19	4		23
Greece		0	7	7	2		9
Hungary		0	2	2	1	1	4
Ireland		1	1	2	0		2
Italy		3	10	13	7		20
Latvia		2	2	4	1		5
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	8		11
Portugal		2	3	5	5		10
Romania	1	7	3	11	8		19
Slovakia		0	1	1	1		2
Slovenia		0	1	1	1		2
Spain		1	3	4	3		7
Sweden		12	21	33	24		57
United Kingdom		3	7	10	4		14
Total	**1**	**50**	**121**	**172**	**96**	**1**	**269**



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 VI: Environmental management

ECDC measures to ensure cost-effective and environment-friendly working place

ECDC premises have been environmentally certified as a "Green building" since 2018. The ECDC building is currently being assessed to receive the environmental certification 'BREEAM Very Good in use' in 2019. Building Research Establishment Environmental Assessment Method (BREEAM) is the world's leading sustainability assessment method for master planning projects, infrastructure and buildings. In the new building, that ECDC moved to in May 2018 the total electricity consumption is significantly lower than in the previous facilities.

ECDC is currently performing an environmental assessment as an introduction before implementation of an Environmental Management System based on the European Management Audit Scheme (EMAS). ECDC is thus placing considerable emphasis on its environmental performance and on identifying areas of improvement.

ECDC measures to reduce the environmental impact of its operations

100% of the ECDC electricity is provided by hydro powered energy. The ECDC premises are equipped with energy-efficient glass windows optimizing daylight admission and reducing solar heat. Light sources are mostly of LED with occupancy sensors and daylight control systems.

In August 2019, ECDC introduced a new recycling system with separation of waste into paper, plastic, glass, organic, metal, e-waste, toners, light & bulbs, batteries, corrugated cardboard and boxes.

To reduce environmental impact of the transport, ECDC encourages its staff to use sustainable ways of commuting by providing facilities for bicycles and offering very good connections by public transport. Moreover, videoconferencing is encouraged as a way to limit the environmental impact of missions.

In addition, ECDC requests from some of its suppliers to provide environmental friendly documentation and purchases eco-labelled products (such as stationery and cleaning detergents).

ECDC has pursued a paperless approach through the implementation of its eAdministration long-term programme. Together with the implementation of a different approach to printing, ECDC has since 2015, reduced by more than 37% the number of pages printed. Additionally, digitalization of various ECDC publications has contributed significantly to reduction in paper use.

ECDC plans environmental objectives for 2021

As an agency of the European Union, ECDC recognizes its responsibility towards the environment and the importance of implementation of measures to control and lower the environmental impact of its operations. In the year 2020, ECDC aimed at having an Environmental Management System introduced, and being registered in EMAS (after finalising the second phase of the project). Furthermore, the agency plans to pursue with its efforts towards a more environmentally friendly profile, focusing on selected areas of further improvement.

Annex VII: Buildings

	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 without indexation is 19,491,840 SEK per year
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.	No support was provided by the Host Country.

Annex VIII. 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: 1) Immunity from jurisdiction as regards acts carried out by them in their official capacity. 2) Exemption from regulations restricting immigration and formalities for the registration of foreigners. 3) 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 IX. 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.

In 2018, ECDC 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 conducted by Price Waterhouse Cooper (PwC) started in September 2018 and was finalised in October 2019. In November 2019, the MEES has presented a set of recommendations for approval by the management Board. The ECDC MB approved the recommendations in June 2020 and subsequently the report together with the recommendations was published on the ECDC website. The report was also shared with the EU Institutions. ~~Once the recommendations are approved in Q2 2020, the external evaluation report will be published on ECDC website, with the recommendations of 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*
- 2019-2020: TB programme – *outsourced*
- 2020: Strategic and performance analysis of ECDCs response to the Covid-19 pandemic - *outsourced.*

The scope of the procedure is described in 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*';
and: '*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 the 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).

Are out of the scope of this procedure:

- The five-year external evaluations[30];
- 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);

[30] ECDC Founding Regulation, article 14.5.b

- 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 of the relevant internal stakeholders.

In addition, the Financial Regulation (art. 29(5)) requires regular ex-ante, interim or ex-post evaluations for certain interventions[31].

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: criticality 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 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 ECDC work programme is managed through a Management Information System, as well as dedicated dashboards reviewed monthly by the Senior Management Team. 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 the 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.

[31] "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 X. Strategy for the organisational management and internal control systems

ECDC Internal Control Framework

ECDC has an Internal Control Framework in place, which is based on the Internal Control Framework of the European Commission.

The Internal Control Framework is based on the five internal control components:

(1) The Control Environment
(2) Risk Assessment
(3) Control activities
(4) Information and communication
(5) Monitoring activities

The internal control components are the building blocks that underpin the framework's structure and support the Agency in its efforts to achieve its objectives.

Each component consists of several principles. Working with these principles helps to provide reasonable assurance that the organisation's objectives are met.

An overall assessment is carried out annually regarding the presence and functioning of the internal control components.

ECDC Anti-Fraud Strategy

ECDC has an Anti-Fraud Strategy in place, covering the period of 2018-2020. A review of the underlying fraud risk assessment is performed annually.

Ex-Post Verifications and Audits

ECDC has a system in place to perform ex-post verifications of grant agreements. A grant verification plan is developed and implemented every year. ECDC has also a grant agreement control strategy in place.

ECDC is audited by the European Court of Auditors and the European Commission's Internal Audit Service.

High level Risk Assessment for the Final Draft Programming Document 2021

As part of preparing the draft Single Programming Document (SPD) 2021, ECDC conducted a high-level risk self-assessment exercise in order to identify the main risks that could impact the implementation of the SPD 2021. A more detailed exercise was conducted for the final SPD 2021 in October 2020, at which stage the main risks and mitigating measures were analysed in more detail.

The following main risks were identified:

- Risk of SPD implementation suffering from a Public Health Emergency (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. Given the on-going PHE event regarding COVID-19,

ECDC has already been forced to amend the SPD 2021 in order to accommodate for the estimated additional workload. However, further amendments might have to be performed depending on the development of the COVID-19 PHE event throughout 2021.

- Unavailability of data from member states and/or unavailability of member states/stakeholders resources to contribute to and/or participate in ECDC activities. Now ECDC has a good acceptance/support among stakeholders, however budget constraints, as well as the effects of the additional workload in 2021 regarding the on-going COVID-19 pandemic on member states/stakeholders could impact their priorities regarding ECDC related activities.

  Amendments to the founding regulation/mandate could change the resources and competences needed in ECDC. In the short-term, it could be difficult to adapt the organisation to the new regulation/mandate.

- Outsourcing of activities. Any outsourcing implies dependence on external parties. All forms of external parties' non-delivery (including insufficient quality) would potentially jeopardize 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 2021 budget and/or cuts of posts in the establishment table 2021, would impact the SPD negatively. A specific risk for the SPD 2021 are the potential negative effects of BREXIT and the uncertainty regarding the results of the ongoing negotiations for a new agreement, as these have not yet been concluded. There is also an uncertainty regarding the new EU Multi-Annual Financial Framework 2021-2027. 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 actions were identified as additional mitigations:

- ECDC will closely monitor the impact of the COVID-19 PHE event, on the workload and activities included in the SPD 2021, and make the appropriate changes when necessary. Important changes will be discussed and approved in the Management Board.

  Deadline: Q1-Q4 2021

- ECDC will closely follow, and liaise with the Member States, on the effects of the COVID-19 pandemic on their abilities to contribute to the ECDC activities as planned.

  Deadline: Q1-Q4 2021

- ECDC will closely follow, and liaise with European Commission and other stakeholders, on the potential changes to the ECDC founding regulation/mandate.

  Deadline: Q1-Q4 2021

- ECDC will closely follow, and liaise with the European Commission, on the effects of the BREXIT and the negotiations for a new agreement, as well as on the approval regarding the new EU Multi-Annual Financial Framework 2021-2027.

  Deadline: Q4 2020.

Annex XI - Financing Decision (procurements) 2021

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Strategy	Functional Group	Generic description of procurements	Expensel d	Financing Decision Amount	Indicative number and type of procurements	FWC number	Indicative period
1. Surveillance and epidemic intelligence	1. Public health surveillance	Data management	12624		Re-opening of competition	OJ/2018/SRS/8990	Q1 2021
			12939		Under existing Framework Contract		
			13246				
		Total		1,102,500			
	2. Methods to support disease prevention and control	Methods to support disease prevention and control (EPHESUS, genome sequencing, bionumerics,	12422		4 Under existing Framework Contract	ECDC/2019/015	Q1 2021
			12461		Amendment Art 172 (123)	DI 7722	
			12774			ECDC/2019/036	
			12777			ECDC/2016/037	
		Total		166,000			
1. Surveillance and epidemic intelligence Total				1,268,500			
2. Scientific support	1. Scientific advice coordination	Methodology, standards and tools for scientific advice (EBPH grading system, consulting for scientific advice, biostatistics, ESCAIDE etc)	12753		5 Under existing Framework Contract	ECDC/2017/015	Q1-Q4 2021
			12754		2 Open Call for tender	New call for tender.	
			12839		Negotiated procedure	ECDC/2019/028	
			12846		Re-opening of competition	ECDC/2019/015	
			12847			ECDC/2019/019	
		Total		745,000			
	2. Knowledge and information management serv	Library, knowledge management services, scientific editing, information management, design support)	12464		2 Negotiated procedure	ECDC/2019/004	Q1-Q2 2021
			12465		2 Under existing Framework Contract	ECDC/2019/008	
			12467		Call for Expression of Interest - Direct Contract		
			12861		Re-opening of competition		
		Total		470,000			
2. Scientific support Total				1,215,000			
3. Preparedness and response	1. EU preparedness and support to EU outbreaks	Risk assessment, PHE preparation, In-Action and After Action Reviews, simulation exercises, metrics and guidences, EOC and trainings on preparedness	12354		6 Under existing Framework Contract	ECDC/2019/021	Q1-Q3 2021
			12728		2 Negotiated procedure	DI/07720	
			12731			ECDC/2019/013	
			12733				
			12743				
			12808				
		Total		672,700			
3. Preparedness and response Total				672,700			

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4. Training and capacity building	2. Training networks, e-learning, training materia	Training networks, e-learning, training materials, accreditations	12321		Exceptional negotiation proceedure	ECDC/2017/015	Q1-Q3 2021
			12322		Negotiated procedure	NewFrameworkContract	
			12330		7 Under existing Framework Contract	PO/2018-02/A4	
			12332				
			12439				
		Total		466,000			
4. Training and capacity building Total				466,000			
5. Communication	1. Press, media, corporate comunication and stak	Media monitoring, audiovisuals, stakeholders, networking, corporate communication, branded items, printing and distribution of publications,	12113		3 Under existing Framework Contract	OJ/2020/DIR/12205 l	Q2 2021
			12121		2 Open Call for tender	OJ/2017/RMC/9315Lot1	
			12124				
			12519				
			13181				
		Total		437,600			
	2. Eurosurveillance	Eurosurveillance (Seminar, editing, printing and distribution, fees, etc)	12108		Call for Expression of Interest (CEI)		Q1 2021
			12109		Under existing Framework Contract	ECDC/2017/015	
			12810		Negotiated procedure		
			12814		Other		
		Total		42,400			
5. Communication Total				480,000			
6. Disease work	ARHAI	AMR and Healthcare-Associated Infections	12644		11 Under existing Framework Contract	ECDC/2020/005	
			12660		3 Open Call for tender	ECDC/2017/021	
			12674		3 Negotiated procedure	ECDC/2019/036	
		Total		42,400			
	CAI	Covid and Influenza	12984		10 Under existing Framework Contract	ECDC/2018/029	Q1-Q3 2021
			12985		Negotiated procedure	ECDC/2019/001	
			12986		Re-opening of competition	ECDC/2017/005	
			12987		2 Open Call for tender	ECDC/2017/002	
			12991			ECDC/2019/015	
			12992			OJ/2018/SRS/8990	
			12994			ECDC/2016/041	
			12995			ECDC/2016/016	
		Total		1,036,000			

	EFVED	Emerging, Food- and Vector-Borne Diseases	12447		3 Negotiated procedure	ECDC/2017/009	Q4 2020-Q4 2021
			12499		Open Call for tender	ECDC/2018/035	
			12505		5 Under existing Framework Contract	ECDC/2019/024	
			12506		Re-opening of competition	ECDC/2019/020	
			12507			OJ/2019/SRS/10962	
			12508			NewFrameworkContract	
		Total		976,400			
	SBT	STI, Blood-Borne Viruses and TB	12603		13 Under existing Framework Contract	ECDC/2017/004	Q1 - Q4 2021
			12604		3 Open Call for tender	ECDC/2019/015	
			12606		3 Negotiated procedure	ECDC/2017/012	
			12609			ECDC/2019/037	
			12611			ECDC/2018/014	
			12612			ECDC/2018/027	
			12613			ECDC/2018/028	
			12627			ECDC/2019/027	
			12628			ECDC/2019/030	
		Total		956,570			
	VPI	VPD and Immunisation	12906		6 Negotiated procedure	ECDC/2019/023	Q1-Q3 2021
			12908		Open Call for tender		
			12909		4 Under existing Framework Contract		
		Total		3,017,330			
6. Disease work	Total			7,156,300			
7. Management and resource management	1. Working with European Union and member Sta	Working with European Union and member States (European Forum Gastein, country technical support, etc)	12860		Negotiated procedure		Q1 2021
			13075		Under existing Framework Contract	ECDC/2018/003	
		Total		119,600			
	2. Working with non-EU Countries	Working with non-EU Countries	12880		Negotiated procedure		Q2 2021
			12895		Call for Expression of Interest - Direct Contract		
			13398		Negotiated procedure		
		Total		82,000			
	3. Health Security Initiative	Health Security Initiative	12589		3 Negotiated procedure		Q1 2021
			12705		Call for Expression of Interest (CEI)		
		Total		206,643			

	4. IPA-6 Action	Working with non-EU	13142		Open Call for tender		Q1 2021
		Countries IPA Action	13143		Under existing Framework Contract	ECDC/2019/047	
		Total		350,000			
	5. IT Operations	IT Operations	12639		6 Under existing Framework Contract	DI/07720	Q1-Q4 2021
			12643			ECDC/2018/037	
			12648			DI/07720	
			12652			DI/07722	
		Total		2,351,360			
	6. Digital Solutions and Governance	Digital Solutions and Governanc	12692		18 Under existing Framework Contract	DI/07722	Q1-Q4 2021
			12693		15 Re-opening of competition	ECDC/2018/032	
			12694		Open Call for tender	ECDC/2018/033	
			12695			OJ/2018/ICT/9778	
			12771			ECDC/2019/025	
			12781			OJ/2019/ICT/9753	
			12782			OJ/2018/ICT/9759	
			12783			ECDC/2018/041	
		Total		3,391,640			
7. Management and resource management Total				6,501,243			

Annex XII. Plan for grant, contribution or service-level agreement

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~~To be updated~~

1. ERLTB-Net

Subject matter of the Action: ERLTB-Net: Implementation of lab coordination activities, including lab 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 2021: 200,000 EUR

Expected launch: Q1 2021

Maximum rate of co-financing: 90%

Human resources from ECDC (FTEs): 36 days (0.23 FTEs)

2. VENICE.Net

Subject matter of the Action: Continuation of VENICE.net activities for VPDs incl. influenza

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 2021: 0.00 EUR

Expected launch: Q2 2021

Maximum rate of co-financing: 90%

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

3. Scientific coordination of ECDC Fellowship Programme

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

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

Objective of the grant: To ensure the availability of highly qualified scientific coordinators for the Fellowship programme

Expected result: Successful running of the ECDC Fellowship Programme

Expected amount 2021: 575,000 EUR

Expected launch: Q4 2020 – Q2 2021

Maximum rate of co-financing: 90%

Human resources from ECDC (FTEs): 300 days (1.88 FTEs)

List of specific agreements: 12 specific agreements

4. ECDC Fellowship Programme: hosting of fellows

Subject matter of the Action: ECDC Fellowship Programme (Epidemiology (EPIET) and Public Health Microbiology (EUPHEM) paths) 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

Expected result: Successful running of the ECDC Fellowship Programme

Expected amount 2021: 1,950,000 EUR

Expected launch: Q4 2020 – Q2 2021

Maximum rate of co-financing: 90%

Human resources from ECDC (FTEs): 148 days (0.93 FTEs)

Indicative number of specific agreements: 39 specific agreements (for hosting cohorts 2019, 2020 and 2021)

~~**1. ERLTB-Net**~~

~~**Subject matter of the Action: ERLTB-Net: Implementation of lab coordination activities, including lab 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 2021:** 199,600 EUR~~

~~**Expected launch:** Q1 2021~~

~~**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 2021: 0.00 EUR

Expected launch: Q2 2021

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 2021: 2,400,000 EUR

Expected launch: Q4 2021

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 2021:** 0.00 EUR~~

~~**Expected launch:** Q2 2021~~

~~**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~~

Annex XIII. Strategy for cooperation with third countries and/or international organisations

ECDC proposed strategy 2021-2027 describes the strategy for the cooperation with third countries and international organisations (under Goal 4, as reproduced below).

Goal 4: By 2027, ECDC contributes to increased health security in the EU through international collaboration and alignment regarding infectious disease policies and practice

Strategic objective 4. Increase health security in the EU through strengthened cooperation and coordination between ECDC and partners in non-EU countries

Intercontinental mobility of people and goods is increasing, and infectious diseases do not respect borders. Consequently, ECDC needs to cooperate with technical partners outside the EU. ECDC will continue to provide technical assistance to countries bordering the EU to improve the detection, assessment and response to health threats caused by infectious diseases in these countries. This will be done through targeted support to Western Balkans and Turkey and European Neighbourhood Policy (ENP) partner countries in the implementation of Decision No 1082/2013/EU and the International Health Regulations. The Centre will also offer capacity building activities and training courses.

As demonstrated by massive measles outbreaks, increased vaccine hesitancy, and antimicrobial resistance, infectious disease threats are often a global phenomenon. It is important to work across borders and strategically link major centres for disease prevention and control (CDCs), including those that already have a formal bilateral agreement with ECDC. Only global cooperation can ensure the rapid exchange of information between partners and provide a platform to develop common approaches to the prevention and control of infectious diseases.

In the framework of external EU policies, ECDC's expertise should be used to provide technical support to the European Commission. This will add factual knowledge to the Commission's dialogues with bilateral partners, multilateral organisations and global health initiatives (e.g. Global Health Security Agenda).

Outside the EU borders, ECDC is one of many organisations working to fight infectious diseases. The European Commission, the European External Action Service (EEAS), the WHO with its Regional Offices, major CDCs, the World Bank, other UN organisations, the public health authorities in the EU Member States also support non-EU countries to implement the IHR and reach internationally agreed objectives and targets. Good coordination between partners will be essential to avoid overlaps, find synergies and take action.

Action area 4.1. Neighbourhood: Develop and implement, together with partners, a comprehensive programme to support Western Balkans and Turkey and ENP partner countries to strengthen their infectious disease prevention and control systems and public health workforce

ECDC will develop a comprehensive programme, in close collaboration with relevant Commission services, providing technical support for Western Balkans and Turkey and European Neighbourhood Policy (ENP) partner countries to strengthen their public health systems. This programme is targeted at enhancing the countries' capacities for early threat detection, threat assessment, and response to health threats from communicable diseases. To facilitate the sustainability, the programme will also cover capacity building/training of the public health work force, the Mediterranean Programme for Field Epidemiology Training (MediPIET), in areas identified through technical assistance and other needs assessments.

Action area 4.2. Major CDCs: Increase ECDC's collaboration with major centres for disease prevention and control

ECDC will, together with major centres for disease prevention and control (CDCs), explore further possibilities to establish processes and procedures for the rapid exchange of information in outbreak situations.

The need for, and added value of, multilateral collaboration among major CDCs will also be explored, for example aligned practices/control options in outbreak situations or common challenges/approaches in the prevention and control of infectious disease threats (examples of possible areas of work are digital transformation of health and care and vaccine hesitancy).

Action area 4.3. Coordination: Ensure seamless coordination with international partners to achieve common objectives

ECDC will coordinate the development and implementation of its international activities with the Commission and EEAS to ensure alignment with EU policies and priorities.

ECDC will further strengthen its coordination with the WHO and its Regional Offices, in particular with the Regional Office for Europe. Coordination with other organisations will be based on the model tested with the WHO Regional Office for Europe and apply an adapted set of procedures.

With regard to other partners working with non-EU countries (e.g. UN organisations, EU Member States, the World Bank), ECDC will use existing relevant mechanisms for coordination at the country, regional, or global levels, for example by using bilateral coordination channels through an EU Member State or by liaising with EU delegations in non-EU countries.

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