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ECDC Annual Work Programme 2016

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Summary:	<p>In accordance with ECDC's Founding Regulation, the Centre's work is guided by an Annual Programme of work based on a revisable Multi-annual Programme. The second Strategic Multi-annual Programme covers the period 2014-2020. The present document takes this as its point of departure for setting priorities on the 2016 activities of ECDC.</p> <p>According to the new Planning Cycle of the Agencies, the final Work Programme 2016 should be approved by June 2015. A first draft of the ECDC 2016 Work Programme Priorities was presented for discussion and feedback at the 32nd meeting of the Management Board on 18-19 November 2014, and was followed by a written consultation of the Management Board members in December 2014. Comments received have been taken into account in this revised version.</p> <p>An additional discussion took place at the Management Board in March 2015, and subsequent discussions took place with the European Commission to finalise the document. The present document takes into account the guidance received regarding the implementation of the programme of the Commissioner of DG SANTÉ.</p> <p>The present document presents the proposed Work Programme of ECDC for 2016, including the resources, both in terms of budget and staff.</p>
Action:	For adoption.
Background:	<p>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".</p> <p>ECDC Strategic Multi-annual Work Programme (SMAP 2014-2020).</p>

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Foreword from the acting Director

The year 2016 marks the second decade of ECDC's existence. Remarkable changes have occurred on the one hand and many things still require the same dedicated conventional approaches. The Centre stays alert as the threats of communicable diseases will not stop to challenge the health and wellbeing of European citizens. So what is new?

ECDC's involvement in the field in West Africa, more specifically in Guinea, has been an unprecedented change in response to threats by the Centre. It is impossible to predict how much efforts will be needed in 2016, but the world cannot give up in supporting the fight to reach Case Zero. For sure I hope that our joint efforts will rapidly lead to a stable situation. However, new and unknown threats may occur, but I feel that the Centre, the European Commission and the Member States are now much better prepared than before. That does not imply any reason for complacency as the goals set forth in Decision 1082/EC/2013 on cross border health threats require significant efforts.

Among those efforts are the horizontal actions to mitigate the health threats related to migrants and vulnerable populations as well as the support to the priorities set by Commissioner Andriukaitis. These priorities include strengthening of the EU in fighting TB, HIV, hepatitis B and C and vaccine preventable diseases. Moreover, the threat of antimicrobial resistance justifies even stronger attention. As the situation in the EU is quite diverse ECDC will support the Commission and the Member States by supplying assessments, data for analysis, data for action and data for comparison.

In that sense the results of our ongoing Surveillance System Reengineering project will lead to an improvement in the speed, flexibility and responsiveness of ECDC. And the capacity to detect and characterise microbiological threats will face challenges of adapting to new technologies, sometimes with limited resources, in which ECDC searches to optimise its coordination activities at the technical level, together with the Commission, CHAFAEA, and so many other partners and stakeholders.

ECDC will continue to optimise its use of resources, especially since its human resources will continue to decrease in the next years. But I feel comfortable that our dedicated staff will find creative ways to reduce the burden of diseases. I am looking forward to see how the recommendations of the second external evaluation will help us to do so in remaining a trustworthy, reliable partner providing state of the art technical support and information.

Andrea Ammon, MD PhD

Acting Director

Executive summary

The Annual Work Programme for 2016 has been developed based on the Strategic Multi-annual Programme (SMAP) 2014–2020. In relation to this, ECDC will further reinforce the: collaboration and cooperation with EU institutions, Member States and international partners; consolidate its core and support functions; strengthen the role and outputs of the seven disease programmes; and ensure that leadership, administration and ICT efficiently support the core operations of the Centre.

The Work Programme has also been prepared with a clear focus on ECDC values, developed in 2010: "service orientation", "quality based" and "one ECDC".

In 2016, the Centre's proposed budget is roughly the same as for 2014 at 58.3 M €, while the total number of temporary agents will decrease from 190 to 186. The decrease of staff is due to the requested post reduction of 10% of the Establishment Plan (i.e. Temporary Agent posts) until 2018 (5 % for the overall reduction of staffing levels and an additional 5 % for the redeployment pool of agencies) . The reduction on the original number of 200 Temporary agent posts started in 2013 and will result in an establishment plan of 180 Temporary Agent posts in 2018.

Surveillance and response

Surveillance, threat monitoring and rapid risk assessment are key tools for preventing and controlling infectious diseases. ECDC's priorities in relation to surveillance under its SMAP 2014-2020 are to add more value to the data it gathers by making them available in new, user-friendly formats; to decrease the administrative burden on data providers in the Member States; and to take advantage of the possibilities offered by molecular typing. In 2016, ECDC will progress new initiatives in all these areas including: expanding still further the scope of the Centre's value added on-line interactive platform, the Surveillance Atlas of Infectious Disease, to include EU-level information on antimicrobial resistance, healthcare-associated infections and antibiotic consumption; implementing a monitoring system for agreed indicators of surveillance standards for selected diseases; and piloting the EU-level sharing of molecular typing data on invasive meningococcal disease and several key drug-resistant microbes. In the area of response support, ECDC will develop a range of new tools to support more rapid investigation and analysis of multi-country outbreaks. These will include among others: 1) an online outbreak investigation questionnaire tool that can simultaneously create a questionnaire in several languages and enable joint analysis of the results gathered, 2) a tool to enable rapid creation and real time updating of line listings / epidemic curves for multi-country outbreaks and 3) a new GIS tool for the investigation of community Legionnaires' disease outbreaks. ECDC will maintain and invest in the infrastructure of its Emergency Operations Centre and continue to improve its emergency processes in light of lessons learning during both exercises and real life Public Health Emergencies.

Scientific support

ECDC's scientific support activities comprise of three broad strands: provision of independent EU-level scientific advice; provision of communicable disease microbiology support to Member States; and publication of the scientific journal *Eurosurveillance*. In the area of scientific advice, ECDC will continue to ensure that the processes and tools used in the production of its advice are consistent and in line with best practice on production of evidence based public health guidance. ECDC will also continue to ensure its advice focuses on topics that are of high importance to its partners, and where ECDC can add maximum value. The Centre's Advisory Forum has played a central role in prioritising the topics on which ECDC should provide advice in 2016. Nonetheless, ECDC foresees that some re-prioritising could be needed depending on the Management Board's response to the Second External Evaluation of ECDC. As in previous years, the ESCAIDE conference will be the flagship scientific event organised by ECDC in 2016. In the area of microbiology, ECDC will reflect with its stakeholders on opportunities and vulnerabilities for public health microbiology in Europe as identified through the 2015 report of EU LabCap (laboratory capabilities)

monitoring; it will deliver a framework for oversight of External Quality Assessment schemes for EU laboratory networks; and, together with its stakeholders, ECDC will evaluate molecular surveillance strategies for 10 pathogens and multidrug-resistance targets. *Eurosurveillance* will continue to consolidate its attractiveness as a journal for publication of articles presenting high-level science and good quality public health-relevant findings. It will also increase its presence in social media.

Capacity support

ECDC's capacity support activities comprise: EU and country preparedness support; public health training; health communication; and international relations. Article 4 of Decision 1082/2013/EU establishes an ambitious agenda for consolidating and enhancing preparedness and response capacities to emerging threats. Providing technical support to that agenda is one of ECDC's top priorities for 2016 and beyond. ECDC will provide support to strengthen preparedness in Member States and facilitate their alignment with Decision 1082/2013/EU by promoting good practices and methodological toolkits on effective preparedness planning, evaluation of response plans and their interoperability. The Centre will also maintain its own resilience to cooperate with the Commission, Health Security Committee (HSC) and dedicated HSC subgroups as required, especially in emergency situations. In the area of training, ECDC will continue to organise the flagship EU fellowship programmes EPIET and EUPHEM and will continue to collaborate in the organisation of the EPIET Associated Programmes; it will provide training for senior and mid-career professionals in the ECDC Continuous Professional Development (CPD) Programme, which includes short courses, senior exchange programme and communities of practice; it will increase the number of e-Learning courses offered via ECDC's Learning Management System (LMS); and ECDC will provide scientific leadership and support to the MediPIET Programme. In the area of health communication, ECDC will continue to communicate the Centre's scientific output to its target audiences¹ in a timely, consistent and professional manner - including via social media; it will provide technical support to the Commission and Member States that will facilitate the coordination of their risk and crisis communication; and it will support Member States' efforts on effective behaviour-based communication around specific diseases. In the area of international relations, ECDC will support the Commission on technical dialogue with Eastern Partnership countries that have signed Association Agreements with the EU (Ukraine, Moldova, Georgia). ECDC will also support the Commission on cooperation with WHO in the area of communicable diseases. In 2016 a grant from the EU's Instrument for Pre-Accession Assistance will be used to finance participation of experts from the Pre-Accession countries in ECDC disease network meetings and technical discussions.

Disease programmes

Organising and delivering the Disease Programmes is a core ECDC activity, and highly appreciated by the Centre's partners and stakeholders. In 2016 will continue giving these programme a very high priority.

Antimicrobial resistance and healthcare-associated infections (ARHAI) Programme

Key objectives of the ARHAI Programme in 2016 and following years are: to improve participation of Member States in surveillance of healthcare associated infections (HAIs), including data on structure and process indicators for prevention and control of HAIs and on mortality; develop a methodology to regularly produce better estimates of the burden and cost of HAIs and antimicrobial resistance (AMR) in the EU and its Member States; increase the use of good practices for the surveillance, prevention and control of AMR and HAIs in the EU; and raise awareness about prudent use of antibiotics through ECDC's contribution to the European Antibiotic Awareness Day. Key outputs to be delivered in 2016 include: the third point prevalence survey in long-term care facilities; initiation of surveillance of *Clostridium difficile*; and preparatory work for the second European Survey of Carbapenemase-Producing Bacteria, including molecular typing.

¹ SMAP 2014-2020 defines the target audiences for ECDC's external communication as: health professionals, policy makers, the media, and health communicators. ECDC is generally not communicating directly with the general public.

Emerging and vector borne diseases (EVD) Programme

Key objectives of the EVD Programme in 2016 and following years include: strengthening, and standardising reporting of, vector-borne and emerging diseases with e.g. the updated case definitions for chikungunya, and dengue; progressive integration of disease data on animals (e.g. for West Nile fever), vector distribution and GIS (re)processing within this reporting; finalization of a case definition for Lyme borreliosis; integrating multidisciplinary knowledge based studies of environmental/climatic drivers into ECDC's scientific advice on this disease group. Outputs in 2016 will include updated vector distribution maps, produced with input from animal health colleagues in EFSA, and laboratory capacity building activities for EVDs.

Food- and Waterborne Diseases and Zoonoses (FWD) Programme

Key objectives for the FWD Programme in 2016 and the following years include: strengthening detection and investigation of multi-country outbreaks by linkage of human surveillance with that of food and animals, in particular through regular analyses in the new common joint molecular typing database with EFSA; enhancing the control of Legionnaires' disease outbreaks at EU/EEA level by promoting early detection; maintaining and further enhancing collaboration with colleagues in the food safety and animal health sector, in particular by promoting joint analyses of data from different sectors and laboratory cooperation. Outputs foreseen for 2016 include: establishment of inter-agency structure to support the implementation of joint molecular surveillance across public health, food safety and animal health sectors; Standard Operating Procedures for cross-sectoral investigation of mixed human, animal, food, feed, and environment molecular typing clusters are in place and made fully operational linked to the existing ECDC / EFSA SOP for producing Rapid Outbreak Assessments; and a report on public health risk associated with emergence of hepatitis E virus in EU/EEA.

HIV, Sexually Transmitted Infections and viral Hepatitis (HSH) Programme

Key objectives for the HSH Programme in 2016 and the following years include: providing evidence-based advice and guidance for the prevention and control of HIV, STIs and hepatitis B and C targeted to countries needs and identified threats; monitor Member States HIV/AIDS response and progress of the response plan for MDR gonorrhoea; supporting national and EU level prevention and control actions for hepatitis B and C; continuing to support wider availability and use of quality surveillance data. Outputs foreseen in 2016 include: the launch of HIV and hepatitis B and C testing guidance; and development of evidence based estimates of Member State and EU-level at-risk population sizes, prevalence/incidence estimates and modelling data for HIV, Chlamydia and hepatitis B and C to help the planning of comprehensive approaches to HIV, hepatitis B/C and STI prevention and control.

4.5 Influenza and other Respiratory Viruses (IRV) Programme

Key objectives for the IRV Programme in 2016 and the following years include: improving surveillance for severe respiratory diseases, for serological typing and molecular strain typing; and supporting the Commission and Member States in implementing Council Recommendation 2009/1019/EU on seasonal influenza vaccination and the Council Conclusions of 1 December 2014 on vaccinations as an effective tool in public health. Outputs foreseen in 2016 include: strengthened surveillance mechanisms for monitoring of severe respiratory disease, risk factors and influenza mortality; EU level surveillance data from IRV made available in value-added online format via ECDC Surveillance Atlas of Infectious Diseases; increased sharing of Member States' seroepidemiological data and molecular strain typing results; timely effectiveness estimates for seasonal influenza vaccine based on further improved methodology; review of need for an improved EU-level system of respiratory syncytial virus (RSV) surveillance.

Vaccine Preventable Diseases (VPD) Programme

Key objectives for the VPD Programme in 2016 and the following years include: developing methodologies for monitoring age specific vaccination uptake and immunity, and facilitating the implementation of national vaccination registries; support to Member States in strengthening their surveillance systems, facilitating the sharing of knowledge and best practices in immunisation issue and response to outbreaks of VPDs; and integrating molecular typing into surveillance for priority VPDs. Outputs foreseen in 2016 include: guidance on meningococcal B vaccination and commencement of work on guidance on pneumococcal vaccination in adults; protocol for conducting sero-surveillance studies on Vaccine Preventable Diseases; continued implementation of sentinel surveillance systems for pertussis and invasive pneumococcal disease; and continued ECDC input to strengthening EU-wide VPD surveillance and infrastructure for monitoring the impact of vaccination programmes.

Tuberculosis (TB) Programme

Key objectives for the TB Programme in 2016 and the following years include: continuing to develop the sharing at EU level of molecular typing data in TB surveillance; strengthening TB laboratory services for management of TB so that all suspect cases are tested with tests that allow for adequate and rapid diagnosis, and all TB cases are tested for drug resistance; supporting TB prevention and care efforts especially in high burden Member States. Key outputs foreseen in 2016 include: assessment of latent TB control as a programmatic intervention; update of the European Union Standards for Tuberculosis Care (ESTC); and scientific advice on interventions for TB prevention and control in hard to reach and vulnerable populations.

Management

The general management of the ECDC requires cohesion of the work described in all chapters. The main activities focus on cross-organisational issues like quality, project management and the implementation of the strategic multi-annual programme 2014-2020. It also includes seamless communication with ECDC's partners, most notably through the Governing Bodies (MB and AF) and the Competent Bodies. Key priorities in this area in 2016 and following years include: finalising the coherent implementation of the recommendations of the second external evaluation; continuing to re-engineer processes to improve ECDC's efficacy and efficiency; applying ECDC's independence policy; and monitor the implementation of the SMAP 2014-2020.

By its history and Founding Regulation one of ECDC's main characteristics is its operation as a network organisation, the hub of an EU "network of networks". ECDC is also part of the EU family of institutions and organisations. Collaborating with partners and stakeholders within the EU system – the European Commission, European Parliament and EU Agencies such as EFSA, EMA and EMCDDA – as well as with international partners such as WHO will continue to be a priority for ECDC in 2016 and beyond.

Introduction

ECDC strives for excellence in the prevention and control of communicable diseases in order to help achieve better health and improved quality of life for all European Union citizens. In the pursuit of this aim, we need to ensure that our scientific excellence, organisational performance and partnerships are aligned with the Centre's core values ('service orientation', 'quality based' and 'one ECDC').

ECDC will consolidate its organisational achievements and focus on increasing its impact on public health, as well as improving its performance in order to strengthen Europe's capacity to tackle communicable diseases and their determinants.

The ECDC mission and mandate

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. ECDC's role is to provide necessary scientific support for EU actions defined in Article 168.1: *Union action, which shall complement national policies, shall be directed towards improving public health, preventing physical and mental illness and diseases, and obviating sources of danger to physical and mental health. Such action shall cover the fight against the major health scourges, by promoting research into their causes, their transmission and their prevention, as well as health information and education, and monitoring, early warning of and combating serious cross-border threats to health.*

Key tasks

Key tasks of the ECDC include:

- operating dedicated surveillance networks;
- providing scientific opinions and promoting and initiating studies;
- operating the Early Warning and Response System;
- providing scientific and technical assistance and training;
- identifying emerging health threats;
- collecting and analysing data; and
- communicating on its activities to key audiences.

The specific tasks of the Centre are described in Article 3(2) and subsequent articles of the Founding Regulation. The tasks of the Centre are transposed into annual work programmes.

The overall aim of our Work Programme remains to support and strengthen the EU in reducing the burden of infectious diseases in an effective and efficient way. ECDC is well aware of the fact that the present priorities are subject to external events like emerging diseases, outbreaks and epidemics. This will lead to changes in priorities and deliverables which will be presented to the management board if the external events extend our normal surge capacity.

Some aspects are worth no note in particular as they were not explicitly mentioned in the SMAP 2014-2020.

1. The new Commissioner Andriukaitis has presented the Commissions priorities for communicable diseases in a letter to the Ministers of Health of the Member States. A quote from his letter shows specific attention will be given to the following areas:

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.

'Let me now move to protection. Keeping our citizens safe and protecting them against health threats is another key area of shared concern. The Commission is ready to play its part in supporting EU capacity to deal with crisis situations including pandemics and to increase vaccination coverage in Europe. Cross border health threats can have major consequences in health terms and can also inflict huge losses on the economy. To improve our preparedness to address such threats, we need to pay more attention to inter-sectorial coordination and business continuity planning. Let us draw lessons from our co-operation in responding to the Ebola outbreak in West Africa so as to reinforce our preparedness to handle any possible cross border health threat in Europe. Your support and cooperation is essential to secure preparedness across the EU. I also believe we need to reinforce our joint efforts to tackle a number of communicable diseases in particular HIV/AIDS, Tuberculosis and Hepatitis, which still inflict great damage in Europe and hence need greater attention. On this note, growing antimicrobial resistance is another challenge I believe we need to address together, head on, with a "one health approach" to reduce the negative impact of multi drug resistant infections. I am ready to co-operate with all Member States and stakeholders at European level to support you and provide added value to your efforts towards improving health, and to monitor progress regularly for example through a possible report on the state of health in Europe.'

It is clear that ECDC will support the Commission in the execution of these priorities, which are not all necessarily new and are already a significant part of work plan, but efforts might increase and lead to shifting priorities.

2. The recommendations of the Management Board drafting group on the second external evaluation will be presented during the June 2015 MB meeting and these may affect ECDC's plans to improve its performance and deliver according to the needs of its stakeholders. It is likely that not all recommendations can be realised in 2015 and therefore the work plan 2016 might be affected. This will be addressed in due time.
3. It is still uncertain how ECDC's involvement into the Ebola crisis, would require ECDC to invest resources for a prolonged period after 2015.
4. Political developments have underlined the need for the EU to react to horizontal issues regarding migrants, vulnerable populations, including Roma and specific questions related to communicable diseases.
5. And finally in 2016 ECDC hopes to harvest the fruits of the surveillance system reengineering project which aims to critically look at the functions of surveillance, the communication between systems and the ICT infrastructure of software and hardware. This will lead to a modernisation, restructuring and of the processes and ICT infrastructure and software solutions to make them fit for the second decade of ECDC's existence.

Structure of the 2016 Annual Work Programme

According to ECDC's Founding Regulation³, "*The Management Board shall adopt, before 31 January each year, the Centre's programme of work for the coming year. It shall also adopt a revisable multi-annual programme.*" Furthermore, "*Each year the director shall submit to the Management Board for approval [...] draft work programmes*".⁴

The Strategic Multi-annual Programme 2014-2020 (SMAP) outlines clear expectations for ECDC's achievements by 2020. ECDC's work is planned on a yearly basis in an Annual Work Programme with a medium term "rolling time horizon", based on the SMAP. The SMAP provides input for the preparation of the annual work programmes, to ensure alignment with ECDC longer-term goals and mandate. The Annual Work Programme 2016 follows the structure of the SMAP. The present overview of priorities is conditional upon the approval of the corresponding budget by the relevant authorities.

The framework for this document reflects the development towards a single programming document⁵ with less chapters and broader grouping of activities. However, the need to inform about specific objectives and efforts requires a sub-differentiation by chapter. The structure of the information is similar to what has been presented in earlier years, namely a context part, medium term objectives and the key outputs for 2016.

The Work Programme 2016 includes the detailed split of cost for operations (Title III), as well as the allocation of staff by strategies and a detailed activity based budget, to give the Management Board a complete picture of costs of products and services to be provided by ECDC in 2016.

A set of indicators has been developed for the SMAP; these indicators have been streamlined with the annual Work Programme (common set of indicators). This is necessary as from 2017, following the new EU Financial Framework Regulation⁶, both multi-annual and annual work programmes should be integrated in a *single programming document*, revisable yearly. Targets for the indicators have been adapted to the expectations for 2016. Based on the lessons learnt from 2014, few of the indicators and their target have been adapted to make them more relevant, while the majority was left unchanged in order to keep sufficient comparability with previous years. The indicators will continue to be reported annually to the Management Board, as part of the annual report, with a long term perspective, showing how the SMAP is implemented along the next seven years. Indicators include targets and way of measuring. For the second time an annual stakeholder survey will provide feedback to ECDC on the level of satisfaction of its stakeholders (in particular, the Member States, Commission and Parliament), to feed some of the indicators. ECDC will use the set of indicators to regularly review its results, the effectiveness and efficiency of its operations, and make necessary adjustments to improve its performance. The indicators will in particular feed the existing quality management system and the Centre's internal evaluation process to contribute to the internal evaluation of ECDC's activities and outputs, and to the improvement and reengineering of the Centre's internal work processes. The results also contribute to the discussions of the Quality Management Steering Committee and the Senior Management Team in order to improve the efficacy of the Centre. When presented annually to the Management Board, an action plan will be attached to address and improve areas where performance is not considered satisfactory.

Resources

In 2016, the Centre's proposed budget is the same as for 2015 at 58.3 M € (-0.5%), while the total number of staff will decrease from 290 to 286, plus 5 SNE's. The decrease of staff is due to the requested post reduction of 10% of the Establishment Plan (i.e. Temporary Agent posts) until 2018 (5 % for the overall reduction of staffing levels and an additional 5 % for the redeployment pool of agencies). The reduction on the original number of 200 Temporary agent posts started in 2013 and will result in an establishment

³ Article 14(5)(d)

⁴ Article 16(3)(b)

⁵ The Single Programming Document, as requested by the new Financial Framework Regulation will be fully in place for the Work Programme 2017, following a common template approved by the Network of EU decentralised agencies and the Commission, i.e.: *Communication from the Commission on 16/12/2014 C(2014) 9641 final on the guidelines for programming document for decentralised agencies and the template for the Consolidated Annual Activity Report for decentralised agencies.*

⁶ Regulation (EU, EURATOM) No 966/2012 Of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union.

plan of 180 Temporary Agent posts in 2018. ECDC's Work Programme includes the full Activity Based Budget, providing the real planned cost of the activities of the Centre (see Annex 2).

Table I: Budget by Title

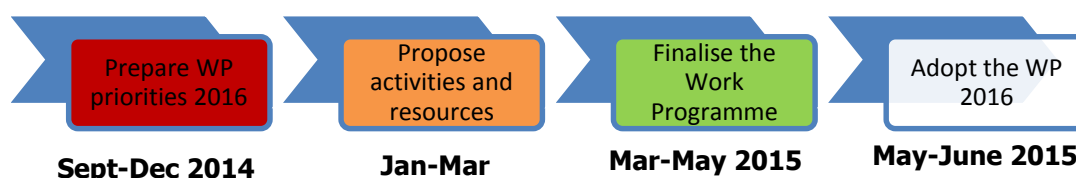
REVENUE	2016	change 2016/2015
TOTAL (EU contribution)	56.766 M€	0%
EFTA contribution	1.594 M€	-1.7%
Total Budget	58.360 M€	-0.5%

EXPENDITURE	2016	change 2016/2015
Title I - Staff	32.835 M€	+0.5%
Title II - Infrastructure	7.244 M€	0%
Title III - Operations	18.281 M€	-1.1%
Total Budget	58.360 M€	-0.5%

The detailed presentation of the budget by activities (Annex 2) provides a more detailed overview. ECDC grouped its activities by functions ('functional groups') on which resources (budget and staff) is spent. This makes easier the quick overview of ECDC resource allocation and allows stable comparisons over time, as comparison of individual actions is not always possible due to their changing nature.

Process of elaboration and consultation with the major stakeholders

Timeline for the Work Programme 2016 preparation



The present document took as its point of departure the current activities of ECDC based on the SMAP. In order to gradually comply with the new framework financial regulation, and the annual timelines for the future Single Programming Document, the process started earlier than in previous years, with the objective of the discussion on priorities before December 2014 and the final approval in June 2015.

A first document, ECDC 2016 Work Programme Priorities - the result of an internal process of consultation with the ECDC Units and Disease Programmes - was presented and discussed at the 32th meeting of the Management Board on 18-19 November 2014. Management Board members were invited to comment on the document through electronic consultation in December 2014. These comments have been integrated in the final document. All comments are registered and made available for all MB members in the repository of comments, which also includes the reaction from ECDC.

Following this step the Senior Management Team reviewed and revised the draft work plan 2016 to reflect the overall strategic priorities of the Centre for 2016. A further update was presented to the MB during the March 2015 meeting. The details of the 2016 Work Programme were then further developed from January until May, both in terms of budget allocation for operations and of staff allocation, in order to ensure the best allocation of resources to activities. The European Commission received the draft version for comments on 24 April 2015 and the reactions were discussed during a video conference on 18 May. Subsequent changes were included in the final proposal which was submitted on 26 May 2015 to the Management Board.

ECDC Work Programme 2016

1. Surveillance and epidemic intelligence

1.1. Surveillance

Context

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

ECDC's overarching priorities in relation to surveillance under its SMAP 2014-2020 are to add more value to the data it gathers by making them available in new, user-friendly formats; to decrease the administrative burden on data providers in the Member States; and to take advantage of the possibilities offered by molecular technologies: in particular in the field of molecular surveillance. In 2016, ECDC is progressing new initiatives in all these areas while continuing to collect and analyse data on all the diseases and public health issues under EU-level surveillance. Event-based and indicator-based surveillance data will be collected in a more systematic and complementary way. This will bring surveillance and epidemic intelligence closer together. We will also continue to provide technical input to possible future updates or revisions of EU case definitions by the European Commission, and to develop EU standards for surveillance of selected pathogens.

Medium-term Objectives

The key objectives of ECDC's surveillance activities in 2016 and next years are:

1. Expand ECDC Surveillance Atlas of Infectious Diseases, so that partners and stakeholders can access value-added EU-level information on antimicrobial resistance, healthcare-associated infections and antibiotic consumption;
2. Display data quality indicators in a restricted version of the Atlas for data providers to have an overview of quality issues for selected diseases;
3. Develop the software of the Atlas tool further after one year of operation and collection of users' feedback;
4. Implement a monitoring system for agreed indicators of surveillance standards for diseases selected through a consultation with the heads of disease programmes: tuberculosis, Salmonellosis, STEC infections, Listeriosis, hepatitis B and C;
5. Support the Commission in the revision and updating of EU case definitions, in particular for Lyme disease, through the implementing acts under decision 1082/2013/EU;
6. Provide technical support to Member States that wish to establish machine-to-machine automated transfer of surveillance data to ECDC, taking into account data protection requirements and in close coordination with the Member States;
7. In accordance with the "ECDC strategy and roadmap for integration of molecular typing into European level surveillance and epidemic preparedness" (AF32/NMFP10), develop business cases for HIV and Legionnaires' disease, and (subject to recommendations in and approval of business cases developed in 2015) support pilot operation of molecular surveillance for invasive meningococcal disease (IMD), drug-resistant *Neisseria gonorrhoeae*, multidrug-resistant *Staphylococcus aureus* (MRSA), and carbapenemase-producing enterobacteriaceae;
8. Provide Member States and the Commission with advanced analysis of the quality of the submitted surveillance data;
9. Liaise with EU networks funded under the Health Programme involved in surveillance.

Key Outputs 2016

1. The Atlas displays data for all diseases and conditions under EU/EEA surveillance for which this makes sense epidemiologically, and country profiles; (1,3) (related to SMAP deliverable 9.1.1).
2. The Atlas displays data quality indicators for selected diseases to data providers (2).
3. Feasibility study report for TESSy machine-to-machine reporting (6) (related to SMAP 9.1.4).
4. Molecular surveillance data included in routine surveillance outputs for Salmonella, Listeria, *E. coli* (VTEC/STEC) and multidrug-resistant *M. tuberculosis*; (related to SMAP deliverable 9.1.6).
5. Molecular surveillance business cases as per roadmap; (7) (related to SMAP deliverable 9.1.6).
6. Subject to recommendations in and approval of business cases developed in 2015: Molecular surveillance pilot operation as per roadmap (7) (related to SMAP deliverable 9.1.6).
7. Surveillance standards monitoring report for prioritised diseases; (8) (related to SMAP deliverable 9.1.3).
8. Advanced data quality reports for all diseases under enhanced surveillance; (2) (related to SMAP deliverable 9.1.2).
9. Provide tailored surveillance outputs on specific countries and diseases, upon request, to support EU policies and actions.

Indicators

Nb.	Objective	Indicator	Target 2015	Verification
1	Support to the Commission and the Member States in the implementation of the epidemiological surveillance of communicable diseases and special health issues according to Article 6.5 of Decision 1082/2013/EU	Proportion of diseases and special health issues for which surveillance standards have been developed and agreed with the National Surveillance partners	Diseases and special health issues under surveillance reviewed according to the SMAP; standards implementation started for all diseases for which standards were agreed in 2014 and 2015 ⁷	Steps to verify 100% achievement are: - Yearly list of diseases for which the standards have been agreed - Yearly report from TESSy on the number of diseases following these standards
2	High level of user friendliness and quality of uploading surveillance data.	Level of positive feedback from the Member States using machine to machine to upload TESSy data	- 100 % response to all requests - 80% users satisfied - Dashboard on quality indicators available to Member States for at least four additional diseases	Measure to be integrated into the annual stakeholder survey
3	Interactive outputs available for all diseases under surveillance	Proportion of diseases under surveillance for which online interactive outputs are available	Satisfaction with functionality: 80% All diseases under EU indicator-based surveillance	Outputs used measured by web statistics As measured in annual stakeholder survey
4	Substantially increased power of surveillance by implementing molecular characterisation for selected diseases	- Proportion of evaluated business cases for selected pathogens.	- All business cases prepared for pathogens whose surveillance objectives have been agreed by AF in 2015	Results of the pilot phase are verified by the Advisory Forum opinion

⁷ When indicators or targets have been changed from last year, they are highlighted in red.

		- Proportion of pathogens with molecular surveillance modules in TESSy	- Molecular surveillance in place for at least 60% of pathogens for which business cases have been prepared in 2015	Note: the decision process might lead to a review of targets in 2017
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1.2 Epidemic intelligence

Context

Monitoring and assessing threats to public health in Europe from infectious diseases are core tasks for ECDC, as is providing technical support to the EU-level response to such threats. The Commission and Member States have come to rely on the Centre's rapid risk assessments and technical support when faced with serious multi-country infectious disease threats. This has been seen during numerous outbreaks in recent years, most recently with the Middle East Respiratory Syndrome Coronavirus (MERS CoV) in 2012-2014, the outbreaks of human cases of avian influenza A (H7N9) in China in 2013 and the large outbreak of Ebola virus disease in West Africa in 2014.

ECDC's partners in the Commission and Member States rely on its epidemic intelligence and response support activities. These are core services that the Centre has been providing since it became operational: many of the activities and outputs planned for 2016 can therefore be seen as continuation of services provided in previous years. Nonetheless, ECDC expects the EU level cooperation against multi-country infectious disease outbreaks to further intensify over the coming years as a result of Decision 1082/2013/EU. ECDC will hence be developing a range of new tools to support more rapid investigation and analysis of multi-country outbreaks. These will include among others: 1) an online outbreak investigation questionnaire tool that can simultaneously create a questionnaire in several languages and enable joint analysis of the results gathered, 2) a tool to enable rapid creation and real time updating of line listings / epidemic curves for multi-country outbreaks and 3) a new GIS tool for the investigation of community Legionnaires' disease outbreaks.

Medium-term Objectives 2016

The key objectives of ECDC's epidemic intelligence and response activities in 2016 and next years are:

1. Timely and effective monitoring of potential threats from infectious diseases.
2. Align the rapid and effective support to the Commission and Member States in addressing infectious disease threats of EU level significance with the implementation of Decision 1082/2013/EC.
3. Provide Member States with updated training for the preparation of Risk Assessments
4. Produce new/updated response tools to support and facilitate work of Member States and the Commission.
5. Further improve the support ECDC provides to the Commission and Member States by a strong and reliable infrastructure and by continually improving processes.
6. Liaise with EU networks funded under the Health Programme involved in epidemic intelligence and response.

Key Outputs 2016

1. Make the EPIS tools (1) accessible and available for neighbourhood and enlargement countries in a step wise approach in order to improve the exchange and quality of the information between those countries and Member States (related to SMAP deliverable 9.2.1 and 9.2.4).
2. Develop new utilities linked to EPIS (2) in order to improve the capacity to manage emerging threats in a standard and homogenous approach (related to SMAP deliverable 9.2.1).
3. Implement the development and extension of TTT (1,2) to ensure high quality event information on threats detected in Epidemic Intelligence (related to SMAP deliverable 9.2.4).
4. Update materials and training sessions (3) on quality and timely performance of risk assessments from Member States (related to SMAP deliverable 9.2.2).

5. Improve the capacity of EWRS (2,5) for preparing reports and exchange essential data and information on public health confirmed alerts (related to SMAP deliverable 9.2.4).
6. Update and improve the different procedures and processes (6) in the areas of Epidemic Intelligence, in order to ensure an appropriate support to the needs of the Commission and the Member States (related to SMAP deliverable 9.2.1, 9.2.2, 9.2.3, 9.2.4).

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
5	Provision of relevant, timely and quality rapid risk assessment to support the risk management carried out by the Member States and the Commission	<ul style="list-style-type: none"> - Number of timely rapid risk assessments - Proportion of rapid risk assessment assessed positively by Member States through the annual stakeholder survey 	<ul style="list-style-type: none"> - 80% of rapid risk assessments produced within the set deadline for each RRA - 100% within 4 weeks - 80 % yearly satisfaction of respondents 	<ul style="list-style-type: none"> Timeliness: RRA statistics Quality: annual stakeholder survey
6	Provision of relevant, and timely updates on threats to the Member States and the Commission	<ul style="list-style-type: none"> Provision of regular epidemiological updates for threats under specific monitoring Provision of weekly communicable disease threat reports Provision of support teams upon request from Member States 	<ul style="list-style-type: none"> - Epidemiological updates provided - 52 weekly CDTR published in 2015 - 100% requests for response support from Member States honoured 	<ul style="list-style-type: none"> CDTR, epidemiological updates: website availability CDTR publications List of requests from Member States

Total Resources surveillance and epidemic intelligence:

Total FTEs for this activity: 25.4 FTE
 Total operational budget title 3: 1,033,000 EUR

2. Scientific support

2.1 Scientific Advice

Context

ECDC's output of scientific advice is highly valued by most of our stakeholders. It provides a European dimension and saves resources by performing systematic reviews and applying an evidence-based approach in one place instead of in 28. Work at ECDC has also concentrated on developing evidence-based methods that are suited to public health issues (PRECEPT). Having a common evidence base and an EU-level analysis of the technical issues in relation to a public health problem can facilitate cooperation between Member States and the EU in addressing common problems. Using evidence-based methods not only improves the value of scientific advice, but also addresses the increased scrutiny towards such output from the public and stakeholders.

It belongs to ECDC's nature of a network organisation to have one central, special focus conference on communicable diseases. The ESCAIDE conference forms such an opportunity for networking and gluing together the scientific communities at the practical public health level.

There is also a need for harmonised procedures in the production of scientific advice between ECDC and other EU Agencies. This work has recently started by launching a network for scientific advice (EU-ANSA), and aims to save resources by sharing ideas and methods for processes such as: selection of experts, use of expert databases and transparency, evidence-based methods, shared terminology, etc. ECDC also contributes to the work of some EU networks on risk assessment funded under the Health Programme, such as SHIPSAN ACT, AIRSAN, EMERGE, for which ECDC staff is consulted as experts or invited as members of the Advisory Boards.

It is also important to work closely with the Member States around scientific advice to ensure ECDC advice and research is adding value and to reduce duplication. Here, the Advisory Forum plays an important role in all aspects.

Due to priority (re)settings and consequent lack of resources, ECDC needs to review its capacity to continue with activities considered to be part of the 'foresight function'. In 2016, resources will be available for maintenance of the 'Burden of Communicable Disease' tool and ensuring its availability for use by ECDC and the Member States. Resources for further development of the project will be reviewed pending the outcome of practical application of the tool by the Member States.

For 2016 we foresee potential new or re-prioritised activities in the domain of scientific advice consequent upon the recommendations and MB response to the External Evaluation. An area of activity that is particularly likely to be impacted by the recommendations and response to the external review include increased integration of public health microbiology and epidemiology work streams.

Medium-term Objectives

The key objectives of ECDC's scientific advice activities in 2016 and next years are:

1. Supporting the Chief Scientist and the Advisory Forum in identifying priority issues on which the Centre should produce scientific advice.
2. Ensuring that the process and tools used in the production of the Centre's scientific advice are consistent and in line with best practice on production of evidence based public health guidance.
3. Further increasing the confidence in, and impact of, ECDC's scientific advice, through strengthening consultation and collaboration structures and processes with Member States and other EU agencies.
4. Supporting and coordinating the 2016 edition of the European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE), and involving Commission services like SANTE, CHAFAE, and other EU agencies.
5. Become a trusted source of scientific advice for all the Member States.

Key Outputs 2016

The activities planned for 2016 form an integral part of the deliverables in the area of scientific advice as defined in ECDC's SMAP 2014-2020. These outputs are:

1. Continued to deliver targeted, high quality scientific advice that impacts policy decisions by:
 - Further develop the Scientific Advice Repository and Management System (SARMS) to manage scientific advice requests directed to ECDC; i.e. deploy a new functionality that allows external stakeholders to directly interact with SARMS (SARMS-IF) (2) (9.4.4)
 - Apply public consultation for at least 2 scientific advice outcomes (2) (9.4.4)
2. Aligned with SMAP deliverable 9.4.2 on becoming a trusted source of scientific advice:
 - Continuing support to the ECDC scientific advice development process; providing a framework for scientific excellence. (5) (9.4.2)
3. Achieved a harmonised, integrated, transparent process of scientific advice that is a significant contribution to the EU's communicable disease control, in collaboration with the Member States, the other EU Agencies, and other stakeholders. (3) (9.4.4)
 - Represent ECDC at the EU-ANSA network of "Chief Scientists" of EU Agencies; (3)
 - Organisation of the ESCAIDE Scientific Conference, involving Commission services like SANTE, CHAFEA, and other EU agencies; (4)
 - ECDC scientific development strategy and coordination; (1 and 3)
4. Offered training to Member States and stakeholders in new methods for evidence-based public health. (3) (9.4.5)
 - Developed methods and tools to facilitate the use of evidence-based principles in daily work.
 - Deploy the PRECEPT⁸ tool to our stakeholders.
5. Proposals developed on using new technology to improve the accessibility, utility and flexibility of ECDC's scientific outputs (3) (9.4.1)

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
7	High level of support of the Commission and Member States by producing quality scientific publications in the area of the priorities and mandate of the Centre	Quality of ECDC scientific publications in peer-reviewed journals remains high i.e.: - Average journal Impact Factor - Average number of citations of each article	IF > 3.8 > 10	Quality and citations base on the following databases: Scopus, PubMed and Embase
8	High level of timely and adequate response to requests for scientific opinions by providing authoritative and reliable evidence-based scientific opinions and guidance to Member States, Commission and Parliament	- Proportion of prioritised scientific topics executed. - Proportion of requested items for scientific advice (ad hoc and planned) timely delivered - Use of evidence-based opinions and guidance produced by ECDC	80 % of prioritised actions integrated in annual work programme 80 % >70% of opinions and guidance	- Comparison between IRIS (tool for scoring scientific priorities by the Advisory Forum) and the approved Work Programme - Source SARMS (internal database on external scientific advice requests) - Annual stakeholder survey

⁸ Project on a Framework for Rating Evidence in Public Health (PRECEPT)

2.2 Microbiology

Context

In keeping with the EU Health Strategy, every Member State should have access to routine and emergency diagnostic and reference laboratory services to detect, identify, characterise and subtype human pathogens of public health significance. This is dependent on maintaining the laboratory capability at clinical, national and supranational reference levels. In a fast-moving field, rapid microbial and drug resistance screening tools are now reaching the point-of-care diagnostic market. Whole genome analysis is transforming microbiological diagnostic and typing approaches and uncovering novel markers of virulence and drug resistance of public health relevance. Yet, there is a largely unmet need to critically assess their accuracy and public health usefulness. In addition, national reference laboratories need access to training and external quality assurance schemes for microbiological technologies to ensure comparability of surveillance data.

The first strategic objective of ECDC microbiology programme is to consolidate the capacity of the EU public health microbiology system. To strengthen capacity ECDC will support Member State access to improved technologies by organising technical guidance, training workshops, external quality assessment schemes as well as sharing specialised testing within European networks of laboratories. The Microbiology Coordination Section will support the disease programmes by facilitating the sharing of best practice across disease networks and in 2016 will play an increasingly important role in ensuring EU-added value of microbiology support activities such as cost-effective management of external quality assessment schemes and guiding harmonisation of new laboratory methods for enhanced surveillance.

The second goal is to implement a system for monitoring key capabilities and essential components of microbiology services for surveillance and disease prevention and control across the EU/EEA to remedy any vulnerability at Member State or EU levels.

The third goal is to further refine the ECDC roadmap for integration of molecular typing into EU-wide surveillance in a stepwise manner based on developing disease-specific objectives, critically reviewing the EU added value and outlining appropriate molecular surveillance study designs. ECDC will offer scientific guidance on the public health added value of whole genome sequencing for pathogens under EU molecular surveillance. This work will be performed in close collaboration with EFSA and academic leaders through advising DG RTD projects, including the Horizon 2020 COMPARE project on rapid genomic-based identification of pathogens, and by contributing to related international initiatives.

Decision 1082/2013/EU gives the European Commission and Member States a new, more robust legal basis for cooperation against infectious diseases and other serious cross-border health threats. The Commission is examining options for creating a system of EU level reference laboratories in the area of human pathogens. ECDC will provide technical support to the Commission as it takes forward this initiative.

For 2016 we foresee a key role of the Microbiology Coordination Section to start reflecting with stakeholders on EU vulnerabilities as detected through the second report of EU LabCap monitoring of key laboratory capabilities to inform possible corrective actions.

Medium-term Objectives

The key objectives of ECDC's microbiology activities in 2016 and next years are to:

1. Support and monitor the further strengthening and coordination of essential microbiology capabilities in Member States for surveillance, prevention and control of infectious diseases and antimicrobial resistance, informed by EU LabCap analysis.
2. Develop and review strategic priorities for the integration of molecular and genomic typing into the EU level surveillance of communicable diseases and antimicrobial resistance.
3. Provide technical support to the Commission in its initiative to establish EU reference laboratory framework for human pathogens in support of Decision 1082/2013
4. Improve the strategic oversight of microbiology external quality assurance activities to strengthen the cost-effectiveness and coordination of ECDC supported External Quality Assessment schemes for EU laboratory networks in close consultation with the Commission to ensure complementarity with the EMERGE Joint Action and other EC laboratory initiatives.

Key Outputs 2016

Objective 1: Annual ECDC report on microbiology support activities 2015 and EULab Cap report on state of laboratory capabilities in EU/EEA 2013-2014 (1) (SMAP Chapter 9.6, Deliverables 9.6.1 and 9.6.2, Milestones 1 and 3).

Objective 2: Molecular surveillance strategies evaluated for 10 pathogens and multidrug-resistance targets (2) (SMAP Chapter 9.6, Deliverable 9.6.3, Milestone 7)

Objective 3: 1. participate in the final workshop 2016 of Cost benefit analysis study of CHAFAEA/SANTE on reference laboratories”

Objective 4: Framework for oversight of External Quality Assessment schemes for EU laboratory networks developed (1) (SMAP Chapter 9.6, Deliverable 9.6.1)

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
9	Implementation of the ECDC microbiology strategy to ensure sufficient microbiology capacity within the EU, to detect and manage infectious threats.	Proportion of Member States having microbiological core capabilities and capacity, as defined by the ECDC Microbiology Strategy	<ul style="list-style-type: none"> - Second annual EULabCap monitoring of three components of laboratory capabilities i.e. primary diagnostics; national microbiology reference laboratory services and laboratory-based surveillance and epidemic response support - Joint assessment with Advisory Forum and competent bodies of lessons learned from comparison 2014 versus 2013 EULabCap indicators - Compare the laboratory EQA performance levels and EULabCap capability levels for surveillance of communicable diseases and antimicrobial resistance - Molecular surveillance strategy defined or revised for 10 diseases - Strengthened ECDC procurement process for external quality assessment schemes 	<p>Verification by technical audits of Member States and other components.</p> <p>[NB. The midterm evaluation may result in the formulation of specific targets and options for action.]</p>

Total Resources Scientific Support (including microbiology):

Total FTEs for this activity: 14.7 FTE
 Total operational budget title 3: 992,000 EUR

3. Preparedness and response

3.1 EU and Country Preparedness Support

Context

Article 4 of Decision 1082/2013/EU on serious cross-border health threats establishes an ambitious agenda for the full implementation by the Member States of the legal provisions, especially in regards to enhanced capacities to prepare for and respond to emerging threats. Providing technical support to that agenda is one of ECDC's top priorities for 2016 and beyond.

Preparedness planning, identification of gaps, and capacity building is critical if the EU and its Member States are to respond effectively to major epidemics, and other serious cross-border health threats. The recent international threats have increased the awareness of public health practitioners on the importance to base their response on good scientific evidence for preparedness, enhanced cooperation with critical sectors, and sharing of good practice across countries.

For 2016 we foresee strengthened cooperation between preparedness support and capacity building within ECDC in support to countries' efforts to have efficient readiness to public health emergencies. While the current biennium (2014-2015) is dedicated to building evidence and developing instruments for identification of gaps and needs (risk categorization, self-assessment tools, case studies) from 2016 and beyond ECDC aims to provide direct support in reinforcing capacity in specific areas, such as testing and proofing effectiveness of public health readiness and strengthening core capabilities in critical preparedness areas (pre-hospital and hospital preparedness, deployment of countermeasures, and inter-sectoral response planning).

Medium-term Objectives

The key objectives of ECDC's Country Preparedness Support activities in 2016 and beyond are to:

1. Support the European Commission in monitoring the implementation of Art. 4 of Decision 1082/2013/EU with scientific evidence base, gap analysis and identification of areas for enhanced support to MS.
2. Strengthen preparedness in countries and facilitate its alignment with Decision 1082/2013/EU by promoting good practices and methodological toolkits on effective preparedness planning, evaluation of response plans and their interoperability, maintaining resilience to cooperate with HSC and its dedicated subgroups
3. Support exchange of knowledge and practice among relevant professionals and organisations at EU and regional level to further strengthen capacities and outbreak management.
4. Provide the Commission with data and analysis on individual Member States to support EU policies and actions on emergency preparedness.

Key Outputs 2016

1. Development of literature reviews on effective response arrangements for pre-hospital and hospital preparedness to highly contagious diseases (i.e. VHF, respiratory viral diseases).
2. Regional NFP workshops on planning for and evaluating operational national public health emergency response plans.
3. Two regional courses on pre- and hospital preparedness (patient nursing and transportation).
4. Launch and dissemination of public health emergency preparedness toolkit (planning guidance, evaluation tool, training curricula, infographics on management of highly infectious patients).
5. Repository of good practice in planning, evaluation and capacity building for PH preparedness to emergencies.
6. Data and analysis on individual Member States crisis preparedness structures and capacities.

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
11	Support to the Commission and the Member States in the implementation of the preparedness Article 4 of Decision 1082/2013/EU as endorsed by the Health Security Committee, in particular in improving the interoperability and consistency of national preparedness planning, intersectoral coordination and business continuity planning.	<ul style="list-style-type: none"> - Proportion of ECDC activities (guidelines, seminars, workshops, exercises) undertaken to reach the planned objectives -Proportion of ECDC products endorsed by the Health Security Committee 	<ul style="list-style-type: none"> 90% by 2020 50% by 2020 	<ul style="list-style-type: none"> -Completed workplan activities -Verified by HSC meeting minutes

3.2. Response and emergency operations

Context

Decision 1082/2013/EU on serious cross border health threats is strengthening and intensifying coordination between the Commission and Member States on preparedness and response against health threats. ECDC will operate the Emergency Operations Centre (EOC) and host the extended EU Early Warning and Response System on Public Health Threats (EWRS). Other ECDC's expert resources will also facilitate the EU level response to serious cross border threats to health. Since 2006, ECDC maintains and invests in the EOC infrastructure. Moreover, ECDC continuously improves its processes in this area in light of lessons learning during both exercises and real life Public Health Emergencies.

Medium-term Objectives 2016

1. Strengthen the participation of ECDC teams in the response support in Member States in front of specific Cross Border Threats for health
2. Further improve the capacities and processes of the Emergency Operation Centre

Key Outputs 2016

1. Update and improve the different procedures and processes (2) in the area of Emergency Operations and EU preparedness in order to ensure an appropriate support to the needs of the Commission and the Member States (related to SMAP deliverable 9.2.1, 9.2.2, 9.2.3, 9.2.4).
2. Maintain the capacity to offer quick deployment of ECDC (1) to support the Member States response in front of cross border threats for health (related to SMAP deliverable 9.2.3).

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
12	Provision of relevant, and response support to the Member States and the Commission	Provision of support teams upon request from Member States	- 100% requests for response support from Member States honoured	List of requests from Member States

Total Resources Preparedness and Response:

Total FTEs for this activity:	14.4 FTE
Total operational budget title 3:	620,000 EUR

4 Training and capacity building

4.1 Training

Context

The defence against communicable diseases in the EU depends on a continuously available competent workforce at all levels. This is recognised in Article 9 (6) of ECDC's Founding Regulation, which mandates the Centre to support and coordinate training programmes. It is reiterated in article 4 of the Decision 1082/2013/EU, where training and capacity development is identified as a key element of EU and Member State level preparedness against serious-cross border health threats. Furthermore, capacity building through training is recognised as critical to develop core capacities under the IHR 2005.

While the ECDC training activities are designed to be complementary to and support national training initiatives, the added value of supporting and coordinating training at EU level is that:

- It is often more cost effective to develop and run highly specialised training on a multi-country basis. Such trainings could be further cascaded to subnational levels by each country as needed.
- Undertaking training together helps professionals from different Member States understand each others' public health systems. This facilitates cross-border cooperation and inter-operability.
- EU level training activities help foster consensus on the core competences needed to prevent and control infectious diseases, and how those competences are defined. This facilitates cross-border cooperation and inter-operability.

For 2016, we foresee a balanced offering of various training activities based on the proposed new Training Strategy to be discussed in the June Management Board meeting, with special emphasis on the provisions in the ECDC Founding Regulation to support the Member States (MS) and the Commission to have sufficient number of trained specialists.

As the available training budget is now at a steady state level, any increase in specific activities with budgetary implications needs to be matched by either a decrease of other activities or by a larger contribution from the Member States.

A key challenge will be to find the best balance between the ECDC Fellowship Programme (EPIET and EUPHEM) aimed at junior and mid-career professionals and activities aimed at mid-career to senior professionals, i.e. continuous professional development (CPD) and training-the trainers.

To maximise the cost-effectiveness of the ECDC training efforts more emphasis will be put on e-learning, supporting Member States to cascade training in the countries and promoting/assisting EPIET associated programmes (EAPs).

Medium-term Objectives

The key objectives of ECDC's Public Health Training activities in 2016 and next years are:

1. Organise the flagship ECDC Fellowship Programme with the EPIET and EUPHEM paths and continue supporting and collaborating in the organisation of the EPIET Associated Programmes and other national FETPs.
2. Strengthen key segments of national public health capacity by providing training for senior and mid-career professionals in the ECDC Continuous Professional Development (CPD) Programme, which includes short courses, senior exchange programme and communities of practice, serving also train the trainers needs of the fellowship programmes and assuming dissemination of knowledge to sub-national levels.

3. Provide scientific leadership and support to the implementation phase of the Mediterranean Programme for Intervention Epidemiology Training (MediPIET).
4. Increase the outreach of ECDC's training capacity by e-Learning courses via its Learning Management System (LMS).
5. To support networking and exchange of knowledge among relevant professionals and organisations involved in capacity building, at European and international level.

Key Outputs 2016

1. One fellowship cohort graduating from EPIET and EUPHEM, one new cohort selected and in place and fellowship training curriculum implemented as planned. The size of the cohorts depending on the outcome of the strategic discussions 2014-15 (related to SMAP deliverable 9.5.1).
2. The ECDC Learning Management System firmly established with a growing number of e-courses (related to SMAP deliverable 9.5.3).
3. Courses delivered according to the Catalogue of the ECDC CPD Programme, and a number of Senior Exchange Programme visits completed. The courses will be organised by blended learning (online and face to face) (Related to SMAP Deliverables 9.5.5.).
4. Scientific leadership and pedagogical support provided to the MediPIET Programme, including chairing of the Annual MediPIET Scientific Conference. Links between MediPIET and EPIET/EUPHEM strengthened through exchange of course participants and faculty (related to SMAP Deliverables 9.5.2).
5. The work with different European and international networks of capacity building continuously strengthened, including establishment of an ASPHER/ECDC network of Schools of Public Health engaged in prevention and control of communicable diseases (related to SMAP deliverable 9.5.5).
6. Core competencies in Tuberculosis finalised, based on work initiated in 2015 (related to SMAP 9.5.4).

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
13	With special emphasis on the core capacities referred to in Article 4 of Decision 1082/2013/EU, a strengthened workforce in the Member States through adequate and relevant training.	<p>Reaction: Participant satisfaction with ECDC training activities.</p> <p>Learning: Achievement of agreed learning objectives in relation to core capacities in ECDC fellowship programmes (EPIET/EUPHEM).</p> <p>Behaviour: Number of scientific articles of public health relevance by EPIET/EUPHEM fellowship during and 2 years after graduation</p>	<p>> 80 % satisfaction</p> <p>> on average 80 % achievement by all fellows</p> <p>> 50% increase compared to the 2-year period before entering the programme</p>	<p>Course evaluations.</p> <p>Incremental progress reports (IPR), Competencies Development Monitoring Tool (CDMT), mid-term and final reviews with fellows and supervisors.</p> <p>Bibliometrics (PubMed, Scopus)</p>

4.2 International relations

Context

Threats from infectious diseases do not stop at the border of the EU. Emerging pathogens and epidemics originating on other continents can also threaten public health in Europe. ECDC therefore needs to maintain lines of communication with key technical counterparts around the world. First and foremost among these is the World Health Organization, and in particular its Regional Office for Europe.

Further developing technical cooperation and exchange of information with countries bordering the EU is a key focus of ECDC's international relations. Within this group priority is given to the EU pre-accession countries and European Neighbourhood Policy partners. ECDC is working with the European Commission and the health authorities in these countries to start integrating them into the EU infectious disease surveillance and rapid alert systems, and to assist them in aligning with the EU acquis in the area of communicable disease prevention and control. Most of this work is carried out through grants from the European Commission (DG NEAR).

For 2016 we foresee that upon request of the European Commission, ECDC will continue the assessments of enlargement countries' capacities in the field of communicable diseases. This will entail an assessment of one country in 2016, continuing the post assessment dialogue and monitoring with countries already assessed, and preparation for the following assessment. ECDC pre-accession technical assistance activities will support participation of aspirant countries in ECDC structures and systems through the ECDC-IPA4 grant.

Furthermore, building upon the achievements of the ECDC European Neighbourhood Partnership Instrument (ENPI) project (2014-2015), ECDC will maintain its support to the overall EU policy objective of bringing European Neighbouring Policy (ENP) partners closer to EU standards through strengthening of capacities, the approximation of practices and legislation, and participation of ENP experts in joint activities.

The ENPI grant that supported the organisation of joint activities with ENP countries will end by January 2016. Strategic decision should be taken as to the possibility to apply again for a new grant through the European Neighbourhood Instrument (ENI) to continue EC financial assistance for development of cooperation activities with ENP countries and maintain our current level of activities with those countries in 2016 and beyond. The level of activities to be envisaged with ENP countries in 2016 and beyond will depend on the availability of EU financial assistance topping up ECDC core budget.

As part of the objective to further develop technical cooperation with ENP partner countries, particular attention will be given to further support East ENP partner countries which have signed Association Agreements with the EU (i.e. Ukraine, Moldova, and Georgia) with a view to support the assessment and strengthening of their communicable disease prevention and control systems.

In addition, ECDC will continue its support to the Mediterranean Programme for Intervention Epidemiology Training (MediPIET) by providing scientific leadership for the implementation of the phase II of the project and ensuring the coordination of related activities with the MediPIET coordinator.

ECDC activities aimed at integrating the EU pre-accession countries in ECDC structures and surveillance systems will be carried out with external EU financial assistance, e.g. the Instrument for Pre-Accession Assistance (IPA), TAIEX.

Finally building upon existing bilateral collaboration agreements with other centres for disease prevention and control or similar organisations in non-EU countries, ECDC will continue its efforts to become a close technical partner of the major CDCs.

Medium-term Objectives

In accordance with the priority setting identified in the ECDC International Relations Policy 2014-2020, the key objectives of ECDC's international relations activities in 2016 and next years are to:

1. Implementation of ECDC technical cooperation objectives and joint activities with:
 - A) EU enlargement countries;
 - B) ENP partner countries.
2. Support the Commission in the implementation of cooperation on Health Security with WHO.
3. Revitalise the existing Memoranda of Understanding with the CDC's in non-EU countries.

Key Outputs 2016

1. Supporting the Commission on:
 - (i) the follow-up phase after the countries' assessments in 2013 – 2015,
 - (ii) conducting the assessment of a new country using the revamped tool that takes into account the Decision 1082/2013/EU, and

- (iii) preparing for the next assessment to be conducted in the following year (related to SMAP deliverables 8.4.1, 8.4.2)
2. Continuing implementation of the ECDC pre-accession assistance activities supported by the Commission (ECDC-IPA4, subject to award decision of proposal in 2015), including support to participation of EU enlargement countries' experts in ECDC disease network meetings and technical discussions.
 3. Policy and action plan on engaging EU pre-accession countries and ENP partners in disease networks and ECDC surveillance activities, including into ECDC thematic EPIS platforms (related to SMAP deliverable 8.4.3)
 4. Follow-up project under European Neighbourhood Instrument (ENI) has been initiated and implementation started to support the development of technical cooperation between ECDC and ENP countries, if granted by the European Commission (new) (32) (related to SMAP deliverable 8.4.7)
 5. Supporting the Commission on technical dialogue with East ENP countries having signed Association Agreements with the EU (Ukraine, Moldova, Georgia)
 6. Continue to provide adequate scientific and technical support and leadership to the further development and consolidation of the MediPIET programme

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
14	Achievement of timely and sustainable support to the Commission and relevant countries in the implementation of EU enlargement and ENP policies. Established and functioning working relations with relevant international partners.	Completion of an agreed list of joint activities established between ECDC and its international partners	- Degree of completion of the key outputs for the Work Programme 2016, in the area of cooperation and collaboration: 80 % activities successfully implemented	Work Programme 2016 list of key outputs

Total Resources Training and capacity building:

Total FTEs for this activity: 21.3 FTE
 Total operational budget title 3: 4,093,500 EUR

5 Communication

5.1 Health Communication

Context

ECDC's partners, and the wider public health community, expect the Centre to communicate its scientific output in a timely manner. The obligation to communicate results and, at minimum, make them available via the Centre's website is set out in Article 12 of ECDC's Founding Regulation. But the importance of health communication goes beyond this. The EU and its Member States have come to regard coordination of risk and crisis communication, based on robust and independent evaluation of public health risks, as a vital area of cooperation when responding to serious cross-border health threats. Being able to rapidly agree a set of coherent, technically sound core messages about a threat can be a huge support to response efforts. Providing technical support to the Commission and Member States in this area will therefore be a top priority for ECDC in 2016 and beyond.

ECDC's technical support on risk and crisis communication will feed into the framework for cooperation between the Commission and Member States laid down in Decision 1082/2013/EU⁹, notably provide technical and expert support to the HSC communicators' network.

Understanding the population's knowledge and perceptions of communicable diseases is the basis for better and more focused planning of interventions and campaigns. Within the priority areas, ECDC will support the Member States' efforts to integrate behaviour change and risk communication strategies in their communicable disease prevention programmes.

Medium-term Objectives

The key objectives of ECDC's health communication activities in 2016 and next years are:

1. Communicate ECDC's scientific output to the Centre's target audiences¹⁰ in a timely, consistent and professional manner - including via social media
2. Provide technical support to the Commission, the HSC communicator' network and the Member States that will facilitate the coordination of their risk and crisis communication in coordination with the HSC and its dedicated subgroups.
3. Support the Member States efforts on effective behaviour-based communication around specific diseases

Key Outputs 2016

1. Efficiently communicate ECDC scientific and technical contents using a broad range of channels (web portal, social media, press...) (1)
2. Provide capacity building support to the Member Stes on risk and crisis communication related to Decision 1082/2013 (2)
3. Within the framework of the ECDC disease programmes provide communication toolkits and other support to the Member States (3)

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
15	Publication of topical online information within ECDC's remit through the web portal and social media channels	Usage of the ECDC web portal and social media channels	+10% web visitors and social media followers	Web and social metrics used for verification Measure on quality will be in the annual stakeholder survey.

⁹ See in particular recital 22, Article 11 and Article 17 of Decision 1082/2013/EU

¹⁰ SMAP 2014-2020 defines the target audiences for ECDC's external communication as: health professionals, policy makers, the media, and health communicators. ECDC is generally not communicating directly with the general public.

			- Certification by an external party (HON)	Health on the Net (HON) www.hon.ch for reference
16	Support to Member States and Commission in regard to public health campaigns and provide training and tools for risk communication.	Activities and actions delivered according to approved planning	100% delivery within agreed timelines	Records on file of activities and actions
17	Provision of scientific input to crisis communication in case of Communicable diseases events/emergencies coordinated by the Health Security Committee (and its communicators network) in liaison with the Commission according to articles 11 and 17 of Decision 1082/2013/EU	Proportion of lines to take (LTTs), press material shared	100% input to all critical events	Quality and timeliness verified by feedback from Commission on HSC actions and decisions

5.2 Eurosurveillance

Eurosurveillance will continue to provide an attractive outlet for peer-reviewed publications on the epidemiology, surveillance, prevention and control of communicable diseases with focus on Europe. It will also carry on supporting timely public health action by facilitating rapid communication about outbreaks or events related to communicable diseases. The good impact factors and further positive metrics for the journal have positioned it among the top ten in its category. Thus the number of submissions and workload are high. A continued challenge has therefore been to maintain quality and speed of published articles and remain attractive for our audiences. While several improvements 'behind the scenes' envisaged for 2015 should have led to improved functionality, the presentation of the journal via its website needs to be further amended to meet readers' and authors' expectations and match that of other journals in the field.

The annual board meeting will give important strategic input for the journal policy and reinforce ties with experts in the national institutes in the Member States. A scientific seminar to mark the 20th anniversary of the journal will be an opportunity to highlight its contribution to public health, and for the editors to liaise closely with some main stakeholders and boost our reputation through high quality content. Development of an educational article series will support capacity building and life-long learning.

Medium term Objectives

1. Consolidate the high level profile and attractiveness of the journal, while maintaining the balance between articles presenting high-level science and those presenting good quality public health-relevant findings.
2. Further develop educational arm by providing educational/scholarly articles such as reviews and methodological papers etc.) to support capacity building and attract younger audiences.
3. Increase the presence of the journal in social media.

Key outputs 2016

1. The website will be optimised with features commonly provided by other scientific journals to (i) offer modern functionalities design for the benefit of readers and authors alike, (ii) to allow editors to work more efficiently through a content management system.
2. The visibility of the journal will be further enhanced by a scientifically attractive seminar marking the 20th anniversary of the journal, embedded in a large conference and presence of staff at scientific conferences.

3. Follow up actions of the editorial board meeting mid 2015 will be implemented.
4. Series of scholarly, educational articles aimed at capacity building and contribution to life-long learning.

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
18	Consolidate the high level profile and attractiveness of Eurosurveillance	Number of issues and items published Impact factor for Eurosurveillance	- 50 issues and 200 items published in 2016 - IF >2	Eurosurveillance website Journal Citation Reports, Thomson Reuters

Total Resources Communication and Eurosurveillance:

Total FTEs for this activity: 21.5 FTE
 Total operational budget title 3: 425,000 EUR

6. Disease programmes

6.1 Antimicrobial resistance and healthcare-associated infections - ARHAI

Context

The issues of antimicrobial resistance (AMR) and healthcare-associated infections (HAIs) are getting higher on the EU agenda, as the various threats keep increasing. Prudent use of antimicrobials, infection prevention and control, and the need for new antibiotics will continue to be the focus of European initiatives. Especially, the alarming trends of increasing resistance to last-line antimicrobial agents such as carbapenems and polymyxins in Gram-negative bacteria, as reported by EARS-Net and the EuSCAPE project in 2013-2014, require close surveillance and concerted efforts in the EU and at international level.

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

Since 2014, our stakeholders have asked for intensified efforts on the surveillance, prevention and control of AMR and HAIs, in particular on estimates of the burden and costs of HAIs, and a monitoring and evaluation system with a set of indicators to assess implementation of national strategies/action plans and their success in improving prevention and control of HAIs. In addition, the development of a directory of online resources (repository) and of a toolbox of essential control options and interventions to prevent and control HAIs and AMR have been prioritised to improve sharing of available resources, information and best practice at EU level. This necessitated an increase in the number of staff working in the ARHAI disease programme, making it possible to add and prioritise new activities, compared to the original SMAP 2014-2020.

Medium-term objectives

The key objectives of the ARHAI disease programme in 2016 and following years are:

1. Improve the participation of Member States in surveillance of HAIs, including data on structure and process indicators for prevention and control of HAIs and on mortality;
2. Develop a methodology to regularly produce better estimates of the burden and cost of HAIs and AMR in the EU and its Member States;
3. Increase the use of good practices for the surveillance, prevention and control of AMR and HAIs in the EU;
4. Raise awareness about prudent use of antibiotics through the contribution to the European Antibiotic Awareness Day (EAAD).

Key Outputs 2016

- HAI-Net: improved country participation in surveillance of surgical site infections (HAI-Net SSI) and HAIs in intensive care units (HAI-Net ICU); report on surveillance of surgical site infections 2013-2014, including mortality estimates (1c) (related to SMAP deliverable 10.1.1)
- Revised estimates of the burden of HAIs and AMR (not in SMAP, additional activity)
- HAI-Net: initiation of the third point prevalence survey in long-term care facilities (not in SMAP, additional activity)
- HAI-Net: initiation of surveillance of *Clostridium difficile* surveillance (not in SMAP, additional activity)

- Preparation of Surveillance Atlas of Infectious Diseases (incl. country summary sheets): AMR, antimicrobial consumption, HAIs, structure and process indicators on prevention and control of HAIs (not in SMAP, additional activity)
- EARS-Net: annual report 2015 and updated interactive database on surveillance of AMR (1a) (related to SMAP deliverable 10.1.1)
- ESAC-Net: updated interactive database 2015 on surveillance of antimicrobial consumption and pilot reporting on antimicrobial consumption in hospitals (1b) (related to SMAP deliverable 10.1.1)
- Preparatory work for the 2nd European Survey of Carbapenemase-Producing Bacteria, including molecular typing (4) (related to SMAP 10.1.2)
- Support the standardisation of antimicrobial susceptibility testing methods in Europe, External quality assessment exercise on performance and compliance with EUCAST standards of the laboratories participating in EARS-Net (both related to SMAP 10.1.2)
- Continue the implementation of the directory (repository) of online resources for the prevention and control of HAI and AMR, including information on projects funded by the European Commission (9) (related to SMAP deliverable 10.1.1)
- First toolbox of essential control options and interventions to prevent and control HAIs and AMR (9) (related to SMAP deliverable 10.1.1)
- Country visits in response to requests from Member States (not in SMAP, additional activity)
- Contribution to the 2nd Joint Interagency Antimicrobial Consumption and Resistance Analysis Report (JIACRA) (6) (related to SMAP deliverable 10.1.3)
- Contribution to international cooperation initiatives such as the Transatlantic Task Force on Antimicrobial Resistance (TATFAR); Cooperation with WHO/Europe to implement the regional strategy on AMR (both related to SMAP deliverable 10.1.4);
- 9th European Antibiotic Awareness Day (EAAD), 18 November 2016 (11) (related to SMAP deliverable 10.1.5)
- Contribution to an "annual world antibiotic awareness campaign" as proposed by WHO in its draft Global Action Plan on AMR (not in SMAP, additional activity)
- Support the WHO "SAVE LIVES: Clean Your Hands" hand hygiene campaign by publication of ECDC-related outputs on 5 May 2016 (not in SMAP, additional activity)
- Scientific advice to the Commission as to future AMR policies (impact assessment, advice on draft EU action plan on AMR, including on suitable indicators) (not in SMAP, additional activity)

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
19	Strengthened Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	Number and type of tools, products and activities aimed at realising the SMAP deliverables.	90%	Measured and verified by Management Information System
20		Satisfaction by the member states on the value of the Disease Programmes	>80% satisfaction by two-third of the respondents	As measured by the annual stakeholder survey
21		Added value of the disease programmes is periodically evaluated	Each programme is evaluated every 5 years and a follow-up plan is made and executed.	

Total Resources ARHAI:

Total FTEs for this activity:	12.6 FTE
Total operational budget title 3:	1,341,385 EUR

6.2 Emerging and vector borne diseases - EVD

Context

Emerging and vector-borne diseases pose a special challenge to ECDC and national public health authorities due to the biological complexity of their transmission pattern and their epidemiological potential. In recent years, several vector-borne disease outbreaks have occurred in Europe and an increased establishment and spread of invasive mosquitoes or even ticks in new areas has been observed. It is anticipated that novel and unusual outbreaks of emerging and vector-borne diseases will occur with progressive risk of endemicity in some areas.

Most vector-borne diseases have their own complex epidemiological features, like seasonality and periods of pathogen persistence in reservoirs or vectors without occurrence of human disease. They can quickly (re-)emerge or be (re-)introduced under the right conditions. ECDC's day-to-day contribution is to share real-time mapping of cases during transmission seasons for the whole of Europe, giving national health authorities (e.g. blood transfusion authorities) timely information for decision making. Furthermore, truly new diseases might appear. Efforts to monitor and control these usually uncommon diseases are hampered by often limited capacity for detection combined with some lack of knowledge or awareness of clinicians.

In general, to understand and assess the risks linked to the different emerging and vector-borne disease situations in Member States, four types of data are needed: 1) disease data; 2) pathogen presence (in human or reservoir hosts); 3) the occurrence and distribution of vectors and 4) suitable environmental conditions. This requires a wider perspective on the surveillance of EVD than usual. Moreover, improved assessment tools are needed such as risk mapping, risk forecasting and orientation on control strategies. In contrast to the original SMAP 2014-2020, ECDC reduced in 2015 the expansion of the E3 network, but maintained certain functions for E3 geo-mapping. In 2016 ECDC proposes to sustain the E3 network for more integrated analysis and geospatial infectious disease modelling in Europe and its integration in Public health.

Medium-term Objectives

The key objectives of ECDC's emerging and vector borne disease programme activities in 2016 and next years are:

1. Surveillance: To strengthen and standardise reporting of vector-borne and emerging diseases through TESSy, EPIS or EWRS when appropriate with e.g. the updated case definitions for chikungunya and dengue, with the progressive integration of disease data on animals (e.g. for West Nile fever), vector distribution and GIS (re)processing; finalization of a case definition for Lyme borreliosis in parallel with a study on validation of neuroborreliosis as an indicator of Lyme borreliosis epidemiology in the EU, the identification of specific microbiological needs for implementation of the case definition, and review of the case definition for hantavirus.
2. Scientific advice: To integrate multidisciplinary knowledge based on studies of environmental/climatic drivers
3. External stakeholder interactions: To strengthen ECDC EVD disease network for interactions with MSs and extend expertise through closer contact and shared activities with international stakeholders particularly EFSA and WHO.

Key Outputs 2016

1. Aligned with SMAP deliverable 10.2.1 to provide relevant and timely surveillance information on vectors, reservoirs, animal and human disease with the following specific outputs for 2016:

- In depth analysis of TESSy data and dissemination of specific reports/publications with integration of animal and/or vector data based on the One Health approach where appropriate.
 - Timely surveillance of mosquito-borne diseases and development of an early information system.
 - Laboratory capacity building for early detection and surveillance of EVDs through an outsourced network, in coordination with the Microbiology Coordination Section and other laboratory related EC initiatives to avoid overlaps.
 - Data collection on disease vectors and the pathogens they transmit for updated vector distribution maps (mosquitoes, ticks and sand-flies), and ad hoc entomological support (through a joint project with EFSA via an outsourced network).
2. Aligned with SMAP deliverable 10.2.2 to produce scenarios for Member States based on risk maps and models, and provide guidance; and with SMAP deliverable 10.2.3 to provide technical support to assess the effects of social and environmental changes (including climate changes) on vector related threats:
- Perform risk analyses of emergence of vector-borne diseases and develop assessment tools and risk mapping/ forecasting/ models, aiming for effective EVD surveillance and MS preparedness.
 - Assessment of pathogen importation through global traffic and trade and disease situation monitoring (dengue, chikungunya, zika etc.).
 - Finalization of a case definition for Lyme neuroborreliosis, development of surveillance of Lyme borreliosis at the EU level (follow-up of previous piloting) to assess trends and burden of disease, and development of communication strategies.
 - Technical advice for supporting preparedness and training programmes on EVDs at ECDC.
 - Insure maintenance and development of tools that facilitate access to and analyses of relevant environmental data.

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
19	Strengthened Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	Number and type of tools, products and activities aimed at realising the SMAP deliverables.	90%	Measured and verified by Management Information System
20		Satisfaction by the member states on the value of the Disease Programmes	>80% satisfaction by two-third of the respondents	As measured by the annual stakeholder survey
21		Added value of the disease programmes is periodically evaluated	Each programme is evaluated every 5 years and a follow-up plan is made and executed.	

Total Resources EVD:

Total FTEs for this activity: 7.0 FTE
 Total operational budget title 3: 643,000 EUR

6.3 Food- and Waterborne Diseases and Zoonoses - FWD

Context

The food- and waterborne diseases and Legionnaires' disease epitomise the concept of serious cross-border threats to health, in that they are prone to outbreaks and clustering of cases that can cross national and international borders, due to trade of contaminated food, water, and/or infected animals as well as due to international travel of humans. This epidemiological characteristic, along with their potentially large economic impact on trade and tourist industry, makes the early detection and effective investigation of outbreaks particularly important. This requires multidisciplinary collaboration and regular communication between food safety, veterinary, environmental and public health authorities to implement timely control and prevention measures. Therefore ECDC works, amongst others, in close collaboration with EFSA. In addition to investing in detection and investigation of outbreaks, a robust enhanced long-term surveillance, integrating laboratory, clinical and epidemiological data, is essential to monitor trends and (re)-emerging strains, assess the public health impact of prevention and control measures implemented in the food and environmental sector, and to identify disease-specific epidemiological characteristics in the EU-wide human population. The linkage of surveillance of human disease with the monitoring of prevalence in food and animals is essential to produce appropriate public health risk assessments, both on an ad hoc basis and for a longer-term perspective.

Not mentioned earlier for FWD is the pilot project on integration of whole genome sequencing (WGS) to the ELiTE project. WGS will impact surveillance, the work in clinical and public health microbiology laboratories as well as response to outbreaks. ECDC will start to explore the potentials for integrating this technique to the outbreak investigation of *Listeria*, *Salmonella* and STEC/VTEC at the EU level.

As indicated by the statistics for urgent inquiries in EPIS-FWD, for 2016, we foresee an increased need for response to multi-country and cross-sectional foodborne outbreaks. The joint EFSA-ECDC molecular typing database is piloted in 2015. In 2016, the number of participating countries from food and human sector is expected to be increasing resulting in more threat signals that require further actions.

Medium-term Objectives

The key objectives of ECDC's Food- and Waterborne diseases and Zoonoses activities in 2016 and next years are:

1. To strengthen detection and investigation of multi-country outbreaks by linkage of human surveillance with that of food and animals, in particular through regular analyses in the new common joint molecular typing database with EFSA.
2. To promote the analyses and publications of TESSy data that is linked to other data sources: food, feed, animal, and environment.
3. To enhance the control of Legionnaires' disease outbreaks at EU/EEA level by promoting early detection, facilitating investigation and/or coordinating of cross-border clusters/outbreaks.
4. To strengthen public health microbiology competence for FWD and Legionnaires' diseases, in particular by offering learning opportunities through a FWD Expert Exchange Programme (FWDEEP).
5. To publish the first report on the European *Listeria* Typing Exercise (ELiTE) and continue the project by exploring the genetic diversity of *L. monocytogenes* in humans and food in the same dataset, in close collaboration with EFSA, EURL for *Listeria monocytogenes* and the Member States.

Key Outputs 2016

1. Strategic inter-agency structure established to support the implementation of joint molecular surveillance (1) (deliverable 10.3.1, milestone 3.2)
2. FWD network and ELDSNet network meetings organised and meeting reports produced (3) (deliverable 10.3.1, milestone 3.1)
3. Production of at least one peer review publication on the analysis and interpretation of surveillance data submitted to ECDC in Eurosurveillance or another journal (2) (deliverable 10.3.3, new milestone)

4. Report on public health risk associated with emergence of hepatitis E virus in EU/EEA (2) (deliverable 10.3.3, milestone 13.2 (from 2015))
5. Standard Operating Procedures for cross-sectoral investigation of mixed human, animal, food, feed, and environment molecular typing clusters is fully operational and linked to the SOP for Rapid Outbreak Assessment (1) (related to SMAP deliverable 10.3.4, milestones 9 (to be moved from deliverable 10.3.2) and 19). On-going activity from 2015 onwards.
6. The European Union Summary Report on zoonoses, zoonotic agents and foodborne outbreaks 2014, and The European Union Summary Report on antimicrobial resistance in zoonotic and indicator bacteria from humans, animals and food in 2014 (2) (deliverables 10.3.3, milestones 14.1 and 14.2)
7. Surveillance report on Legionnaires' disease will be continued (3) (deliverable 10.3.3 milestone 14.5)
8. Reporting of quantitative AMR data from at least 20 MS will be continued for monitoring human Salmonella and Campylobacter infections (2) (deliverable 10.3.3 milestone 14.6)
9. Expert Exchange Programme for food- and waterborne diseases and Legionnaires' disease (FWDEEP) (4) (deliverable 10.3.5, milestone 24.3 (continued from 2015 to 2016))
10. ELiTE: to finalise and publish the joint ECDC-EFSA-EURL-Lm report on epidemiology of Listeria based on simultaneous sampling of food and human isolates and description based on Pulsed Field Gel Electrophoresis (PFGE).
11. ELiTE: to initiate the continuation study with whole genome sequencing.

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
19	Strengthened Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	Number and type of tools, products and activities aimed at realising the SMAP deliverables.	90%	Measured and verified by Management Information System
20		Satisfaction by the member states on the value of the Disease Programmes	>80% satisfaction by two-third of the respondents	As measured by the annual stakeholder survey
21		Added value of the disease programmes is periodically evaluated	Each programme is evaluated every 5 years and a follow-up plan is made and executed.	

Total Resources FWD:

Total FTEs for this activity: 11.4 FTE
 Total operational budget title 3: 817,000 EUR

6.4 HIV, Sexually Transmitted Infections and viral Hepatitis - HSH

Context

The context for the different diseases in this programme differs significantly, but several threats connect them as well. The obvious links to sexual behaviour, deprived communities and some similarities in the determinants of transmission of infection are clear, but even stronger is that these diseases have

characteristics of silent epidemics, with all the inherent problems for prevention and control. Dedicated programmes for each of these diseases need specific evidence and data, which are often difficult to obtain, particularly from hard-to-reach populations and even harder to validate. However, the EU policy makers must know what are the emerging trends and practices and they need to know what works to prevent and/or reduce the harm from these infections most effectively. Because of their specific nature dedicated STI/HIV and hepatitis prevention programmes are less often embedded in the routine public health structures and often need significant advocacy in view of conflicting interests, political visibility and financial sustainability. Many Member States suffer from the fragmentation of the prevention and care services for HIV, STIs and viral hepatitis and this does not help in ensuring effective prevention and control.

A common factor in the work plan of HSH for the individual diseases is the focus on the collection, analysis and dissemination of the best available strategic information to support action. These efforts make a clear distinction between the needs of Member States in driving higher standards for surveillance and providing opportunities for sharing best practices in prevention and control programmes. This is supplemented by high quality, evidence-based scientific advice and guidance in the area of prevention and control that can be useful for both Member States and the EU Commission. Technical support for the development and monitoring of EU action plans and initiatives is provided, whether it is for HIV, viral hepatitis, the (re-) emergence of (some) sexually transmitted diseases or the threatening development of antimicrobial resistance for others.

Building on our past experience and the persistent threats, continued focus will be on those activities that have the biggest impact on reducing new HIV, STI and hepatitis infections, including treatment as prevention and pre- and post-exposure prophylaxis with appropriate antimicrobials to enhance the public health impact. Extra efforts have been requested for working on key at-risk populations, virology and molecular biology and migrant health and therefore, in 2015, 1 additional FTE has been granted to the programme and no budget cuts have been applied for the operational expenses, including the expansion of molecular surveillance activities.

As already started in 2015, for 2016 we intend to consult more and incorporate our stakeholders¹¹ needs and hence intend to steer our main efforts to ensure these are of most added value to Member States as well as the Commission. We aim to evaluate the impact of past guidances and consult our stakeholder regarding the needs for further guidance or update of previous advice. We also foresee a need for better integration of epidemiological and response data. Further we will aim to make better use of already existing data to estimate at-risk population sizes, prevalence/incidence to modelling data for HIV and hepatitis B and C. For 2016, we still foresee the need for direct technical request of Member States per request, as well as the need to monitor frameworks (HIV/Hepatitis/STI/ TB) and the responses to MDR gonorrhoea. We intend to explore the need for scientific advice on HIV as a chronic disease and we plan to enhance our collaboration on co-morbidity infections such as HIV+TB, HIV+HCV, etc.

Compared to 2015, we flag up capacity issues and the need for an additional dedicated senior expert. To accomplish all the tasks planned for 2016, will require an additional € 100,000 to our budget.

Medium-term Objectives

The key objectives of ECDC's activities in STI's, HIV/AIDS and blood borne viruses in 2016 and next years are:

1. Consolidate surveillance analysis and support the wider availability and use of quality surveillance data and reports.
2. Provide evidence-based advice and guidance¹² for the prevention and control of HIV, STIs and hepatitis B and C targeted to countries needs and identified threats.
3. Monitor the HIV/AIDS response; monitor the response plan for MDR gonorrhoea; support MS with improving the effectiveness of national prevention and control programmes and support the Commission in establishing a framework for hepatitis B and C prevention and control (possibly in conjunction with HIV, STI and TB).

¹¹ National Focal Points and Operational Contact Points in the Member States

¹² Guidance: a document based upon a systematic review of scientific evidence and on a scientific experts panel appraising the evidence and providing a list of options with regards to the potential benefits, costs and harms of measures, areas and level of uncertainty and recommendations for future research.

4. Strengthen prevention communication activities and consolidate links with key stakeholders and their networks.
5. Provide the Commission with data and analysis on EU Member State level to support EU policies and actions on HIV/AIDS, and viral hepatitis.

Key Outputs 2016

1. Continue to develop guidance on youth as well as scientific advice on sex work with the emphasis to support Member States in the implementation of comprehensive approaches to HIV, hepatitis B/C and STI prevention and control (2) (related to SMAP deliverable 3 within 10.4.2)
2. Conduct a European disease network meeting in the field of HIV and STI and ensure that the 'EU-plus' countries are informed about relevant developments for HIV/STI control by participation in this network meeting. Members of the networks will increase their impact by sharing and learning on best practices and experiences in surveillance, prevention and control from other countries (5) (related to SMAP deliverable 8 within 10.4.3)
3. Launch of a HIV and hepatitis B and C testing guidance (2 and 3) (related to SMAP deliverable 15 within 10.4.4)
4. Develop and possibly publish evidence based estimates of MS- and EU-level at-risk population sizes, prevalence/incidence estimates and modelling data for HIV, Chlamydia and hepatitis B and C to help plan better the comprehensive approaches to HIV, hepatitis B/C and STI prevention and control in Member States (2) (SMAP-Deliverable 3: 10.4.2)
5. Production at least one peer review publication on the analysis and interpretation of surveillance data submitted to ECDC in Eurosurveillance or another journal (1) (deliverable 10.3.3, new milestone)
6. Data and analysis on Member State level to support EU policies and actions on key infectious diseases including HIV and viral hepatitis). (5)
7. Support the Commission in establishing a policy framework for HIV/AIDS, and hepatitis B/C prevention and control (possibly in conjunction with STI and TB) by providing data, evidence and guidance on best practice. (3)

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
19	Strengthened Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	Number and type of tools, products and activities aimed at realising the SMAP deliverables.	90%	Measured and verified by Management Information System
20		Satisfaction by the member states on the value of the Disease Programmes	>80% satisfaction by two-third of the respondents	As measured by the annual stakeholder survey
21		Added value of the disease programmes is periodically evaluated	Each programme is evaluated every 5 years and a follow-up plan is made and executed.	

Total Resources HSH:

Total FTEs for this activity: 9.6 FTE
 Total operational budget title 3: 1,020,000 EUR

6.5 Influenza and other Respiratory Viruses - IRV

Context

Seasonal influenza continues to be the communicable disease with one of the highest morbidity and mortality impacts on the EU population. In addition, zoonotic influenza and other emerging respiratory viruses (IRV) continue to threaten public health in unsuspected and unexpected ways. Strong (pandemic) preparedness at the level of surveillance, laboratory activities and comprehensive actions in line with the serious cross border threats to health (Decision 1082/2013/EU) is needed. Globally, the countries participating in the World Health Assembly have agreed to a Pandemic Influenza Preparedness Framework (WHA64.5), which obliges countries to share viruses with pandemic potential and is important for ECDC work to support pandemic preparedness.

EU Member States have agreed to have strong influenza immunisation programmes for the elderly and the risk groups - Council recommendation of 22 December 2009 on seasonal influenza vaccination (2009/1019/EU) and have agreed on the importance of strong immunisation programmes in general - the Council conclusions on vaccinations as an effective tool in public health of 1 December 2014.

Recent examples of the H7N9 influenza outbreak in China and the Middle East Respiratory Syndrome - coronavirus (MERS CoV) threats from the Arabic peninsula show the importance of the following, recurring topics:

- The need for strong surveillance systems for seasonal influenza and (re-)emerging respiratory viruses, including estimates of disease severity, serological profiles, molecular strains and resistance to anti-viral drugs.
- Monitoring the overall impact of seasonal, zoonotic and pandemic influenza.
- The need for a strong national reference laboratory network in the EU.
- Scientific guidance for various topics.
- Sustainable structures to promote vaccination by targeted communication efforts, and to assess vaccine effectiveness and safety by means of agreed protocols and multi-country studies.
- Active participation in global surveillance, laboratory, vaccine and research networks.

Given the nature of the diseases, international collaboration is vital, in particular with WHO-Europe, WHO-HQ and CDC's. Significant structures are already in place and they allow ECDC to perform its ongoing epidemiology, laboratory and molecular surveillance, and publish the influenza surveillance bulletin. ECDC has the experience and capacity to upscale for monitoring emerging viruses and produces timely assessments and options for risk management. Close collaboration with the new EMERGE Joint Action is envisaged when it comes to emerging respiratory virus outbreaks and with the H2020 I-MOVE+ project aimed at measuring the effectiveness and impact of influenza (and pneumococcal vaccines).

The Disease Programme also aims to improve the structure and organisation of EU-level vaccine impact monitoring, mainly by participating in the Innovative Medicines Initiative (IMI) project "ADVANCE" in close cooperation with the ECDC Vaccine Preventable Disease programme.

Medium-term Objectives

The key objectives of ECDC's disease programme Influenza and other Respiratory Viruses in 2016 and next years are:

1. Improve the surveillance for severe respiratory diseases, for serological typing and molecular strain typing, and to improve the surveillance outputs.
2. To provide rapid assessments and guidance regarding emerging respiratory pathogens.
3. Strengthen laboratory capacity through external quality assessments, training and coordination of early virus detection in the EU.
4. Promotion of influenza vaccine coverage, including health communication and monitoring as integral parts of prevention strategies in support of implementation of the Council recommendation of 22 December 2009 on seasonal influenza vaccination (2009/1019/EU) and the Council conclusions on vaccinations as an effective tool in public health of 1 December 2014.

- To improve the pandemic preparedness in the EU by supporting the implementation of Decision 1082/2013/EU on serious cross border threats to health.

Key Outputs 2016

- Strengthen the routine surveillance mechanism for monitoring of severe respiratory disease, risk factors and influenza mortality (1) (deliverable 10.5.2). More flexible surveillance data outputs developed based on the Surveillance Atlas (1).
- Timely and high-quality risk assessment on emerging respiratory pathogens, outbreaks (2) (deliverable 9.2.1)
- More EU MS report seroepidemiological data and molecular strain typing results (1) (deliverable 10.5.1)
- Timely vaccine effectiveness estimates provided with improved methodology (4) (deliverable 10.5.4)
- Need for improved EU-level RSV surveillance reviewed. RSV is likely the respiratory virus with the second highest burden in EU and there is a vaccine for RSV in the pipeline. Currently a limited number of EUMS report RSV surveillance data to ECDC as part of the influenza surveillance; however the need for a routine surveillance system should be evaluated. An additional 0.5FTEs would be needed for this activity (1) (deliverable 9.4.1).
- Three case studies on multi-sectorial pandemic or respiratory disease preparedness done (5) (deliverable 9.3.2).
- Production at least one peer review publication on the analysis and interpretation of surveillance data submitted to ECDC in Eurosurveillance or another journal (1) (deliverable 10.5.2)

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
19	Strengthened Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	Number and type of tools, products and activities aimed at realising the SMAP deliverables.	90%	Measured and verified by Management Information System
20		Satisfaction by the member states on the value of the Disease Programmes	>80% satisfaction by two-third of the respondents	As measured by the annual stakeholder survey
21		Added value of the disease programmes is periodically evaluated	Each programme is evaluated every 5 years and a follow-up plan is made and executed.	

Total Resources IRV:

Total FTEs for this activity: 8.7 FTE
 Total operational budget title 3: 649,000 EUR

6.6 Vaccine Preventable Diseases - VPD

Context

The implementation of effective vaccination programmes have led to impressive strengthening and improvements in public health. To continue this trend and to safeguard the health of EU/EEA and global citizens, it is essential that these efforts are maintained. Challenges still remain in assuring optimal prevention and control of VPDs, and existing threats continue to lure and new threats and risks are seen to emerge:

- The re-introduction of an eliminated disease like polio in Europe is of more than theoretical importance as exemplified by the recent outbreak in Syria.
- The sizeable populations in the EU (clustered or scattered) that are not vaccinated pose a public health risk, as has been seen in the recent events with measles and rubella in EU/EEA Member States.
- Knowledge about vaccine effectiveness and vaccine safety are crucial to maintain trust and allow interventions if needed. Waning immunity may for instance affect the effectiveness of existing vaccination programmes. It is thus vital to establish an evidence based priority setting and subsequent decisions by policy makers.
- The availability of new vaccines for different age-groups opens vistas for life-long vaccination schedules at the EU level, but it requires new assessments on cost-effectiveness and priority setting at national levels.
- New approaches in communication regarding vaccination are urgently needed at various levels, including the medical profession, in order to meet vaccine scepticism and ensure informed vaccination decision.

A pillar of a robust vaccination programme is ensuring optimal monitoring of all aspects of the programme; including vaccine effectiveness, vaccine safety and vaccine coverage. However, maintaining sustainable monitoring activities is not self-evident.

The VPD programme will continue updating scientific advice and supplying training to complement the programmatic efforts.

Medium-term Objectives

The key objectives of ECDC's vaccine preventable disease programme activities in 2016 and the coming years are:

1. To further strengthen EU-wide VPD surveillance and infrastructure for monitoring the impact of vaccination programmes, by developing methodologies for monitoring age specific vaccination uptake and immunity, and facilitating the implementation of national vaccination registries.
2. To support Member States in strengthening their surveillance systems, facilitating the sharing of knowledge and best practices in immunisation issues and with the response to outbreaks of VPDs.
3. To support Member States in their efforts to monitor trends in vaccine acceptance and building public trust in vaccination programmes by providing tools and scientific advice.
4. In accordance with the ECDC strategy and roadmap for integration of molecular typing into European level surveillance and epidemic preparedness (AF32/NMFP10), to better integrate molecular typing and disease surveillance for priority vaccine preventable diseases.
5. Provide the Commission with data and policy analysis on individual Member States to support EU policies and actions on vaccine preventable diseases. Attention needs to be given to the situation of vulnerable migrants, especially children in an irregular situation facing legal/practical obstacles to accessing childhood immunisation; as well as in relation to re-emerging vaccine preventable diseases as poliomyelitis.

Key Outputs 2016

- "Strengthening EU-wide VPD surveillance and infrastructure for monitoring the impact of vaccination programmes" : Continue providing technical support to Member States and the European Commission for the implementation of the 2011 Council Conclusions on Childhood Immunisation and the foreseen

new Council Conclusions on immunisation (medium-term objective 2). Continue efforts of the IMI ADVANCE project; Collaboration with the H2020 project I-MOVE-PLUS.

- Scientific Advice: Evidence for guidance document collected and guidance document published on priority diseases. 2016 will focus on finalising guidance on meningococcal B vaccination and further initiate guidance on pneumococcal vaccination in adults (medium-term objective 2, SMAP deliverable 10.6.3, milestone 8).
- Scientific Advice and Preparedness: Continue following developments of re-emerging VPDs (as for example poliomyelitis) and providing EU/EEA and Member States with support as needed.
- Scientific Advice: Further develop methodologies and guidance for strengthening of immunisation systems in the EU/EEA Member States under the umbrella of the VENICE project for both VPDs and influenza (medium-term objective 1), as well as for strengthening the evidence base of immunisation programmes.
- Scientific Advice: Provide communication toolkits for healthcare workers supporting vaccination activities with a special focus on reaching vaccination-hesitant groups and piloting social marketing tools (medium-term objective 3).
- Surveillance: data and analysis on EU Member States level of vaccine preventable diseases (rate of vaccination, national measures).
- Surveillance: Continue the implementation sentinel surveillance systems for pertussis as well as for invasive pneumococcal disease (medium-term objective 1).
- Surveillance: Maintain high quality epidemiological, laboratory and molecular surveillance for VPDs (medium-term objective 1).
- Surveillance: Further implement meningococcal molecular surveillance (medium-term objective 4)
- Surveillance: Production of at least one peer review publication on the analysis and interpretation of surveillance data submitted to ECDC in Eurosurveillance or another journal (medium term objective 1)
- Public Health Microbiology: Maintain and strengthen the Invasive Bacterial Diseases (IBD) and pertussis laboratory networks and their activities (medium-term objective 1).
- Develop a protocol for conducting sero-surveillance studies on Vaccine Preventable Diseases.
- Stakeholder Interactions: Organise the biannual VPD network meeting, bringing together a number of the sub networks for the first time since the new CCB structure was adopted (medium-term objective 1); organise Eurovaccine 2016, in parallel with ESPID (European Society for Paediatric Infectious Diseases).

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
19	Strengthened Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	Number and type of tools, products and activities aimed at realising the SMAP deliverables.	90%	Measured and verified by Management Information System
20		Satisfaction by the member states on the value of the Disease Programmes	>80% satisfaction by two-third of the respondents	As measured by the annual stakeholder survey
21		Added value of the disease programmes is periodically evaluated	Each programme is evaluated every 5 years and a follow-up plan is made and executed.	

Total Resources VPD:

Total FTEs for this activity:	10.4 FTE
Total operational budget title 3:	1,246,000 EUR

6.7 Tuberculosis - TB

Context

The EU Member States, EEA countries and the candidate, potential candidate countries and the European Neighbourhood Policy countries have different tuberculosis (TB) epidemiological profiles: i.e. medium and high burden of (drug-resistant) TB; and low burden which permits to embark on the elimination of TB. Thus different approaches should be followed. In low burden settings, people at risk for TB are often found in vulnerable populations which may be difficult to reach. Also, TB in migrants contributes to the epidemiology. In medium and high burden countries, TB is more often found in the general population. Diagnosing and treating patients is the main public health strategy. This requires sufficient human and financial resources and innovative strategies that allow for early case finding and optimal treatment.

The World Health Organisation has defined its post-2015 targets and developed a new global strategy (the End TB Strategy), and in the EU we have assessed whether there are gaps in the Framework Action plan. Meanwhile, ECDC contributes to:

- The joint surveillance with WHO Euro and improvement and standardisation of data collection of all diagnosed TB patients with specific focus on treatment outcome results, molecular typing and HIV co-infection.
- Adequate laboratory services which take into account the different country profiles and resources. New diagnostic tests, including molecular typing are needed as well as support for national reference laboratories to ensure quality and timely diagnosis for all. This requires assessments, training, and guidance and scientific advice for strategic introduction into the sub-network.
- Optimal TB prevention and control with a focus on vulnerable groups¹³. This asks for prompt identification, diagnosis and treatment of all individuals affected. In low-burden countries this may imply efforts to maintain the necessary knowledge and infrastructure.
- Keeping MDR TB as a priority and continue to collaborate with WHO in implementing the action plan to prevent and combat M/XDR TB.
- Scientific advice and guidance¹⁴ that supports Member States in prevention and control of TB.

The Advisory Forum has prioritised scientific advice on programmatic latent TB control, on interventions for TB prevention and control in hard to reach and vulnerable populations, on improving treatment outcomes for TB, on assessment of external completeness of TB notification data, on risk factors for TB among HIV infected people that will allow for identification of risk groups and implementation of targeted preventive actions, and updating the European Union Standards for Tuberculosis Care.

To assist with the implementation of the WHO End TB Strategy scientific advice on making TB prevention and control patient centred in the EU/EEA is needed. ECDC will provide technical support to the Commission on developing and monitoring the implementation of an EU Action Plan or strategy document on communicable diseases (HIV/AIDS, viral hepatitis, and TB) ECDC will also collaborate with the TB Health Programme actions (HA REACT and future TB 2015), in particular on TB standards of care, support to cross

¹³ Homeless people, people with drug or alcohol addiction, prisoners or people with a history of imprisonment, some vulnerable migrant populations, and Roma populations.

¹⁴ Guidance: a document based upon a systematic review of scientific evidence and on a scientific experts panel appraising the evidence and providing a list of options with regards to the potential benefits, costs and harms of measures, areas and level of uncertainty and recommendations for future research.

border TB control data sharing (patient data sharing) and on the development of country strategies, and monitoring.

For 2016 we foresee to finalise the scientific advice activities that were started in earlier years and we plan to start with the collection of the evidence for new scientific advice documents.

Medium-term Objectives

The key objectives of ECDC's TB activities in 2016 and next years are:

1. Strengthening TB (molecular) surveillance at national and EU level to reach an adequate coverage and completeness; the targets are specified in the monitoring and evaluation framework¹⁵.
2. Strengthening TB laboratory services for management of TB so that all TB suspects are tested with tests that allow for adequate and rapid diagnosis, and all TB cases are tested for drug resistance.
3. Supporting TB prevention and care efforts especially in high burden Member States.
4. Providing relevant scientific advice on TB prevention and control.
5. Providing technical support to the Commission for the development of or monitoring of the implementation of strategy document(s), e.g. an EU Action Plan.

Key Outputs 2016

1. Scientific advice: Assessment of latent TB control as a programmatic intervention (4) (related to SMAP deliverable 10.7.1)
2. Update of the European Union Standards for Tuberculosis Care (ESTC) (4) (related to SMAP deliverable 10.7.1)
3. Scientific advice on interventions for TB prevention and control in hard to reach and vulnerable populations (4) (related to SMAP deliverable 10.7.1)
4. Evidence base for development of one or two scientific advice documents (4) (related to SMAP deliverable 10.7.1)
5. Coordination of Surveillance and Monitoring of TB in Europe, with an annual network meeting (1) (related to SMAP deliverable 10.7.2)
6. Coordination of laboratory network (European Reference Laboratory for Tuberculosis Network), with annual network meeting (2) (related to SMAP deliverable 10.7.2)
7. Support to high priority countries with development and implementation of country strategies and activities for TB prevention and control (3) (related to SMAP deliverable 10.7.3)
8. Support to the Commission on development or monitoring the implementation of strategy document(s), e.g. an EU Action Plan on Communicable Diseases (HIV/AIDS, viral hepatitis, TB) (5) (related to SMAP deliverable 10.7.3)
9. Support the Commission with data and analysis on Member State level to support EU policies and actions on key infectious diseases including tuberculosis (rate of infection, national measures, evidence-based interventions/ actions) (5) (related to SMAP deliverable 10.7.3)
10. Production of at least one peer review publication on the analysis and interpretation of surveillance data submitted to ECDC in Eurosurveillance or another journal (1) (related to SMAP deliverable 10.7.2)

Please find in the footnote below a more elaborate justification for the proposed (new) activities for TB¹⁶.

¹⁵ European Centre for Disease Prevention and Control. Progressing towards TB elimination. Stockholm ECDC; 2010. Available from http://ecdc.europa.eu/en/publications/publications/101111_spr_progressing_towards_tb_elimination.pdf

¹⁶ *Assessment of external completeness of TB notification data In 2013/2014, ECDC has assessed the internal completeness of the TB notification data. The results of this project were reported and discussed in the annual TB surveillance sub network meeting. In 2016 ECDC would like to start a multi-year project to assess the external completeness of TB notification data using the methodology developed by the World Health Organization (http://www.who.int/tb/publications/inventory_studies/en/). ECDC will work with 2-3*

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
19	Strengthened Europe's defences against infectious diseases by dedicated programmes aiming at the best possible knowledge and implementation for prevention and control.	Number and type of tools, products and activities aimed at realising the SMAP deliverables.	90%	Measured and verified by Management Information System
20		Satisfaction by the member states on the value of the Disease Programmes	>80% satisfaction by two-third of the respondents	As measured by the annual stakeholder survey
21		Added value of the disease programmes is periodically evaluated	Each programme is evaluated every 5 years and a follow-up plan is made and executed.	

Total Resources TB:

Total FTEs for this activity: 5.8 FTE
 Total operational budget title 3: 624,000 EUR

countries per year to evaluate the external completeness of their surveillance data. The results of this project can be used to better estimate the TB burden in the EU and to improve TB surveillance.

Update of the European Union Standards for Tuberculosis Care (ESTC): In 2012, ECDC and the European Respiratory Society (ERS) published the European Union Standards for Tuberculosis Care. These standards are an EU adaptation of the International Standards of Tuberculosis Care (ISTC) and aim to provide clinicians and public health workers with an easy-to-use resource, guiding through all required activities to ensure optimal diagnosis, treatment and prevention of TB. In 2014, ECDC and ERS published an assessment about whether there is a need for an update of the ESTC given that an update of the ISTC was published in 2014 (<http://erj.ersjournals.com/content/43/4/933.long>). The conclusion of this assessment was that it would be good to update the ESTC in 2016.

7. Management

7.1 General Management

Context

The general management of the organisation requires cohesion of the work described in all chapters. The main activities focus on cross-organisational issues like quality, project management and the implementation of the strategic multi-annual programme 2014-2020.

Dedicated efforts are the organisation of seamless communication with the Member States, the European Commission, notably through the governing bodies MB and AF and the National Coordinators of the coordinating Competent Bodies.

Although these activities shape the direction for the coming years, specific responsiveness is required and guided from the Director's Office. In particular the implementation of the recommendations of the second external evaluation and the reduction of the burden for the Member States will be targets. Furthermore leading the reduction of staff and (re-)allocation of resources is a priority.

Depending on the recommendations of the Management Board in 2015 regarding the implementation of the external evaluation, at least the first half year of 2016 could require significant resources and attention to follow-up.

It is important that ECDC's products and communications are scientifically correct and impartial. As ECDC relies on many internal and external experts who together shape the scientific position of ECDC it is necessary to have an Independence Policy in place that effectively and proportionally ensures transparency and dealing with potential and existing conflicts of interest.

In 2016 the existing policy will have been revised, and the emphasis will be on timely and correct application of the policy, in particular for expert meetings. The review of the annual declarations of interest will be guided by the latest, more explicit risk analysis for ECDC. This risk analysis also serves to start collecting information on the proportionality of the resources involved.

Medium-term Objectives

The key objectives of the Director's Office activities in 2016 and next years are:

1. Finalising the coherent implementation of the recommendations of the second external evaluation.
2. Continue to re-engineer processes to improve ECDC's efficacy and efficiency.
3. Monitor the implementation of the SMAP 2014-2020.
4. To apply the independence policy in a proportional manner to the meetings organised by ECDC.
5. To harmonise the submission of Declarations of Interests between different target groups and device ways to reduce the rate of errors.
6. Increase the harmonisation of storage and dual use of submitted Declarations of Interest.

Key outputs 2016

1. Midterm evaluation of the SMAP 2014-2020 leading to a proposal for revision to the MB.
2. The submission of ADoI's and SDoI's follows a harmonised workflow using a - yet to be decided - format permitting easy storage and options for systematic review and collection of statistics.
3. Search functions for the dual use of ADoI's are in place.

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
22	Implementation of the independence policy of the agency	Proportion of approved annual and specific declarations of interest for delegates to Governing Bodies, ad hoc scientific panels, invited experts and ECDC staff members before participation to the specified activities as defined in the policy.	100 %	Data from the compliance officer

Total Resources General Management:

Total FTEs for this activity: 11.8 FTE
 Total operational budget title 3: 0 EUR

7.2 Collaboration and Cooperation**Context**

By its history and Founding Regulation one of ECDC's main characteristics is its operation as a network organisation, the hub of an EU "network of networks". Most of the disease prevention and control resources ECDC draws on – including all of the public health laboratories and many of the disease-specific experts – are in the Member States national public health institutes and associated academic environments. Linking with experts and resources in the Member States is therefore a vital core task of ECDC. In this respect the director's country visits aim to better understand the public health and policies and thus facilitate cooperation. The Centre's key partners in doing this are the Competent Bodies – ECDC's official national counterpart organisations, each of which has been formally nominated by its Member State. Reduced resources lead to a postponement in the original planning for the developing CRM driven workflows in cooperating with Competent Bodies. ECDC also nurtures the relationship with our host country Sweden.

ECDC is also part of the EU family of institutions and organisations. The Centre collaborates closely with other members of this family in order to ensure its actions are coherent with the EU's policy objectives and properly coordinated with those of other EU bodies. First and foremost among its partners within the EU family are the European Commission's Directorate-General for Health and Food Safety. The Centre also has contacts with other Commission DGs, among which DG Research and DG Enlargement, as well as other EU agencies, most notably the European Food Safety Authority (EFSA) and the European Medicines Agency (EMA). ECDC is active in the Heads of Agencies network with the aim to increase joint activities, common procedures and possible efficiency gains.

The European Parliament is also a partner for ECDC: the Director has an annual exchange of views with Parliament's Committee for the Environment, Public Health and Food Safety (ENVI) and submits annual written reports to its Committee for Budgetary Control (CONT).

By 2016 we will be in the second year of the mandate of the new Commission, which may result in policy changes that ECDC has to respond to. In a similar vein new policy priorities may arise from the new European Parliament, the European Council and the regular meetings of EU health ministers within the EPSCO Council: some of these could also have implications for ECDC.

Medium-term Objectives

The key objectives of ECDC's collaboration within the EU family and with Member States in 2016 and next years are:

1. Smooth, timely and efficient procedures for cooperation with the Commission, in particular with a view to the practical consequences of Decision 1082/2013/EU.
2. Invest in maintaining appropriate relationships with the new European Parliament, in particular the ENVI committee.
3. Foster feedback to improve communication and cooperation with the coordinating Competent Bodies.
4. Invest in even closer cooperation with our host country Sweden.

Key Outputs 2016

1. Implemented the procedures in ECDC regarding risk assessments, tools and guidance requested by the Commission to support implementation of Decision 1082/2013/EU (1)
2. ECDC Director has a well prepared and constructive annual exchange of views with the European Parliament's ENVI Committee (2)
3. Implemented the External Evaluation recommendations regarding cooperation with EU stakeholders (3)
4. Implemented the actions as agreed in the strategic cooperation paper signed with our host country Sweden (4).

Indicators

Nb.	Objective	Indicator	Target 2016	Verification
23	Achievement of a high level of effective communication and coordination between ECDC and its Competent Bodies	Satisfaction of the Coordinating Competent Bodies on the communication with ECDC	70 % satisfied with communication and coordination	Measure to be integrated into the annual stakeholder survey

Total Resources Cooperation and collaboration:

Total FTEs for this activity: 2.9 FTE
 Total operational budget title 3: 13,500 EUR

7.3 Resource management

Context

The resources available for disease prevention and control in the EU including the operational budget of the Centre are under pressure. The budget restrictions demand for increasing cost-efficiency without compromising the quality of the work. It includes good practises on reliability, accuracy and transparency. The legal, administrative and operational processes supporting our core activities should further gain in efficiency. They should help reduce the workload related to the good administration of the Centre as staff reductions are inevitable. This challenge is addressed in a structured way. The reorganisation of procurement, Finance and Mission and Meetings activities have laid the foundation. The reorganisation also recognises that processes rely on people and therefore ECDC puts a specific focus on clarifying roles and responsibilities, on relevant skills and mutual expectations in order to better support the Centre's abilities to deliver sustainable results, and for example at a wider scale by our goal that Resource Management is working paperless as much as possible.

Most of Resources Management and Coordination's activities do not change from year to year and a common theme is cost-conscious, efficient operations in all areas of RMC.

For Human Resources management the main point of attention is to further develop the staff performance process. The services by Human Resources continue to support the staff development, aiming at ensuring operational flexibility and sustainable good performance, as well as creating a healthy work environment. Human Resources support and advice to the organisation is provided at a high professional level always ensuring compliance with the regulatory framework.

Most activities in Finance are ongoing actions to: 1) Ensure that the financial resources of the Centre are managed efficiently; 2) Provide the annual accounts of the Centre; 3) Ensure the preparation of draft, approved and amending budgets; and 4) Provide financial advice and support to all Units of the Centre.

For Procurement, the focus is on becoming a true strategic partner across the Centre. The aim is to be involved much earlier in the decision making process in close collaboration with the Centre Programming exercise. This proactive approach will ensure economies of scale; most importantly it will bring much more efficiency, transparency and will ensure compliance for both internal and external control exercises. At the same time eProcurement and green procurement will continue to be the backbone of an ECDC Procurement activity development to foster innovation in the services and products offered by our suppliers.

Legal services will routinely address contract issues aiming for solid agreements, support staff with sound and practical advice. Legal will provide services and advice regarding the revised Staff Regulations and Financial Regulations and its consequences for ECDC policies and internal procedures. Furthermore, the work of the Data Protection Officer (DPO) will be kept in line with best practises according to the EDPS.

Internal control coordination contributes to ensure effective and efficient management of ECDC, and maintaining a good reputation among its stakeholders. Not only need the internal control systems be of high quality, but assessments, ex post controls and compliance reviews have to confirm their proper functioning.

The context for Performance Management is increasingly defined by the established practises across EU agencies and close cooperation within the Agencies network and the Commission ensures coherent planning and performance management. Efficient project management, seamless internal processes and a solid culture of quality management receive continuous attention. Regular feedback through internal evaluations now in full operation, and from external stakeholders (through an annual stakeholder's survey and input for the annual Work Programme) is increasingly fostered.

Most of the tasks of Corporate Services are ongoing and business as usual to ensure a functional, safe and comfortable workplace for all workers and visitors. The preparations for new premises are ongoing aiming for health, safety and security in an environmentally friendly and cost-effective way. The focus will be on submitting the feasibility study with the proposal of the best solution to the Management Board and the Budgetary Authority (Council and Parliament) before signing the rent contract.. ECDC's missions and meetings consolidate the reformed services according to the vision and strategy developed in 2015 which form an important part to realise the Centre's functions as a network organisation.

Internal Communication and Knowledge Services provides a variety of services that concern the future of sharing, storing and retrieving information relevant for ECDC. New and interactive tools and personalised information will be progressively offered. Library services and standard reusable semantic assets support the scientific processes and maintain unity. Similarly internal communication complements external communication ensuring information sharing throughout the organisation, thus reinforcing the corporate culture.

For 2016 we envisage continued support to the Centre by further developments of tools and adapting them to user's needs. Knowledge services will continue to support the provision of e-health approaches and provide reusable content structures and actively support their interoperability and foster synergy. The library will progressively support systematic reviews and establish an institutional repository for the curation of the scientific output of the Centre. Integrated filing and archiving systems as well as further developed workflows will ensure transparency, collaboration and active management of documentation and data retained. Internal communication activities will be evaluated and an action plan drawn up.

Medium-term Objectives

The key objectives of RMC's activities in 2016 and next years are:

1. Implement the recommendations of the Roadmap based on proposals from EU agencies network;
2. Consolidate and further optimise essential services and processes (e.g. excellence in the operations of Finance, Procurement, Mission and Meetings);

3. Finalise procurement for ECDC future premises;
4. Translate paper-based business processes into electronic workflows, continuous transparency and communication support to allow for systematic access to relevant information;
5. Develop an effective operating model for emergency situations to ensure business continuity.

Key Outputs 2016

The activities planned for 2016 address the following deliverables for 2020 in the area of resource management and organisational development defined in ECDC's SMAP 2014-2020. These are:

1. Being in the upper quartile of the benchmark for EU agencies [depending on developments in the Heads of Agencies developments in performance management.]
2. All selected process have been reviewed, are known throughout the Centre and running in a synchronised way efficiently supporting ECDC key operational processes. Clear descriptions of roles facilitate synergy and avoid duplication of work.
3. The Centre's organisational matrix structure is consolidated by screening the relevance and appropriateness of processes and organisational forms followed by improvement proposals when required.

Human Resources

1. New framework contract for medical services in place;
2. Review of internal processes implementing the Staff Regulations and Implementing Rules carried out;
3. New framework contract for accommodation support services in place.

Finances and Accounting

1. Interim evaluation of the ECDC wide implementation of the new FFR;
2. Review of internal procedures;
3. Specifications for electronic workflows infrastructure developed and implementation started;
4. Annual report on performance of ex-ante verifications.

Procurement

1. Established proactive Procurement planning and preparation approach across the Centre in close collaboration with the programming exercise
2. Improvement in excellence and compliance of Procurement and Contract Management activities
3. eProcurement and green procurement development started and aligned with EU guidelines and tools like EU Green Procurement Policy, e-PRIOR and related electronic workflows
4. Implemented contract management best practices in the Centre and across our network of Agencies and other EU institutions.

Legal Services

1. Provide regular ethics training for newcomers and others working at the Centre, and prepare for upcoming needs;
2. Legal guidance to staff members that need to engage in agreements and / or activities with ECDC third parties;
3. Provide guidance on state of compliance with Regulation 1049/2001 on public access to documents and develop best practise guidelines;
4. Ad hoc advice regarding legal matters as requested.

Internal Control Coordination

1. Report showing status on the implementation of and compliance with ECDC Internal Control Standards;
2. Compliance reports produced in line with Compliance Review Plan;

3. Internal Control Part of the Declaration of Assurance performed and included in AAR;
4. Ex-post verification reports issued in accordance with annual work plans;
5. Follow up of audit recommendations reported to AC and in AAR.

Performance Management

1. Preparation of the single programming document for 2017, following the new common standards for all EU agencies, including a review of the medium term plan
2. Annual stakeholder survey to feed ECDC indicators
3. Full implementation of the internal evaluation (2 internal evaluations foreseen)
4. Project management methodology applied to all ECDC projects

Corporate Services

1. Manage the facility business as usual in an efficient way.
2. Final ECDC Premises project:
 - Complete the shortlisting and evaluation of proposed solutions
 - Submit feasibility study to Management Board (March)
 - Submit feasibility study to Budgetary Authority (April-June)
 - Sign lease contract with awarded candidate
3. Manage the Missions & Meetings business in an efficient way.

Internal Communication and Knowledge Services

1. Action plan and amended IC strategy for Internal Communication activities based on evaluation;
2. Newly implemented workflows in DMS;
3. Integrated filing and archiving systems;
4. Implementation of personalised features for Intranet/internal communication;
5. Design of institutional repository ready and implementation started.
6. Revised ECDC metadata core standard available.

Indicators¹⁷

Nb.	Objective	Indicator	Target 2016	Verification
24	Ensured best use of financial resources, timely correlated to the implementation of activities of the work programme.	<p>Percentage of budget committed (C1) and percentage of payments executed (C1) in the same year as the commitment</p> <p>Percentage of invoices paid within the time limits of the ECDC Financial Regulation</p>	<p>100% committed</p> <p>80% paid</p> <p>95%</p>	Annual accounts

¹⁷ New indicators have been added to comply with the new recommendations from the Commission for all EU decentralised agencies: [Guidelines on key performance indicators \(KPI\) for Directors of EU decentralised agencies, Brussels, 13 March 2015, SWD \(2015\) 62 Final](#)

		Rate of cancellation of payment appropriations	5%	Total payments in year N and carry-forwards to Year N+1, as a % of the total EU funding and fee income, where applicable, received in Year N)
		Rate of outturn	5%	
25	Implementation of the <i>annual</i> work programmes, aligned with the SMAP in order to ensure the full implementation of the SMAP by 2020	Proportion of activities implementation of the Annual Work programme	85%	Verified via MIS
26	Ensured swift and timely fulfilment of the Agency's establishment plan correlated to the implementation of activities of the work programme	Average vacancy rate	5%	% of authorised posts of the annual establishment plan which are vacant at the end of the year, including job offers sent before 31st December
		Percentage of staff satisfaction/engagement	65%	ECDC biannual staff survey
27	Timely improvements in the adequacy and effectiveness of internal control systems	Rate (%) of external and accepted internal audit recommendations implemented within agreed deadlines (excluding 'desirable')	- 100% for critical observations - 90% for very important - 80% for important	Internal control

Total Resources Resources Management:

Total FTEs for this activity: 75.1 FTE
Total operational budget title 3: 458,000 EUR

7.4 Information and Communication technology

Context

Information and Communication Technologies (ICT) is mission critical for ECDC. In pursuing its strategy, the Centre allocates ICT resources with two key objectives in mind:

- Enable ECDC's mission, by efficiently and effectively supporting the Centre's ICT needs for internal, Commission and Members States users.
- Enable ECDC to continue improving its ICT quality and cost efficiency.

In order to provide and manage ICT services for internal and external end users, ECDC's ICT teams deliver a number of services that cover the following areas:

- Business support services (including advice and studies as well as business analysis, support to IT governance, ICT Quality);
- Software services (including enterprise architecture, software production, project management, urgent software development in public health emergencies);

- Hosting, operating, maintenance and security of applications and infrastructure (including 24/7 monitoring of critical systems, planning and management of hardware and software infrastructure);
- Hardware, software and services for the workstation (including management of back-end systems, networks, voice communications, desktop and mobile equipment and support to end users).

In fulfilling its core functions of surveillance, epidemic intelligence and response, the Centre acts as hub of a network of EU-wide networks in which intensive daily interaction takes place between ECDC and its partners across the EU, and indeed internationally. These interactions all require the use of ICT: in fact some of ECDC's best known services, such as TESSy, EPIS and the ECDC web portal, are heavily ICT dependent. It is also ECDC's legal duty to operate EU's Early Warning and Response System (EWRS) on public health threats. Regular maintenance and further evolution of these systems are vital investments for enabling ECDC core missions.

A non-exhaustive list of ICT products and services enabling the realisation of ECDC's mission is listed below.

System / application	Description
Early Warning and Response System (EWRS)	Supports critical communication of information and threat alerts between the Commission, Member States, other EU Agencies and WHO.
Epidemic Intelligence System (EPIS)	Supports communication of public health events, threats and collaboration between surveillance networks of several disease programs (e.g. European Legionnaires' Disease Surveillance Network and others)
The European Surveillance System (TESSy)	Supports collection, validation, cleaning, analysis and dissemination of data for public health surveillance, provided by EU member states and other associated countries.
Threat Tracking Tool (TTT)	Supports the collaboration and management of public health threats, including the preparation of regular Communicable Disease Threats Reports and coordination in situations of Public Health Emergency.
Emergency Operations Centre (EOC)	A set of ICT solutions that support an effective access to information and management of situations of Public Health Emergency.
ECDC web Portal	Supports an important part of the external communication, e.g. making available outputs for public health professionals, information for the public.
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.
Eurosurveillance	Supports the edition and publication of Eurosurveillance, a European journal on communicable diseases with more than 11.000 active electronic subscribers.
ECDC Extranets	Support collaboration of public health networks, working groups and institutional bodies (MB and AF). Currently ECDC manages >20 extranets.
eLearning/LMS	Currently under implementation, will allow ECDC to make use of blended and pure e-learning capacities in support of its public health training activities.

System / application	Description
Customer Relationship Management (CRM)	Supports a centralised management of MS and other external contacts.
Intranet	Tool for internal communication and support of internal processes.
Document Management System	Supports the management of electronic formats of documents, providing a single point of controlled access to documents in the Centre contributing to dematerialisation of paper based processes.
E-mail system	Supports electronic internal and external communication. It is a crucial component in support of many processes of the Centre and in communication with external entities.
Remote access to ECDC systems	Allows the continuity of work by ECDC staff when away from the Centre's premises, e.g. during missions and on stand-by duty.

The end users of the ICT products and services are both internal (ECDC end users) and external (Member States' contact points, Laboratories, European Commission, general public) and require ECDC service for assistance and technical support. The high reliability of these systems depending on technical infrastructures and on services that ensure proper operations and support, ECDC ensures that the necessary quality infrastructures are in place, including a reliable data centre, data communications, overall security, business continuity capabilities, as well as a disaster recovery site (under agreement with EASA).

In connection with the second key objective, ECDC created a central ICT Unit in 2012 to further improve the effectiveness and efficiency of resources, notably in terms of governance, process efficiency, enterprise architecture and long term strategy.

The main focus of SMAP 2014-2020 is to adopt a General IT Governance framework in the centre, supporting sound managed decision making processes on all IT investments across the Centre.

Another focus is to improve the maturity of ICT processes using as reference the CMMI¹⁸ model. In 2014 ICT processes were initially assessed level 1 and goals will be set for progressively reaching CMMI maturity level 2 and level 3 (out of five). Proper organisation of work and efficiency of work processes being key for ensuring good value for money, ICT commits doing this effort over time, in line with the recommendations of the Court of Auditors to mature IT governance and processes.

With a keen eye on the future, the area of ICT architecture is focus of improvement initiatives as well: The efforts for a sustainable ICT architectural framework started in 2014 and is complemented with technology long term strategy to be defined. The latter is expected to serve as guiding reference when making investment decisions on technical platforms to be used in the future, and on decisions on reuse, buy or build of core systems to be maintained and evolved.

Having an architectural framework will improve the Centre's capacity to deliver interoperable, scalable and maintainable systems at the most effective cost.

Medium-term Objectives

The key objectives of ECDC's ICT activities in 2016 and next years are:

1. Enable ECDC operations by maintaining high availability of IT services (dedicated applications, databases, web portal) in regards to enterprise infrastructure services, back-end systems, hosting of

¹⁸ According to the CMMI Institute, Capability Maturity Model Integration (CMMI) is a process improvement approach that provides organizations with the essential elements of effective processes that will improve performance. It is the result of more than 20 years of evolution steered by Carnegie Mellon Software Engineering Institute, with participation of industry and public organisations.

applications under service level agreement, business continuity, disaster recovery and support to users of systems and services according to needs.

2. Maintain the existing systems as necessary for ensuring their reliability, their need to meet evolving business needs, and the need to be kept maintainable and interoperable with other systems overtime; maintain notably the EWRS in the light of decision 1082/2013/EU.
3. Reengineer the ECDC Surveillance core systems in need to better meet user expectations according to annual workplan.
4. Develop new core-business and administrative applications according to annual workplan, and deliver urgent developments in support to Serious Health Boarder Health Threat and PHE.
5. Ensure that updated and continuous improvement processes are in place on main areas of work to support efficiency of the use of resources.

Note: during the preparation of these priorities a preview revealed potential capacity problems which are flagged up here.

6. Define the Architecture roadmap based on the ICT long-term strategy produced in 2015, for enabling enlightened core IT decision making and efficiency of resources, in complement to governance and CMMI initiatives.

Note: Due to 2014 budget cuts, the reduced specialised resource is affecting 2015 and 2016 enterprise architecture objectives. Meeting the planned milestones highly depends on available budgets and specialised expertise.

Key Outputs 2016

1. Maintenance of high availability of IT services (1) (SMAP objective supervised with indicator)
2. Maintenance of the existing systems as per annual workplan (2) (recurrent activity)
3. Reengineered Surveillance systems (3) as per application development roadmap to be defined in 2015 (significant additional and major activity)
4. Development of new core-business and administrative applications, and delivery of urgent developments in support to Serious Health Boarder Health Threat and PHE activities as per annual workplan (4) (recurrent activity)
5. Updated and continuous improvement processes (5) (SMAP milestone 13.1 - 3)
6. Definition of the Architecture roadmap (6) (SMAP milestone 13.3-11)

Indicators

	Objective	Indicator	Target	Verification
28	Ensured agencies operations by maintaining constant availability of IT services elements to ensure a smooth running of the Centre’s activities (dedicated applications, databases, web portal)	Performance of ICT services in regards to: - availability of enterprise infrastructure services and backend systems, - availability of hosted applications under service level agreement (SLA), - proportion of ICT Front-Office incidents resolved as per SLA. [- Efficiency indicator to be defined later based on future exercises]	99% each 100% each 90%	Verified by regular monitoring reports

Total Resources ICT:

Total FTEs for this activity:	33.6 FTE
Total operational budget title 3:	4,306,000 EUR

ANNEX 1: Budget Title 3 by budget line and Units/Disease Programme for financing decision

The present table shows the budget split for Title 3 per budget line and according to the organisational structure of the Centre.

Row Labels	*ARHAI	*EVD	*FWD	*HSH	*IRV	*TUB	*VPD	Core DIR	Core ICT	Core OCS	Core PHC	Core RMC	Core SRS	Grand Total
3000-Surveillance	764,385		386,182	458,000	584,750		201,000						647,000	3,041,317
3001-Epidemic intelligence and response													221,000	221,000
3002-Scientific advice (including microbiology su	377,000	643,000	430,818	562,000	64,250	624,000	1,002,000			796,000	100,000	458,000	236,000	5,293,068
3003-Public Health Training	80,000										3,957,000			4,037,000
3004-Health Communication	120,000										235,000			355,000
3005-Public Health Informatics									4,306,000				285,000	4,591,000
3006-Preparedness/capacity support							43,000				460,000			503,000
3007-Eurosurveillance												90,000		90,000
3009-Collaboration and (country) cooperation								150,000						150,000
Grand Total	1,341,385	643,000	817,000	1,020,000	649,000	624,000	1,246,000	150,000	4,306,000	796,000	4,752,000	548,000	1,389,000	18,281,385

NB: changes are related to a decrease of the EFTA budget contribution of 28,315 EUR for 2016 and some adjustments between budget lines.

ANNEX 2: Activity Based Budget

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

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

*The 5 not yet allocated correspond to the 5 Seconded national Experts (SNE) whose recruitment and allocation is not yet finalised

Externally assigned revenues (€)

	Received revenue in 2015	Estimated remaining budget from 2015	Expected revenue in 2016	Total Budget Available 2016
ECDC-IPA4 Grant: DG NEAR	350,000 (expected)	300,000	0	300,000 (to be spent until mid-2017)
ECDC-ENPI Grant: DG NEAR	242,026	100,000	0	100,000
ADVANCE Grant: IMI	32,029.30	61,000.00	20,000.00	81,000.00

ANNEX 3: Detailed staff allocation per strategy

The present table shows the contribution of the Disease Programmes and ICT to the main strategies

Strategies	Disease programmes							Core activities						Total
	ARHAI	EVD	FWD	HSH	IRV	TB	VPD	OCS	SRS	PHC	DIR	RMC	ICT	
1. Surveillance and epidemic intelligence	4.4	1.6	5.3	3.5	2.4	1.1	2.4		25.4				11.6	57.6
2. Scientific support	7.2	4.5	5.5	5.7	4.8	4.4	6.5	13.0	1.7				6.8	60.1
3. Preparedness and response		0.3	0.1		0.3		0.4		6.9	7.5			3.0	18.5
4. Training and capacity building	0.2	0.1					0.4			15.4	6.0		0.7	22.7
5. Communication	0.8	0.5	0.6	0.4	1.2	0.4	0.7			15.4		6.1	4.2	30.3
6. Management/Administration											14.9	74.7*	7.3**	96.9
Total*	12.6	6.9	11.4	9.6	8.7	5.8	10.4	13.0	34.0	38.3	20.8	80.8	33.6	286.0

* 74.7 RMC staff for Management/administration split (following the common methodology for *EU agencies job screening benchmarking endorsed by the EU heads of agencies network in application of art. 29(3) of the Framework Financial Regulation (FFR)*):

- Administrative and coordination: 34.3 FTE + 0.4 confidential counselors
- Neutral: 26 FTE
- Operational: 14 FTE

** 33.6 ICT staff split following the *EU agencies job screening benchmarking as*:

- Administrative and coordination: 7.3 FTE
- Operational: 26.3 FTE

ANNEX 4: Risk assessment for the Work Programme 2016

As part of preparing the Work Programme (WP) 2016, ECDC conducted a risk self-assessment exercise in order to identify all main risks that could impact the implementation of the WP.

The following main risks were identified:

- Risk of WP implementation suffering from a PHE event or impacted by other unforeseen additional politically 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 WP as planned.
- Unavailability of data from member states and/or unavailability of member states/stakeholders resources to contribute to and/or participate in ECDC activities. At the moment ECDC has a good acceptance/support among stakeholders, however budget constraints on member states/stakeholders could impact their priorities regarding ECDC related activities.
- Outsourcing of activities. Any outsourcing implies dependence on external parties. All forms of external parties' non-delivery (including insufficient quality) would potentially jeopardize the implementation of the WP. Good planning and follow-up of outsourced work (including quality control) should reduce this risk to an acceptable level. However, for the WP 2016, the areas of the Web portal 2.0, as well as the dependence on ICT and other consultants, have been identified as having a high residual risk of potential delays in the service delivery, thereby requiring an increased attention from ECDC staff and management.
- Immaturity of IT processes remains one of the highest risks in the good execution of the ECDC ICT work plan. In 2015 some mitigation actions are being implemented in regards to: the elaboration of the ICT long term strategy, the availability of key enterprise architecture skills, the selection and adoption of an enterprise architecture framework for the SSR project, the experimentation of an enterprise architecture approach for reengineering the surveillance systems, the improvement of quality processes notably in IT project management and requirement management area.
- Any budget cuts in the 2016 budget and/or additional cuts of posts in the establishment table 2016, would impact the WP negatively. Also, any large change in the exchange rate (SEK/EURO) risks impacting the budget implementation and thereby also the execution of the WP.
- Finally, the complexity of the procurement procedures is a constraint on the implementation of the WP, and especially on making changes to the WP during the year. However, good planning should reduce this risk to an acceptable level.

ANNEX 5a: Procurement plan (Open calls for tender)

Num.	Activity name	Procurement title	Budget line	Budget to be committed in 2016 (EUR)	Total value of the contract (EUR)	Procurement Procedure	Contract type	Maximum duration of contract (years)	Expected procurement launch	Expected contract signature date
1	*ARHAI DP - COMMUNICATION	European Antibiotic Awareness Day (communication support)	3004-Health Communication	80,000	tbc	Open call for tender	Framework contract	4	Q4-2015	Q2-2016
2	*ARHAI DP- PUBLIC HEALTH TRAINING	Organisation and delivery of a course: MDRO course (3 days)	3003-Public Health Training	80,000	80,000	Open call for tender	Direct contract	1	Q3-2015	Q1-2016
3	*ARHAI DP- SURVEILLANCE ANALYSIS - HAI-Net	HAI-Net: Validity study to support the COM request on improved mortality data	3000-Surveillance	160,000	160,000	Open call for tender	Direct contract	1	Q4-2015	Q2-2016
4	*HSH DP- SCIENTIFIC ADVICE	Scientific guidance: Procurement to produce tool for HIV incidence estimates & to model the HIV epidemic in migrants - REQUESTED BY COM	3002-Scientific advice (including microbiology support)	80,000	400,000	Open Call for tender	Framework contract	4	Q3-2015	Q1-2016
5	*TUB DP- Scientific Guidance	Scientific guidance: Improvement of treatment outcomes for TB (incl. MDR TB)	3002-Scientific advice (including microbiology support)	50,000	800,000	Open call for tender	Framework contract	4	Q4-2015	Q2-2016
6	*TUB DP- Surveillance Studies	Assessment of tuberculosis under-reporting through inventory studies	3002-Scientific advice (including microbiology support)	45,500	175,500	Open call for tender	Framework contract	4	Q1-2016	Q3-2016
7	SD Advice and Study service, Software production and development expertise	Project Management and external software production (operational)	3005-Public Health Informatics	616,081	tbc	Open call for tender	Framework contract	4	Q2-2016	Q4-2016
8	CPS-C. Development of technical support tools for effective planning and operations	Development of PH emergency planning guidance (with pilot testing in workshop).	3006-Preparedness/capacity support	50,000	tbc	Open call for tender	Framework contract	4	Q3-2015	Q1-2016
9	Business continuity	External consultancy	2308-Business Continuity	50,000	120,000	Open call for tender	Framework contract	4	Q2-2016	Q4-2016
10	Fitting-out	Works (only procurement BL 2004)	0000-Internal work	500,000	1,500,000	Open call for tender	Framework contract	4	Q4-2016	Q2-2017
11	Furniture	Furniture	2009-Other expenditure on buildings	65,000	1,000,000	Open Call for tender	Framework contract	4	Q1-2017	Q3-2017
12	Organisational performance	Language training (only procurement BL 1149)	0000-Internal work	120,000	120,000	Open call for tender	Framework contract	4	Q3-2016	Q1-2017
13	Restauration and Canteen costs	Restauration and Canteen costs (only procurement BL 2006)	0000-Internal work	500,000	500,000	Open call for tender	Framework contract	4	Q3-2016	Q1-2017
14	Restauration and Canteen costs	Catering services (only procurement various BLs)	0000-Internal work	1,200,000	1,200,000	Open Call for tender	Framework contract	4	Q3-2016	Q1-2017

Num.	Activity name	Procurement title	Budget line	Budget to be committed in 2016 (EUR)	Total value of the contract (EUR)	Procurement Procedure	Contract type	Maximum duration of contract (years)	Expected procurement launch	Expected contract signature date
15	Security	Security	2009-Other expenditure on buildings	75,000	2,400,000	Open call for tender	Framework contract	4	Q1-2017	Q3-2017
16	Development of contact tracing tool and information leaflets	On-line questionnaire tool	3000-Surveillance	100,000	tbc	Open call for tender	Framework contract	4	Q4-2015	Q2-2016
17	Microbiology: EVDLabNet, Lyme and internal support	EVDLabNet	3002-Scientific advice (including microbiology support)	200,000	tbc	Open call for tender	Framework contract	4	Q1-2016	Q3-2016
18	SCIENTIFIC ADVICE: Mosquito-borne diseases	WNF tool to compare vector control strategies	3002-Scientific advice (including microbiology support)	70,000	tbc	Open call for tender	Framework contract	4	Q3-2015	Q1-2016
19	Stationery and office supplies	Stationery and office supplies	2300-Stationery and office supplies	tbc	240,000	Open call for tender	Framework contract	4	Q1-2016	Q1-2016
20	Development of contact tracing tool and information leaflets	On-line questionnaire tool	3000-Surveillance	100,000	tbc	Open call for tender	Framework contract	4	Q2-2016	Q2-2016
21	*HSH DP- SURVEILLANCE ANALYSIS	Surveillance protocol: Technical support to countries to submit revised combined HIV/AIDS record-type	3000-Surveillance	29,000	245,000	Open call for tender	Framework contract	4	Q2-2016	Q2-2016

ANNEX 5b: Procurement plan (Negotiated procedures)

Num.	Activity name	Procurement title	Budget line	Budget to be committed in 2016 (EUR)	Total value of the contract (EUR)	Procurement Procedure	Contract type	Maximum duration of contract (years)	Expected procurement launch	Expected contract signature date
1	*FWD DP - EPIDEMIC INTELLIGENCE: Duty, EPIS and SOPs	EPIS ELDSNet development GIS tool	3000-Surveillance	10,000		Negotiated procedure	Purchase order	1	Q4-2016	Q4-2016
2	*HSH DP- SCIENTIFIC ADVICE	Scientific study: Procurement to support countries in collecting and analysing data appropriate for defining the HIV treatment cascade	3002-Scientific advice (including microbiology support)	30,000		Negotiated procedure	Purchase order	1	tbc	tbc
3	*HSH DP- SCIENTIFIC ADVICE	Scientific study: Early treatment of infections for the prevention of sequelae later in life	3002-Scientific advice (including microbiology support)	30,000		Negotiated procedure	Direct Contract	1	Q4-2015	Q1-2016
4	*HSH DP- SURVEILLANCE ANALYSIS	Lead the implementation of molecular surveillance of HIV	3000-Surveillance	40,000		Negotiated procedure	Direct Contract	1	Q1-2016	Q2-2016
5	*IRV DP- SURVEILLANCE ANALYSIS	RSV Surveillance	3000-Surveillance	25,000		Negotiated procedure	Direct contract	1	Q4-2016	Q4-2016
6	*TUB DP- Scientific Guidance	Scientific guidance: ESTC	3002-Scientific advice (including microbiology support)	40,000		Negotiated procedure	Direct contract	1	Q1-2016	Q2-2016
7	*VPD DP - SCIENTIFIC ADVICE	Monitoring and evaluation: Implementing actions within the Council Conclusion including database updates, vaccine scheduler, and vaccination registry	3002-Scientific advice (including microbiology support)	10,000		Negotiated procedure	Direct contract	1	Q1-2016	Q2-2016
8	*VPD DP - SCIENTIFIC ADVICE	Scientific study: Framework for monitoring vaccine effectiveness of Rotavirus vaccination through means of sentinel surveillance	3002-Scientific advice (including microbiology support)	60,000		Negotiated procedure	Direct contract	1	Q1-2016	Q1-2016
9	Running and maintaining ECDC corporate car	Running and maintaining ECDC corporate car	2202-Purchase and maintenance of vehicles	12,000	57,000	Negotiated procedure	Direct Contract	1	Q2-2016	Q2-2016
10	Evidence-based Public Health	Methods and tools in the field of EBPH	3002-Scientific advice (including microbiology support)	30,000		Negotiated procedure	Direct contract	1	Q1-2016	Q2-2016
11	Management, coordination and administrative support for OCS	Open source publication costs	3002-Scientific advice (including microbiology support)	70,000		Negotiated procedure	Direct Contract	1	Q4-2016	Q4-2016
12	Quality, Documentation & Communication	Fee for accreditation bodies	3003-Public Health Training	10,000		Negotiated procedure	Purchase order	1	Q4-2016	Q4-2016
13	Evaluation policies	ECDC self-assessment (CAF or other quality model)	2501-Evaluation and Strategic Management Consulting	15,000		Negotiated procedure	Direct contract	1	Q1-2016	Q2-2016
14	Evaluation policies	Evaluation for two Disease Programmes (as per SMAP indicators)	2501-Evaluation and Strategic Management Consulting	30,000		Negotiated procedure	Direct contract	1	Q1-2016	Q2-2016
15	Extend, manage and maintain the ECDC premises-Building relocation	Extend, manage and maintain the ECDC premises-Building relocation	2009-Other expenditure on buildings	0		Negotiated procedure	Direct Contract	1	Q4-2015	Q1-2016

Num.	Activity name	Procurement title	Budget line	Budget to be committed in 2016 (EUR)	Total value of the contract (EUR)	Procurement Procedure	Contract type	Maximum duration of contract (years)	Expected procurement launch	Expected contract signature date
16	Extend, manage and maintain the ECDC premises-Building relocation	Extend, manage and maintain the ECDC premises-Building relocation	2009-Other expenditure on buildings	0		Negotiated procedure	Direct Contract	1	Q1-2016	Q2-2016
17	Extend, manage and maintain the ECDC premises-Building relocation	Extend, manage and maintain the ECDC premises-Building relocation	2009-Other expenditure on buildings	0		Negotiated procedure	Direct Contract	1	Q2-2016	Q3-2016
18	Extend, manage and maintain the ECDC premises-Building relocation	Extend, manage and maintain the ECDC premises-Building relocation	2009-Other expenditure on buildings	0		Negotiated procedure	Direct Contract	1	Q3-2016	Q4-2016
19	Fitting-out	Fitting-out	2004-Fitting-out	40,000	15,000	Negotiated procedure	Direct Contract	1	Q3-2016	Q3-2016
20	Fitting-out	Fitting-out	2009-Other expenditure on buildings	35,000		Negotiated procedure	Direct contract	1	Q1-2016	Q2-2016
21	Furniture	Furniture	2201-Furniture	15,000	7,500	Negotiated procedure	Direct Contract	1	Q3-2016	Q3-2016
22	Furniture	Furniture (outside the Commission catalogue)	2201-Furniture	0	7,500	Negotiated procedure	Direct contract	1	Q1-2016	Q1-2016
23	Integration and living in Sweden	Accommodation services (only procurement BL 1176)	0000-Internal work	25,000		Negotiated procedure	Framework contract	4	Q4-2016	Q1-2017
24	Mail Room and Archives	Digitalisation of archives artifacts	2114-Developments to support administrative and management applications	0		Negotiated procedure	Direct contract	1	tbc	tbc
25	Production and promotion of the scientific journal Eurosurveillance, publication platform implementation and maintenance	Provision of educational features i.e. CME accreditation	3007-Eurosurveillance	5,000		Negotiated procedure	Purchase order	1	Q4-2016	Q4-2016
26	Quality management	Further development of the quality management methodology (3i, QMSC, etc)	2501-Evaluation and Strategic Management Consulting	0		Negotiated procedure	Direct contract	1	Q4-2016	Q4-2016
27	Quality management	Implementation of ECDC the internal evaluation policy	2501-Evaluation and Strategic Management Consulting	0		Negotiated procedure	Direct contract	1	Q4-2016	Q4-2016
28	Wellbeing Services	Counselling FWC for 4 yrs (only procurement BL 1410)	0000-Internal work	60,000	60,000	Negotiated procedure	Framework contract	4	Q4-2016	Q1-2017
29	Wellbeing Services	Staff Deployment Support (only procurement BL 1410)	0000-Internal work	60,000		Negotiated procedure	Framework contract	4	Q1-2017	Q1-2017
30	Assessment of the risk of transmission of Chagas disease, Chikungunya and Leishmaniasis via substances of human origin (SoHO)	Risk assessment	3002-Scientific advice (including microbiology support)	40,000		Negotiated procedure	Direct contract	1	Q4-2016	Q4-2016
31	EOC maintenance and development	A) EOC and PHE ongoing maintenance and equipment upgrades	3001-Epidemic intelligence and response	15,000		Negotiated procedure	Direct Contract	1	Q4-2016	Q4-2016

Num.	Activity name	Procurement title	Budget line	Budget to be committed in 2016 (EUR)	Total value of the contract (EUR)	Procurement Procedure	Contract type	Maximum duration of contract (years)	Expected procurement launch	Expected contract signature date
32	EOC management and Networking	Resupply and equipment upgrade	3001-Epidemic intelligence and response	17,000		Negotiated procedure	Framework contract	4	Q4-2016	Q4-2016
33	Epidemic intelligence GIDEON	Subscription to GIDEON services	3001-Epidemic intelligence and response	5,000		Negotiated procedure	Purchase order	1	Q4-2016	Q4-2016

ANNEX 5c: Procurement plan (Grants)

Num.	Activity name	Procurement title	Budget line	Budget to be committed in 2016 (EUR)	Total value of the contract (EUR)	Procurement Procedure	Contract type	Maximum duration of contract (years)	Expected procurement launch	Expected contract signature date
1	*TUB DP- Microbiology support	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.	3002-Scientific advice (including microbiology support)	199,999	800,000	Grant	Specific Grant agreement	2	Q4-2015	Q1-2016
2	*VPD DP - SCIENTIFIC ADVICE	Monitoring and evaluation: Continuation of VENICE.net activities for VPDs incl influenza under the existing FWC	3002-Scientific advice (including microbiology support)	220,000		Grant	Specific Grant agreement	2	Q4-2015	Q1-2016
3	Fellows Salaries EU tracks	Cohort 2016 Salaries, Removals and Language	3003-Public Health Training	2,080,000	2,080,000	Grant	Framework partnership agreement	4	Q2-2016	Q4-2016
4	Fellowship FPA Coordinators	FPA Scientific Coordination	3003-Public Health Training	506,000	506,000	Grant	Framework partnership agreement	4	Q2-2016	Q4-2016

ANNEX 5d: Exceptional negotiated procedures

Num.	Activity name	Procurement title	Budget line	Budget to be committed in 2016 (EUR)	Total value of the contract (EUR)	Procurement Procedure	Contract type	Maximum duration of contract (years)	Expected procurement launch	Expected contract signature date
1	Extend, manage and maintain the ECDC premises-Building relocation	Office space for ECDC Headquarters (only procurement BL 2000)	0000-Internal work	0	30,000,000	Negotiated procedure for building contracts	Direct Contract	15	Q2-2016	Q3-2016