

# 1. MAKING THE EU A BEST PRACTICE REGION

## 1.1 BETTER EVIDENCE AND AWARENESS OF THE CHALLENGES OF AMR

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
<ul style="list-style-type: none"> <li>Strengthen One Health surveillance and reporting of AMR and antimicrobial use</li> </ul>	2017	2018	2019	2020	2021	2022
Review EU implementing legislation on monitoring AMR in zoonotic and commensal bacteria in farm animals and food.	Mandate to EFSA for technical advice		EFSA opinion	Adoption of the new legislation		
Review EU implementing legislation on reporting communicable diseases in humans.		New implementing act with updated AMR case definitions				
Identify and assess under the Animal Health Law, resistant bacteria that cause transmissible animal diseases and, if necessary, develop harmonised rules for their surveillance.			Mandate to EFSA for technical advice once list of transmissible disease is adopted under Animal Health Law			
Improve AMR detection in the human health sector by providing EU support for networking collaboration and reference laboratory activities.			EU health programme funding to support AMR networking collaboration and reference laboratory activities in human health			
Consider options for the harmonised monitoring of AMR in the environment.	Linked to the EU strategic approach to pharmaceuticals in the environment (see action 1.4)					
<ul style="list-style-type: none"> <li>Benefit from the best evidence-based analysis and data</li> </ul>	2017	2018	2019	2020	2021	2022
Provide evidence-based data on possible links between the consumption of antimicrobial agents and the occurrence of antimicrobial resistance in humans and food-producing animals.	Second JIACRA report	Mandate to EFSA/ECDC/EMA for a 3rd JIACRA report		3rd JIACRA report*		
Define a limited number of key outcome indicators for AMR and antimicrobial consumption.	EFSA/ECDC/EMA report on indicators					

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
Support the development of a model aimed at helping Member States to assess the economic burden of AMR imposes on people and to estimate the cost-effectiveness of their national policies to reduce it.		Publication of the OECD model	Further work by OECD, supported by the EU Health Programme to extend the model and to provide support to Member States in using the model*			
<ul style="list-style-type: none"> <li><b>Increase awareness and understanding</b></li> </ul>	2017	2018	2019	2020	2021	2022
Provide insights into reported public use of and knowledge about antimicrobials through Eurobarometer surveys.		Eurobarometer in MS			Eurobarometer in MS	
Support Member States' national awareness-raising efforts with specific communication tools targeting key audiences and contribute to the annual European Antibiotic Awareness Day (EAAD).	EAAD	EAAD	EAAD	EAAD	EAAD	EAAD

## 1.2 BETTER COORDINATION AND IMPLEMENTATION OF EU RULES TO TACKLE AMR

<ul style="list-style-type: none"> <li><b>Improve the coordination of Member States' One Health responses to AMR</b></li> </ul>	2017	2018	2019	2020	2021	2022
Make available regular information on AMR in the context of the AMR One Health network, which gives an overview of the AMR epidemiological situation at Member State and EU level.		2nd meeting 3rd meeting	4th meeting 5th meeting	6th meeting* 7th meeting*		
Support the implementation of national One Health action plans through joint Commission and the ECDC visits to Member States upon request.	Joint One Health visits with ECDC	Joint One Health visits with ECDC	Joint One Health visits with ECDC	Joint One Health visits with ECDC*		
Launch a joint action to tackle AMR and healthcare-associated infections to support collaborative activities and policy development by Member States.	Launch	Interim reports*			Final conference and report*	

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
<p>Make increased use of the EU Health Security Committee and the Commission Working Group on AMR in the veterinary and food areas to strengthen coordination and to share information.</p>	<p>New HSC action plan with new AMR section to be adopted by HSC. HSC exchanges on AMR</p> <p>Meeting of working group on AMR in food (2019)   Meetings of working group on AMR in food* (2020)</p>					
<p>Seek to co-fund and collaborate with the WHO on activities to help EU Member States develop and implement national One Health action plans against AMR.</p>	<p>New WHO EURO activities co-funded by EU health programme</p>					
<p>• <b>Better implementation of EU rules</b></p>	2017	2018	2019	2020	2021	2022
<p>Assess the effectiveness of the implementation of EU legislation on, inter alia, monitoring AMR in food-producing animal populations and food by continuing to carry out regular audits in Member States.</p>	Interim Overview report		Overview report			
	Audits	Audits				
<p>Develop training programmes on AMR for Member State competent authorities under the Better Training for Safer Food (BTSF) initiative and for health professionals.</p>	<p>BTSF training activities</p>					
<p>Advise Member States on the possibility to use the Structural Reform Support Service (SRSS) funding to Member States for designing and implementing policies against AMR.</p>		SRSS support presented to MSs in the AMR One Health network				

## 1.3 BETTER PREVENTION AND CONTROL OF AMR

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
<ul style="list-style-type: none"> <li>Strengthen infection prevention and control measures</li> </ul>	2017	2018	2019	2020	2021	2022
<p>Support good practices in infection prevention and control in hospital environments.</p>		<p>Work by OECD supported by EU health programme to report on cost effectiveness of AMR/infection prevention measures including hand hygiene and hospital cleaning</p>				
<p>Support activities for infection prevention and control in vulnerable groups, in particular to tackle resistant tuberculosis strains.</p>		<p>Infection control training to be carried out by ECDC and WHO*</p>	<p>Report from HA-REACT joint action from EU Health programme on HIV and co-infection prevention and harm reduction which includes activities to address tuberculosis</p>	<p>Report from INTEGRATE joint action from EU health programme on integrating prevention, testing and link to care strategies across HIV, viral hepatitis, TB and STIs in Europe*</p>		
<p>Promote the uptake of vaccination in humans to prevent infections and subsequent use of antimicrobials.</p>		<p>Part of Joint Action Vaccination*</p>	<p>Part of policy initiative on vaccination (Council Recommendation on strengthened cooperation against vaccine preventable diseases)*</p>			

## CONCRETE ACTIVITIES

## TIMELINES AND DELIVERABLES

	2017	2018	2019	2020	2021	2022
Continue to promote animal husbandry, including aquaculture and livestock farming systems, and feeding regimes which support good animal health and welfare to reduce antimicrobial consumption.	Improve the microbiota of animals through autorisation of several feed additives					
	AMR related workshop		H2020 research projects launched: DISARM, ROADMAP and HealthyLivestock			
	Implementation of existing policy on biosecurity AGRI action					
<b>• Promote the prudent use of antimicrobials</b>	2017	2018	2019	2020	2021	2022
Forthcoming veterinary medicinal products and medicated feed Regulations containing concrete restrictions for prescription and the prophylactic use of antimicrobials. Moreover, work towards EU implementing and delegated acts established in these Regulations include a list of antimicrobials reserved for human use, drawing up a list of antimicrobials that cannot be used off-label, limits for residues of antimicrobials in feed, requirements for animals or products of animal origin exported from third countries and methods for data gathering and reporting on the sales and use of antimicrobials.		Regulations adopted (application after 3 years)  Implementing and delegated acts to be adopted as per deadlines in those Regulations				
Develop EU guidelines for the prudent use of antimicrobials in human medicine.	EU guidelines published					
Assist Member States implement EU guidelines for the prudent use of antimicrobials in veterinary medicine.	Fact-finding missions on prudent use in veterinary sector	Fact-finding missions on prudent use in veterinary sector	Overview report			
	Interim Overview report					

## 1.4 BETTER ADDRESSING THE ROLE OF THE ENVIRONMENT

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
Encourage the EMA to review all available information on the benefits and risks of older antimicrobial agent	EMA finalised a review of the vancomycin-containing medicines	Exploratory meeting with EMA on the topic of availability of veterinary antimicrobials and their prudent use		EMA review of medicines containing fosfomycin*  Regular update meetings with EMA on the topic of availability of veterinary antimicrobials and their prudent use*		
Adopt an EU strategic approach to pharmaceuticals in the environment.			EU strategic approach to pharmaceuticals in the environment (PIE) adopted	Implementation of EU strategic approach to pharmaceuticals in the environment (PIE)		
Maximise the use of data from existing monitoring to improve knowledge, including by using the Information Platform for Chemical Monitoring (IPChEM).				Project to promote IPChEM in regulatory processes*		
Reinforce the role of the Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) in providing scientific advice to the European Commission on environment-related AMR issues.		Video material describing the role of SCHEER circulated to relevant sectors in the Commission				

# 1.5 A STRONGER PARTNERSHIP AGAINST AMR AND BETTER AVAILABILITY OF ANTIMICROBIALS

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
Engage with and support collaboration among key stakeholders in the human health, animal health, food, water and environmental sectors to encourage the responsible use of antimicrobials and appropriate handling of waste material.	2017	2018	2019	2020	2021	2022
	AMR discussed in the plenary of the advisory group of the food chain and animal and plant health					
	EMA information session on AMR (EMA Working Party with Patients' and Consumers' Organisations (PCWP) and Healthcare Professionals' Organisations (HCPWP))					
BTSF training activities						

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
<p>Work with stakeholders to ensure the availability of human and veterinary antimicrobials and continued access to established products; provide incentives to increase the uptake of diagnostics, antimicrobial alternatives and vaccines.</p>	<p>Implementation of Regulation (EU) 2017/746 on in vitro diagnostic medical devices</p>					
<p>Reduce the scope for falsified medicines by assisting Member States and stakeholders in the successful implementation of the safety features (unique identifier).</p>	<p>Presidency Safer Europe Without Falsified Medicines Conference organised by industry and the Estonian Presidency</p>					

Discussion in the IVD Technical Group (IVD TG) and possibly in the Medical Device Coordination Group on how to promote the uptake of diagnostics

Multi-stakeholder conference on the themes of availability of veterinary antimicrobials (old, new and future) and on their prudent use, at EU level but also in the context of broader international cooperation\*

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
Reduce the scope for falsified medicines by assisting Member States and stakeholders in the successful implementation of the safety features (unique identifier).		Conference organised by DIA (Drug information Association) with pharmaceutical industry	Regular Commission expert group on the implementation of the safety features*			
		Update of the Q&A interpretative document on the safety features				
Discuss the availability of veterinary antimicrobials to tackle AMR in the Veterinary Pharmaceutical Committee.			Exploratory meeting* (see above mentioned multistakeholders conference)			

## 2. BOOSTING RESEARCH, DEVELOPMENT AND INNOVATION ON AMR

### 2.1 IMPROVE KNOWLEDGE ON DETECTION, EFFECTIVE INFECTION CONTROL AND SURVEILLANCE

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
<p>Support research into the development and assessment of interventions that prevent the development and spread of AMR.</p>	<p>Funding of research projects under the ERA- NET SusAn on animal production</p>	<p>Launch of One Health EJP which includes research on new intervention tools on AMR</p>	<p>Launch of Call topic on clinical management of AMR</p>			
		<p>Funding of projects coming out of Call topic SFS-46-2017 on alternative production systems to address anti-microbial drug usage, animal welfare and the impact on health</p>				
	<p>Funding decision on projects from the JPIAMR 5th call on prevention and intervention strategies to control AMR infections</p>					
<p>Support research into understanding the epidemiology of AMR, in particular the pathways of transmission between animals and humans, and their impact.</p>	<p>Funding decision on project addressing the clinical burden of Clostridium difficile infection under IMI2, Call 9</p>				<p>Report of projects selected under 3rd JPIAMR ERA-NET Co-fund call to bridge the knowledge gap on AMR transmission mechanisms</p>	

## CONCRETE ACTIVITIES

## TIMELINES AND DELIVERABLES

	2017	2018	2019	2020	2021	2022
Support research into the development of new tools for early (real-time) detection of resistant pathogens in humans and animals.		<p>Launch of One Health EJP which includes research on early signalling and assessing zoonotic threats</p> <p>Launch of Call topic SC1-BHC-13-2019, on mining of big data for early detection of infectious disease threats</p>	<p>Reporting DIAGORAS, on bedside diagnosis of oral and respiratory tract infections, and identification of antibiotic resistances for personalised monitoring and treatment</p>	<p>Reporting COMPARE, on the rapid identification, containment and mitigation of emerging infectious diseases and foodborne outbreaks*</p>		
Support research into new eHealth solutions to improve prescription practices, self-management of health, care solutions, and improve awareness of AMR.		<p>Launch of Call topic SC1-DTH-10-2019-2020, on digital solutions for health and care services</p>				

## 2.2 DEVELOP NEW THERAPEUTICS AND ALTERNATIVES

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
<p>Support research into the development of new antimicrobials and alternative products for humans and animals as well as the repurposing of old antimicrobials or the development of new combination therapies.</p>	2017	2018	2019	2020	2021	2022
	<p>Funding decision on EDCTP2 projects on treatments for cryptococcal meningitis, malaria, HIV, tuberculosis and reproductive tract infections</p>	<p>Reporting of project PneumoNP on nanotherapeutics to treat antibiotic resistant Gram-Negative pneumonia</p> <p>Reporting of project NAREB on nanotherapeutics for antibiotic resistant emerging bacterial pathogens</p> <p>Launch of Call topics SC1-BHC-14-2019 on stratified host-directed approaches to improve prevention, treatment and/or cure of infectious diseases and SC2-SFS-11-2019- 2019 on antimicrobials and animal production</p> <p>Reporting of project FormAMP on innovative nanoformulation design of antimicrobial peptides</p>	<p>Launch of IMI2 call topics on development of new antimicrobials and alternative products for humans*</p> <p>Reports of projects from 1st and 2nd joint transnational calls of JPIAMR</p>	<p>Loans awarded under IDFF to development of new antimicrobials and alternative products*</p> <p>Reporting of IMI ND4BB projects on development of new antimicrobials and alternative products for humans*</p>	<p>Reporting of project anTBiotic progressing TB drug candidates to clinical proof of concept</p>	

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
Support SMEs in their R&D efforts towards innovative and/or alternative therapeutic approaches for the treatment or prevention of bacterial infections.				Reporting of projects from SME Instrument, on development of new antimicrobials and alternative products*		
Facilitate sharing of antimicrobial research data among relevant stakeholders.		Launch of IMI2 call topics on development of new antimicrobials including facilitating data sharing				
		Reporting of IMI ND4BB project TRANSLOCATION on antibacterial drug discovery				
Support the establishment of a European-wide sustainable clinical research network.	Launch of Call topic SC1-HCO-08-2018 on the creation of a European wide sustainable clinical research network for infectious diseases				Reporting of IMI ND4BB project COMBACTE on the development of new antibacterial treatments	
Support research and innovation to promote the use of digital technologies supporting the development of new therapeutics and alternatives.				Reporting of Biotechnology (LEIT) project DD-DeCaF on optimisation of -omics data*		

## 2.3 DEVELOP NEW PREVENTIVE VACCINES

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
				Reporting of projects from Call topic SC1- PM-16-2017 on in-silico trials for developing and assessing biomedical products*		
Continue to support research into the development of new effective preventive vaccines for humans and animals.	Launch of Call Topic SC1-BHC-15-2018, on new anti-infective agents (including vaccines) for prevention and/or treatment of neglected infectious diseases	Launch of Call Topics SC1-BHC-14-2019, on stratified host-directed approaches to improve prevention, treatment and/or cure of infectious diseases, SC2-SFS-31-2019 (ERANET) on veterinary vaccinology and SC2-SFS-12-2019 on swine fever vaccines	Reporting of project SAPHIR on novel vaccine strategies for animal production	Reporting of the European AIDS Vaccine Initiative (EAVI) 2020*	Reporting of the European HIV Vaccine Alliance (EHVA)	Reporting of projects OptiMalVax and MultiViVax on Malaria vaccine development
				Reporting of projects TBVAC2020 and EMI-TB on advancing tuberculosis vaccine candidates*	Reporting of project TracVac on Developing a Chlamydia Trachomatis vaccine	
					Loans awarded under IDFF to development of new vaccines*	
				Reporting MycoSynVac, on development of a Mycoplasma vaccine for animal use*		

## 2.4 DEVELOP NOVEL DIAGNOSTICS

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
Support increasing the knowledge base concerning the barriers that influence the wider use of vaccination in medical and veterinary practice.		Launch of Call Topic SFS-11-2018-2019, on antimicrobials and livestock production				
Support research into the development of new diagnostic tools in particular on-site tests in humans and animals.	Launch of IMIZ call, on diagnostics development and validation	Reporting of project VIROGENESIS on virus discovery and epidemic tracing	Reporting of project Poc-ID on Point-of-Care diagnostics for Infectious Diseases*	Reporting of project FAPIC on developing a fast assay for pathogen identification and characterisation*		
		Launch of One Health EJP, incl. research on new diagnostic tools on AMR		Loans awarded under IDFF to development of new diagnostic tools*		
				Reporting of EDCTP2 projects, on diagnostic tools for poverty-related diseases*		
Support the use of IT solutions in developing tools for diagnosing human and animal infections.				Reporting PREPARE, on outbreak preparedness*		
				Reporting of projects from SME Instrument, on IT solutions and tools to support diagnosing human and animal infections*		

## 2.5 DEVELOP NEW ECONOMIC MODELS AND INCENTIVES

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
Encourage the uptake of diagnostics in medical and veterinary practice.	Launch of Call Topic SC1-HCO-12-2018, on Innovation Procurement					
Increase the evidence base for understanding the societal costs and benefits of different strategies for fighting AMR.		Reporting of IMI DRIVE-AB project				
Support research into the development of new economic models, exploring and analysing incentives to boost the development of new therapeutics, alternatives, vaccines and diagnostics.		Reporting of IMI DRIVE-AB project TATFAR discussion on incentives				
Analyse EU regulatory tools and incentives – in particular orphan and paediatric legislation – to use them for novel antimicrobials and innovative alternative medicinal products that currently do not generate sufficient returns on investment.	Report from the European Commission to the European Parliament and the Council on the 10 years of the paediatric Regulation	Study on the economic impact of the supplementary protection certificate, pharmaceutical incentives and rewards in Europe	Study on orphan medicinal products legislation	Evaluation of the orphan and paediatric medicines legislation*		
Encourage Member States to explore results and recommendations of EU research projects on new economic business models.			Discussion with Member States in the Pharmaceutical Committee			
Develop new or improved methodological HTA approaches and foster methodological consensus-building.	Launch of Call Topic SC1-BHC-26-2018, on HTA research to support evidence-based healthcare					

## 2.6 CLOSE KNOWLEDGE GAPS ON AMR IN THE ENVIRONMENT AND ON HOW TO PREVENT TRANSMISSION

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
Support research into knowledge gaps on the release of resistant microorganisms and antimicrobials into the environment and their spread.		Launch of One Health EJP, incl. research on resistance spread	Reporting of project EFFORT on microbial drug resistance and transmission		Reports of projects from JPIAMR 3rd ERA- NET Co-fund call on transmission dynamics	
Explore risk assessment methodologies to evaluate the risks to human and animal health from the presence of antimicrobials in the environment.		Launch of One Health EJP, incl. research on resistance spread		Implementation of Commission strategic approach to pharmaceuticals in the environment (PIE)*		
Support research into and the development of new tools for monitoring antimicrobials and microorganisms resistant against antimicrobials in the environment.				Implementation of Commission strategic approach to pharmaceuticals in the environment (PIE)*		
Support the development of technologies that enable efficient and rapid degradation of antimicrobials in wastewater and the environment and reduce the spread of AMR.			ERA-NET for JPI Water and JPIAMR			

### 3. SHAPING THE GLOBAL AGENDA

#### 3.1 A STRONGER EU GLOBAL PRESENCE

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
<p>Continue to actively contribute to the normative work of the WHO, the OIE, the FAO, and the Codex Alimentarius on the development of ambitious international frameworks and standards/norms/ guidelines/methodologies related to AMR.</p>	2017	2018	2019	2020	2021	2022
	<p>Signature of a letter of intent for reinforced cooperation between FAO and EC between FAO DG and V. Andriukaitis Commission</p>	<p>Involvement of FAO in new BTSF activities for non-EU countries</p>			<p>New CODEX guidelines on integrated monitoring and surveillance of foodborne AMR</p>	
<p>Reinforce technical cooperation with the WHO and its members in key areas of the WHO Global Action Plan on AMR.</p>		<p>Review upcoming normative work (e.g. as outlined in resolution of the World Health Assembly) and assess EC involvement</p>			<p>Revised CODEX code of practice to minimize AMR</p>	

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
<p>Boost support for the International Conference on the Harmonisation of Technical Requirements for the Registration of Pharmaceuticals for Human Use (ICH) and the Veterinary International Conference on the Harmonisation (VICH) on relevant international guidelines/standards/norms related to AMR.</p>	<p>Promotion of the new EU Action Plan against AMR during the IPRF meeting in the margins of the ICH meeting in Geneva in November 2017</p>		<p>Text on AMR in the UN political declaration on Universal Health Coverage</p>	<p>Explore the needs to update existing VICH guidelines and other possibilities supporting harmonisation*</p>		
<p>Work towards continued high-level political attention and commitment to AMR action, including in the United Nations forums, the G7 and the G20.</p>	<p>AMR featuring in the G7 Health Minister Communique and G20 Health Ministers' Declaration</p>	<p>AMR on G7 and G20 Agenda</p>	<p>AMR on G7 and G20 Agenda</p>	<p>AMR on G20 Agenda*</p>		
	<p>Approval by G7 CVOs of a common approach on the definitions of therapeutic, responsible and prudent use of antimicrobials in animals</p>					
<p>Look for synergies with the UN Strategic Approach to International Chemicals Management's work on the emerging policy issue of pharmaceuticals in the environment.</p>				<p>EU strategy on chemicals*</p>		
<p>Analyse the feasibility of setting up a global AMR clinical studies network in collaboration with G7 members.</p>						

**CONCRETE ACTIVITIES**

**TIMELINES AND DELIVERABLES**

	2017	2018	2019	2020	2021	2022
Continue and strengthen ongoing collaboration within the Transatlantic Taskforce on Antimicrobial Resistance (TATFAR), which includes the EU, the USA, Canada, and Norway.		Updated TATFAR work plan and deliverables		Develop actions and deliverables for new TATFAR work plan 2021-2025* TATFAR Conference*	Implementation of the New TATFAR workplan	
Promote international regulatory convergence between the EMA and other regulatory agencies such as the US Food and Drug Administration (FDA) and the Japan Pharmaceuticals and Medical Devices Agency (PMDA) on development plans for new promising antimicrobials.			4th tripartite meeting between PMDA, EMA, and FDA to discuss convergence on approaches for the evaluation of antibacterial drugs*			

### 3.2 STRONGER BILATERAL PARTNERSHIPS FOR STRONGER COOPERATION

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
<p>Advocate EU standards and measures for tackling AMR in trade agreements and incorporate them into cooperative arrangements in trade agreements.</p>	2017	2018	2019	2020	2021	2022
			<p>Discussions with Mercosur on SPS issues</p>	<p>AMR cooperation article agreed between EU and Indonesia*</p> <p>AMR cooperation article agreed between EU and Malaysia*</p> <p>AMR cooperation article agreed between EU and India*</p> <p>Trade discussions with ASEAN countries*</p> <p>FTA negotiations with Australia and New Zealand*</p>		

## IMPROVE KNOWLEDGE ON DETECTION, EFFECTIVE INFECTION CONTROL AND SURVEILLANCE

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
<p>Engage with major global players and strategic countries (e.g. Brazil, China, India), contributing towards achieving objectives of the WHO global action plan on AMR.</p>	<p>Seminars on AMR with Argentina, Brazil, Chile &amp; Colombia</p> <p>Seminar with India on the use of veterinary medicines and AMR</p> <p>Identification mission on AMR cooperation with South-American partner countries</p>	<p>Seminars on AMR with Paraguay, Peru &amp; Uruguay</p> <p>Overview report regarding national policies and measures against AMR in third countries</p>	<p>AMR activities with China and India*</p> <p>Follow-up seminars in South East Asia including Australia and New Zealand*</p> <p>AMR activities in Latin American countries under FPI project</p>	<p>AMR activities in South East Asia</p>		
<p>Support EU candidate countries, potential candidate countries and neighbouring countries to which the ENP applies in the alignment with, and capacity building for the implementation of EU legislation related to AMR and EU standards.</p>			<p>ECDC/EFSA and EU-Enlargement multi-country workshop / ECDC/EFSA and EU-ENP multi-country workshop</p>			
<p>Invite the European Parliament, Member States and stakeholders to share views on actions to be taken to ensure that efforts to combat AMR made by EU producers, including farmers, do not place them at a competitive disadvantage.</p>						

### 3.3 COOPERATING WITH DEVELOPING COUNTRIES

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
Continue to contribute to reducing AMR in least developed countries through infectious disease programmes such as the Global Alliance for Vaccines and Immunisations (GAVI)			Implementation through Commission pledges			
Assist in the development of AMR strategies in the areas of food safety and animal health through regional training workshops on AMR		New BTSF activities for non-EU countries				
Support partner countries' policy initiatives on AMR, where appropriate, through international cooperation and development instruments (e.g. Global Public Goods & Challenges, the European Development Fund).	Through a pilot project on mapping the global threat of AMR, DEVCO supports WHO to develop a point prevalence protocol for undertaking surveys on prescribing and use of antimicrobial medicines in hospital setting, build capacity to implement antimicrobial stewardship programmes in hospitals in SSA, address the prevention, detection and response to substandard and falsified products					
Support the development of resilient health systems in partner countries			Supporting WHO for strengthened health systems through development funding instruments at country and region levels			

### 3.4 DEVELOPING A GLOBAL RESEARCH AGENDA

CONCRETE ACTIVITIES	TIMELINES AND DELIVERABLES					
	2017	2018	2019	2020	2021	2022
Improve global coordination of research activities.		Launch of G20 Research hub				
Support the establishment of a virtual research institute under JPIAMR.				Reporting of project EXEDRA on the expansion of the JPIAMR		
Continue collaborative research with Sub-Saharan Africa in the context of the European and Developing Countries Clinical Trial Partnership (EDCTP) in particular in relation to tuberculosis, HIV/AIDS, malaria and neglected infectious diseases.			<p>Reporting of EDCTP2 projects on research capacity development in support of the EVD response</p> <p>Reporting of EDCTP2 projects on maximising the impact of EDCTP research and translation of research results into policy and practice</p>			
Foster international research collaboration on AMR in the animal health sector in the STAR-IDAZ International Research Consortium.						