

ECDC GUIDE

Guide for the development of national One Health roadmaps on antimicrobial resistance in the Western Balkans

November 2024

Introduction

To increase health security in the European Union (EU), ECDC provides national authorities in the Western Balkans¹ with support to strengthen their infectious disease prevention and control systems and public health workforce. Since 2011, the Centre has undertaken several national technical assessments and convened regional meetings to prepare for the Western Balkans' participation in ECDC activities, most recently focusing on a One Health approach to antimicrobial resistance (AMR). As part of this work, ECDC undertakes One Health country visits on AMR [1] and offers support during the development of national One Health roadmaps on AMR.

AMR is a key priority for ECDC, as it is an increasing public health problem that poses a serious threat to human and animal health, as well as to the environment. AMR also has substantial economic implications: it is estimated that in 2019 alone, over 38 710 deaths were attributable to bacterial infections with AMR in the EU and European Economic Area (EEA), with associated costs of nearly EUR 11.7 billion due to increased health expenditure and reduced work productivity.

Purpose and audience

This guide for the development of a national One Health roadmap on AMR was developed as a reference for the national human health, animal health and food safety, and environment sector authorities in the Western Balkans to address the gap analysis following the One Health country visit on AMR [1], as part of the EU-funded [ECDC Accession Support activities](#). The overall aim of this joint ECDC and European Food Safety Authority (EFSA) initiative is to strengthen national capacities to implement EU *acquis* on AMR as part of the EU enlargement process. It is suggested that the technical recommendations provided in the country visit report are addressed in a comprehensive and prioritised national action plan.

This guide presents the methodology and supporting documents that can be used to develop a comprehensive, time-bound and budgeted national One Health roadmap on AMR. The goal of the methodology is to develop one cohesive national plan to support country-wide adherence to international policies and strategies, in line with guidance on AMR from the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (WOAH) [2,3,4]. The guide also outlines the roles and responsibilities of national and external stakeholders, as well as the external contractor, in the roadmap's development.

A national One Health roadmap on AMR presents a list of costed activities organised by goals and objectives with indicators to monitor the implementation of the recommendations proposed following country visit. The roadmap could also serve to identify actions that are compromised by insufficient national funding, offering insight into where implementation could be supported by the EU, other partners, external stakeholders, donors or international organisations.

The content, dates and time frames of the roadmap development should be defined in close communication with the country-designated contact points so that the resulting roadmap accurately represents the current regional and national initiatives related to AMR.

¹ Western Balkans: Albania, Kosovo*, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ opinion on the Kosovo declaration of independence.

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Methods

This guide was prepared by the external contractors Epiconcept and Integrated Quality Laboratory Services (IQLS), with guidance from ECDC and in consultation with experts from EFSA and the EU Directorate-General for Health and Food Safety.

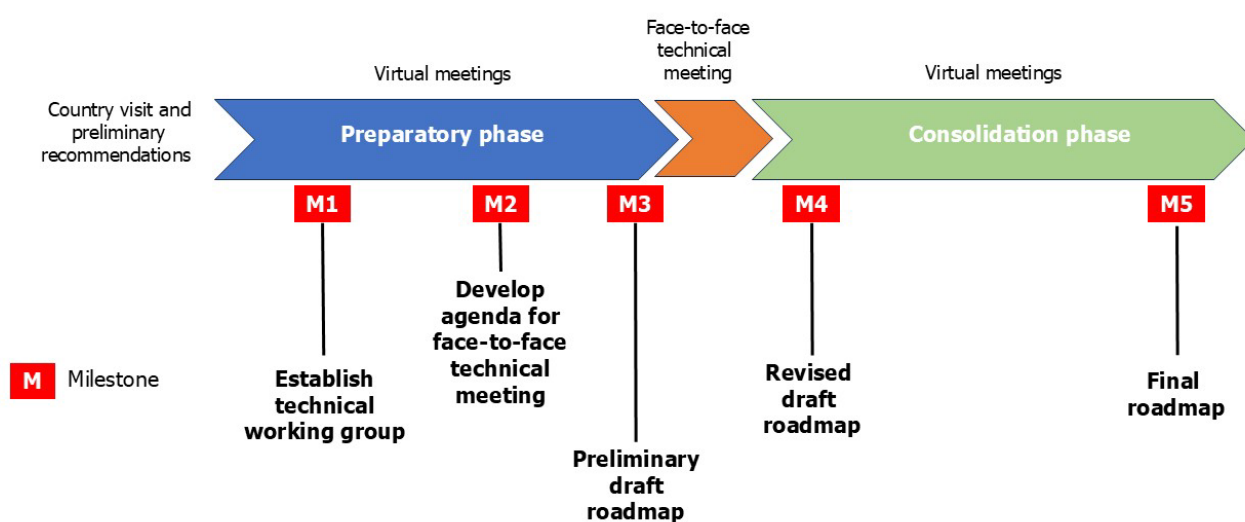
Methodology to develop a national One Health roadmap on AMR

The development of a national One Health roadmap on AMR is conducted via a series of meetings, including online meetings and a two-day, face-to-face technical meeting. The process is coordinated by an external contractor, who helps guide the process and provides technical expertise. The roadmap development undertaken by a technical working group composed of representatives and national authorities involved in AMR. Draft documents will be shared with ECDC and international stakeholders at each stage to seek comments and additional suggestions.

The roadmap development consists of three phases (Figure 1):

- **A preparatory phase**, which starts at the end of the country visit. During this phase, meetings will take place online. The aim of this phase is to:
 - Agree on the dates and agendas of meetings, including the face-to-face technical meeting;
 - Discuss shared reflections on the country visit and conduct a final analysis of gaps and recommendations;
 - Develop a preliminary draft roadmap (**Milestone 3**) that will be circulated to the participants prior to the face-to-face technical meeting.
- **A two-day, face-to-face technical meeting** that takes place in the country and aims to:
 - Present the observations, conclusions and recommendations of the One Health country visit on AMR to a wider audience;
 - Present the preliminary draft roadmap developed during the preparatory phase;
 - Discuss and refine the preliminary draft roadmap with national authorities and international experts and stakeholders during thematic or sector-specific workshops;
 - Discuss a list of key indicators to monitor the implementation of the recommendations;
 - Agree on a RACI matrix² for national stakeholders.
- **A consolidation phase**, which aims to:
 - Incorporate the comments and suggestions gathered during the two-day technical meeting to improve and finalise the detailed list and scope of activities proposed for each objective;
 - Provide cost and resource (technical and human) estimates for each activity;
 - Finalise the list of indicators.

Figure 1. Overview of the development of a national roadmap on AMR, with key milestones



The two-day, face-to face technical meeting is expected to occur within six to seven months after the country visit. The final national One Health roadmap on AMR is to be finalised within one year after the country visit.

² The RACI matrix clarifies which individual, institution or groups are responsible for a project's successful completion, and the roles that each will play throughout the project. RACI stands for: responsible, accountable, consulted and informed.

Preparatory phase

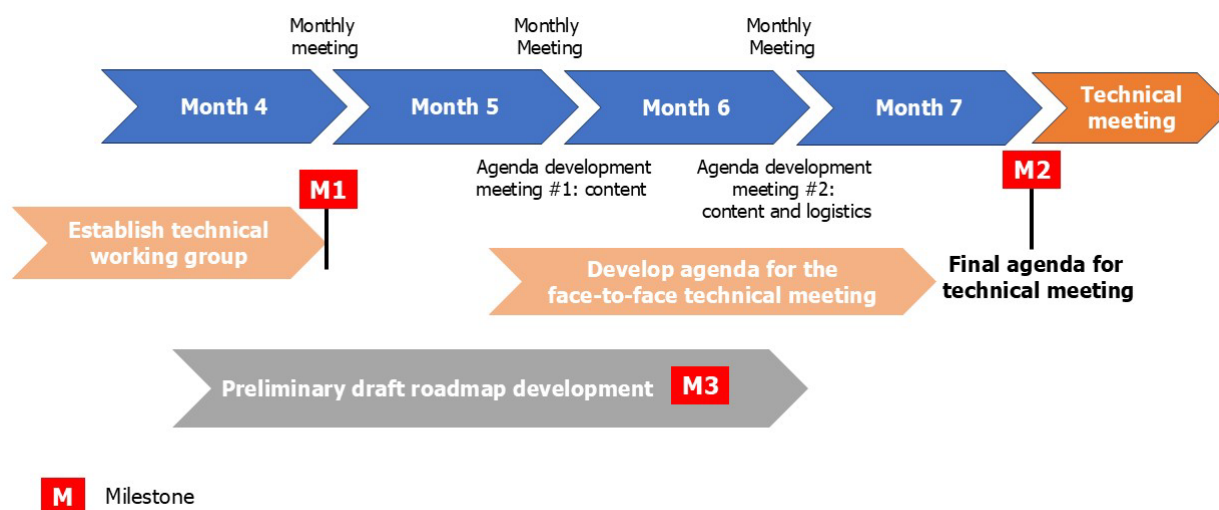
In the preparatory phase, the external contractor will undertake the following **specific actions** in collaboration with the relevant parties:

- Establish a dedicated technical working group (**Milestone 1**) that consists of national experts representing all One Health sectors. This group will be in charge of the development of the roadmap.
- Liaise between ECDC, EFSA, the EU Directorate-General for Health and Food Safety and the national technical experts to agree on the date and agenda of the face-to-face technical meeting (**Milestone 2**). This date is to be communicated to ECDC, along with a draft agenda, at least three months in advance of the agreed date.
- Discuss with the technical working group to identify two or three priority areas of the roadmap where technical expertise from outside the country will be needed during the face-to-face technical meeting. If expert support from EU/EEA countries is required, it should be communicated to ECDC, the Technical Assistance and Information Exchange instrument of the European Commission (TAIEX) and/or the WHO Country Office as soon as the date for the technical meeting is confirmed, so that partners can mobilise the technical support needed before the technical meeting.
- Support the technical working group's development of a preliminary draft roadmap (**Milestone 3**) with objectives, a list of costed activities and timeframes, indicators to monitor progress and follow implementation, and resources needed to implement the activities. This work should reference the gap analysis and recommendations from the technical report on the One Health country visit on AMR.

The **main output** of the preparatory phase will be the preliminary draft roadmap (**Milestone 3**) in a table format (Annex 1) that lists the activities – organised by specific objectives – and covers the high-level goals. The external contractor will support the development of this draft roadmap via regular meetings with the technical working group.

The elements of the preparatory phase are described in Figure 2.

Figure 2. Preparatory phase (months 4–7 after the country visit)



Technical working group

A dedicated technical working group composed of national representatives from human health, animal health and food safety, and the environment needs to be established. It is ideal if the group also includes experts in national programme implementation and finance from national ministries or governmental agencies. A team leader will be appointed to be responsible for the overall roadmap development, with guidance and in agreement with the national intersectoral committee on AMR.

The **technical working group's tasks** will be to:

- Revise or develop the goals and objectives of the roadmap and identify the time-bound activities required to meet each objective (table format; Annex 1);
- Agree on the details of the roadmap development process (e.g. how the work on the roadmap will be done, who will make decisions to endorse it at the national level, what needs to be ready for the roadmap to be approved, how to secure institutional commitment for its implementation, etc.), as well as communication flows and which, if any, subgroups should be established;
- Review and take into consideration existing documents from other international stakeholders (e.g. WHO, FAO, WOA) [2,3,4];
- Identify and align with any AMR initiatives or activities – national or international, public or private – that are relevant to the development or implementation of the roadmap.

Technical meeting agenda

The technical working group will draft an agenda for the two-day, face-to-face technical meeting, along with a list of attendees, during the preparatory phase (**Milestone 2**). This work can be supported by the external contractor. A proposed agenda outline is presented in Table 1. The more detailed version in Annex 2 can be used as a template.

Table 1. Proposed agenda outline

Time	Activities
Day 1 (AM)	<p>1. Observations, conclusions and recommendations of the country visit report. This summary can be provided by the external contractor or representatives from EU bodies, if present.</p> <p>2. Presentation of the draft roadmap goals and objectives for:</p> <ul style="list-style-type: none"> • Governance and collaboration among sectors: alignment of legislation with EU <i>acquis</i>, responsibility and accountability for the monitoring and evaluation framework; • Human health: AMR surveillance, antimicrobial stewardship, infection prevention and control, and healthcare-associated infections; • Animal health and food safety: AMR surveillance, monitoring of sales of antimicrobials for use in animals and use of antimicrobials in animals, prudent use of veterinary medicinal products; • Environment: surveillance of antimicrobial-resistant bacteria and genes, management of waste of expired medicines and veterinary medicinal products. <p>These presentations can be provided by national representatives.</p> <p>3. Discussion of cross-cutting themes of the draft roadmap, such as governance and awareness-raising campaigns. Feedback from the audience can be gathered through an open discussion moderated by the external contractor.</p>
Day 1 (PM)	<p>Two parallel workshops in i) human health and ii) animal health and food safety, and the environment to discuss draft activities and milestones for each of the three sectors can take place to agree on priority activities and milestones. Roundtable, moderated discussions can help to ensure coherence.</p> <p>It is recommended that implementation of the proposed activities is designed in a staged approach that takes into account:</p> <ul style="list-style-type: none"> • RACI^a roles of different stakeholders; • Costs and resources (technical and human) needed to implement the activities.
Day 2 (AM):	<p>Plenary reporting from the parallel workshops on activities, monitoring and evaluation framework with indicators, and follow-up plan can be held, composed of the following:</p> <ul style="list-style-type: none"> • Presentations by the technical leads of each workshop; • Discussion and validation; • List of remaining gaps in the roadmap development to be considered following the meeting. <p>Sessions will be moderated by the contractor and the technical working group team leader.</p>
Day 2 (PM)	<p>Discussion on budget and resource mobilisation, as well as next steps to develop the roadmap.</p>
Supporting material for participants	<ul style="list-style-type: none"> • Technical report produced as part of the One Health country visit on AMR [1]; • Draft outline of the national One Health roadmap on AMR.

AMR: antimicrobial resistance; EU: European Union.

^a The RACI matrix clarifies which individual, institution or groups are responsible for a project's successful completion, and the roles that each will play throughout the project. RACI stands for: responsible, accountable, consulted and informed.

Face-to-face technical meeting

The face-to-face technical meeting should be held once the technical working group (with the support from the external contractor) has produced the preliminary draft roadmap. The **specific objectives** of the technical meeting are to:

- Discuss the proposed actions to address the gaps and recommendations described in the One Health country visit on AMR report with a wider audience of stakeholders;
- Find consensus among national actors and finalise the roadmap's objectives, milestones and activities;
- Identify key indicators to monitor the implementation of the roadmap. A list of key indicators on AMR is available in [1].

The **proposed target audience** of national stakeholders includes:

- Ministry of Health;
- Ministry of Agriculture, Forestry and Rural Development;
- Ministry of Environment;
- Members of the national multisectoral committee on AMR;
- Public health, animal health, environmental and food safety agencies;
- EU agencies (e.g. ECDC, EFSA, European Commission) and EU representation in the country;
- Regional AMR Focal Points from WHO, FAO and WOA;
- Any other international or bilateral partners working on AMR with the country in the field.

The **main output** of the face-to-face technical meeting will be a revised draft roadmap (**Milestone 4**) with a plan for how the technical working group should continue to improve and develop the roadmap. This revised draft roadmap will then enter a consolidation phase.

Consolidation phase

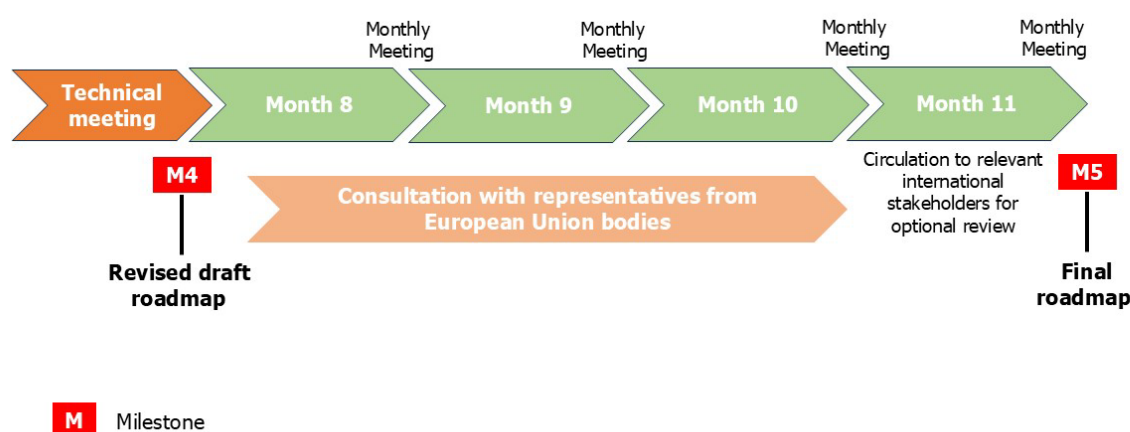
The **specific objectives** of the consolidation phase are to:

- Estimate costs and resources (technical and human) for all activities;
- Create the final roadmap (**Milestone 5**), working from the revised draft roadmap and taking into account the input received at the technical meeting.

The technical working group is responsible for incorporating the suggestions and recommendations collected during the face-to-face technical meeting into the revised draft roadmap and to continue this development in the consolidation phase until there is a final roadmap document (**Milestone 5**). This final roadmap will be circulated for optional review to the relevant international stakeholders, such as ECDC, EFSA, the European Commission, the WHO Regional Office for Europe, FAO and WOA, among others. The technical working group will be responsible for addressing any comments, as needed.

The final roadmap (**Milestone 5**) will include cost and resource (technical and human) estimates for each activity, as well as a monitoring and evaluation framework with indicators to measure progress towards and achievement of objectives, with baseline and target values. The indicators should be aligned with the EU-level indicators used to monitor progress in EU Member States.

Figure 3. Consolidation phase (months 8–11 after country visit), following the face-to-face technical meeting



Role and participation of stakeholders

Country

The country will lead the development of its national One Health roadmap on AMR. This work will be undertaken by a technical working group, with support from the members of its multisectoral committee on AMR. Progress in the development of the roadmap (including the list of costed activities) will be shared with the external contractor via regular updates (e.g. online meetings) organised by the contractor.

The preliminary draft roadmap should be shared with the external contractor and other partners that have been involved in the country visit on One Health against AMR, as per [1] (e.g. ECDC, EFSA, EC's Directorate-General for Health and Food Safety, and international stakeholders). Ideally, this will be shared at least one month before the face-to-face technical meeting to allow sufficient time to review the proposed activities in terms of scope, coherence and alignment with relevant EU legislation on AMR.

The country will designate a contact person who will be responsible for confirming the date and venue for the face-to-face technical meeting, which will be organised with support from the external contractor (e.g. finding and booking any required conference rooms, sending invitations to national experts, providing names and contact information of international collaborators, and providing any other information the external contractor needs to ensure a successful and productive workshop). The country will send the invitations for the face-to-face technical meeting to national stakeholders early in the preparatory phase to ensure participation of key experts from local, regional and national levels. International partners should be notified as soon as a draft agenda is ready.

Members of the technical working group or multisectoral committee on AMR will identify, communicate with and establish collaborations with other international AMR initiatives as necessary to support the development and implementation of the roadmap.

ECDC, EFSA and experts from the EC's Directorate-General for Health and Food Safety

ECDC will offer input on the scope and agenda of the face-to-face technical meeting. Experts from ECDC, EFSA and the EC's Directorate-General for Health and Food Safety (ideally members of the team who participated in the One Health country visit on AMR) will provide input and comments on the roadmap at each stage of its preparation.

Depending on availability, experts will participate in the technical meeting (preferably in-person, otherwise remotely) to provide further technical expertise and suggestions, e.g. on the alignment of the objectives and activities proposed with the EU *acquis* on AMR and the prudent use of antimicrobials.

ECDC might also identify and propose experts from other EU/EEA countries who could share their experience implementing national action plans on AMR or expertise on the priority areas identified by the country as necessary for the development of the roadmap. The mode of communication for these exchanges will be agreed with the country's designated contact person and the external contractor.

External contractor

The external contractor will work closely with the country-designated contact person and ECDC.

The contractor will facilitate the regular online meetings during the preparatory and consolidation phases and – when feasible – will invite experts from ECDC, EFSA and the EC's Directorate-General for Health and Food Safety to contribute to the regular meetings. The contractor should seek to engage experts from WHO, FAO and WOA from the preparatory phase.

The contractor will develop the agenda of the face-to-face technical meeting in consultation with the technical working group and experts from ECDC, EFSA and the EC's Directorate-General for Health and Food Safety. They will also moderate the meeting in collaboration with the relevant participants.

The external contractor will support the technical working group in the development of the roadmap by providing technical expertise, comments and suggestions at each phase of its development.

International stakeholders

Input from WHO, FAO and WOA is extremely beneficial to the development of the roadmap. It is ideal if their involvement in the process starts during the preparatory phase. Close collaboration with international stakeholders during all phases of the roadmap's development and implementation will contribute to the initiative's success.

Acknowledgements

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The contributing authors were: Cyril Buhler, IQLS; Dominique Monnet, ECDC; Anthony Nardone, Epiconcept; Agne Bajoriniene, ECDC; Aikaterini Mougkou, ECDC; and Anna Machowska, ECDC.

References

1. European Centre for Disease Prevention and Control (ECDC). Methodology for conducting One Health country visits on antimicrobial resistance in the Western Balkans. Stockholm: ECDC; 2024. Available at: <https://www.ecdc.europa.eu/en/publications-data/methodology-conducting-one-health-country-visits-antimicrobial-resistance-western>
2. World Health Organization (WHO). WHO implementation handbook for national action plans on antimicrobial resistance: guidance for the human health sector. Geneva: World Health Organization; 2022. Available at: <https://www.who.int/publications/i/item/9789240041981>
3. World Health Organization (WHO). WHO costing and budgeting tool for national action plans on antimicrobial resistance: user guide. Geneva: World Health Organization; 2021. Available at: <https://www.who.int/publications/i/item/9789240036901>
4. World Health Organization (WHO). Guidance to facilitate monitoring and evaluation for antimicrobial resistance national action plans. Geneva: World Health Organization; 2023. Available at: <https://www.who.int/publications/i/item/9789240069763>

Annex 1. Proposed template for drafting a national One Health roadmap on AMR

Action area – Governance and One Health aspects of antimicrobial resistance												
Area	Objectives (country visit recommendations)	Link to EU <i>acquis</i> per action area or per objective	Activities	Deliverables	Timeframe	Needed resources (human, technical, financial)	Funding sources, partners	Responsible organisation and contact	Monitoring and evaluation			
									Baseline (country visit report)	Target	Indicators	Progress monitoring ^a
1. Intersectoral collaboration and national action plan	1.1 Resuming meetings of intersectoral committee		1.1.1									
			1.1.2									
			1.1.3									
	1.2. Improving collaboration in a One Health perspective, enhancing the cooperation between human health, animal health/food safety and environmental sectors		1.2.1									
			1.2.2									
	1.3 Continuing with the implementation of the proposed actions in the human health sector and urgently commencing actions in the animal health/food safety sector		1.3.1									
	1.4 Providing sustainable national funding for activities		1.4.1									
	1.5 Intensifying training and awareness-raising using a One Health approach for health professionals in the human and animal health sectors, and continuing with awareness-raising campaigns that incorporate One Health messages directed at the general public		1.5.1									

^a Response key: Level 1: activity defined (including monitoring indicator(s)) but some resources or funding still to be identified; Level 2: resources and funding secured to complete the activity but implementation has not started; Level 3: implementation ongoing; Level 4: activity completed.

Annex 2. Sample documents to support organisation of the face-to-face technical meeting

Technical meeting to support the development of a national One Health roadmap on AMR in [Country]

ECDC Accession Support to the Western Balkans and Türkiye

This activity is commissioned by ECDC and prepared with the financial support of the European Union under [CN/2019/409-781](#), as part of the contract ECDC/2022/006 on 'Country support to advance One Health responses against antimicrobial resistance in Western Balkans'.

External contractor and EU expert team

[Name of external contractor]	
ECDC	
European Commission	
EFSA	

[Add the venue and address of the technical meeting here]

DAY 1: [Day, Date Month 202X]

9:00–10:15 **Opening meeting with national authorities and stakeholders** (See list of participants below)

- Ministry of Health
- Ministry of Agriculture Forestry and Rural Development
- Ministry of Environment
- National Institute for Public Health
- Food and Veterinary Agency
- International stakeholders.

Roundtable short presentation of participants (10 min)

Roadmap development in the context of the integration process for [Country] – ECDC (10 min)

Presentation on main gaps and weaknesses, and **recommendations** from the One Health country visit held in [date of the country visit] – [Presenter name], ECDC and [Presenter name], EC Directorate-General for Health and Food Safety (10 min total)

Updates on AMR-related activities in [Country] since the country visit – [Presenter name, association] and [Presenter name, association] (20 min total; 10 min each)

Brief updates from Ministries (15 min total; 5 min each)

- Ministry of Agriculture Forestry and Rural Development
- Ministry of Environment
- Ministry of Health.

Objectives of the meeting and organisation of the work sessions – [External contractor name] (5 min)

Opening meeting link

10:15–10:30 **Coffee break**

10:30–12:00	<p>I. Governance and One Health aspects of antimicrobial resistance</p> <p>1. Presentation: Overview of activities to address recommendations regarding governance, intersectoral collaboration, participation of the environmental sector, implementation of the national action plan activities – [Presenter name, association] (10 min)</p> <p>2. Brainstorming discussions on cross-sectoral activities</p> <ul style="list-style-type: none"> • Meetings of the intersectoral committee • Activities to improve collaboration in a One Health perspective • Implementation of actions in the human health sector and animal health/food safety sector • National funding schemes for One Health AMR activities • Awareness-raising and campaigns to reduce and encourage prudent use of antimicrobials for health professionals and the general public • Environmental aspects of antimicrobial resistance: <ul style="list-style-type: none"> – Encouraging the active involvement of the environmental sector in the work related to AMR. – Establishing safe routes for disposal of unused and expired medicines, including antimicrobials. <p>Discussion topics for this area:</p> <ul style="list-style-type: none"> • Completeness and coherence of proposed activities • Prioritisation and timeframe (identify intermediate milestones) • Targets and indicators to measure progress • Relevant EU legislation (if any) that apply • What is achievable? (discussion with EU expert team) <p>If time allows and depending on how developed the preliminary draft roadmap is prior to the meeting, the discussion can also address the following components:</p> <ul style="list-style-type: none"> • Costing of activities • Resources needed to reach the objectives • International support needed • Administration instructions. <p>Moderator: Rapporteurs: Session I meeting link</p>		
12:00–13:00	Lunch break		
13:00–15:00	<p>II. Two separate parallel workshops on 'Human health aspects of AMR' and 'Animal health and food safety aspects of AMR'</p> <p>Using the draft roadmap as a guide, the two workshop discussions will address for each area:</p> <ul style="list-style-type: none"> • Completeness and coherence of proposed activities • Prioritisation and timeframe (identify intermediate milestones) • Targets and indicators to measure progress • Relevant EU legislation (if any) that apply; • What is achievable? (discussion with EU expert team) <p>If time allows and depending on how developed the preliminary draft roadmap is prior to the meeting, the discussion can also address the following components:</p> <ul style="list-style-type: none"> • Costing of activities • Resources needed to reach the objectives • International support needed • Administration instructions. <table border="1" data-bbox="384 1637 1410 2063"> <tr> <td data-bbox="384 1637 887 2063"> <p>Human health aspects of AMR</p> <p>Laboratory services, monitoring of AMR and antimicrobial consumption (AMC), antimicrobial stewardship (AMS) and treatment guidelines</p> <p>1. Presentation: Overview of activities to increase microbiological sampling and timeliness of reporting results; generating routine data on AMR and AMC, and integrating these data into patient management in primary care and in hospitals in the framework of AMS – [Presenter name]</p> </td><td data-bbox="887 1637 1410 2063"> <p>Animal health and food safety aspects of AMR</p> <p>Monitoring of AMR in animal health and the food sector</p> <p>1. Presentation: Overview of activities to strengthen testing capacity at animal health laboratories (AHLs) and food safety laboratories (FSLs); ensuring alignment with EU methodology – [Presenter name]</p> </td></tr> </table>	<p>Human health aspects of AMR</p> <p>Laboratory services, monitoring of AMR and antimicrobial consumption (AMC), antimicrobial stewardship (AMS) and treatment guidelines</p> <p>1. Presentation: Overview of activities to increase microbiological sampling and timeliness of reporting results; generating routine data on AMR and AMC, and integrating these data into patient management in primary care and in hospitals in the framework of AMS – [Presenter name]</p>	<p>Animal health and food safety aspects of AMR</p> <p>Monitoring of AMR in animal health and the food sector</p> <p>1. Presentation: Overview of activities to strengthen testing capacity at animal health laboratories (AHLs) and food safety laboratories (FSLs); ensuring alignment with EU methodology – [Presenter name]</p>
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	<p>2. Brainstorming discussions and review of the preliminary draft roadmap activities on:</p> <ul style="list-style-type: none"> • Diagnostic laboratory services • Monitoring of AMR • Monitoring of AMC • AMS and treatment guidelines. <p>Moderator Rapporteur:</p> <p>Session II (ECDC) meeting link</p>	<p>2. Brainstorming discussions and review of the preliminary draft roadmap activities on:</p> <ul style="list-style-type: none"> • Diagnostic laboratory services at AHL and FSL • Implementation of AMR monitoring in food-producing animals • Enhancing testing of veterinary pathogens • Support and training from other countries and institutions. <p>Moderator: Rapporteur:</p> <p>Session II (EFSA/EU Directorate-General for Health and Food Safety) meeting link</p>
15:00–15:15	Coffee break	
15:15–17:00	<p>III. Infection prevention and control (IPC)</p> <p>1. Presentation: Overview of activities related to IPC, healthcare associated infections (HAIs) monitoring, and AMR and IPC education – [Presenter name]</p> <p>2. Brainstorming discussions and review of the draft roadmap activities on:</p> <ul style="list-style-type: none"> • Strengthening hand hygiene practices in hospitals • Ensuring availability of alcohol-based hand rub solutions • Providing regular IPC training for healthcare staff in all facilities • Increasing IPC staff in hospitals • Establishing national surveillance of HAIs and <i>Clostridioides difficile</i> infections. • Considering systematic screening in areas with outbreaks or areas endemic for carbapenem-resistant <i>Acinetobacter baumannii</i> and carbapenem-resistant Enterobacterales. <p>Moderator: Rapporteur:</p> <p>Session III (ECDC) meeting link</p>	<p>III. Monitoring sales and use of antimicrobials in animals</p> <p>1. Presentation: Overview of activities – [Presenter name]</p> <p>2. Brainstorming discussions and review of the draft roadmap activities on:</p> <ul style="list-style-type: none"> • Prioritising and developing a system for collecting data on sales of veterinary antimicrobials for use in animals to establish a baseline • Reporting sales of antimicrobials using a population correction unit (PCU) • Strengthening the controls of farms, veterinarians and wholesalers (among others) to enforce the transfer of sales and use data from the wholesalers and veterinarians and to promote and enforce record keeping by farmers. <p>Moderator: Rapporteur:</p> <p>Session III (EFSA/EU Directorate-General for Health and Food Safety) meeting link</p>
17:00–17:30	<p>Day 1 debrief/open discussion</p> <ul style="list-style-type: none"> • Brief summary of day 1 achievements in the human health sector – [Presenter name] • Brief summary of day 1 achievements in the animal health and food safety sector – [Presenter name] <p>Open discussion</p> <p>Moderator:</p> <p>Day 1 debrief meeting link</p>	

DAY 2: [Day, Date Month 202X]**09:00–10:30****IV. Two separate parallel workshops on on 'Human health aspects of AMR' and 'Animal health and food safety aspects of AMR'**

- Completeness and coherence of proposed activities
- Prioritisation and timeframe (identify intermediate milestones)
- Targets and indicators to measure progress
- Relevant EU legislation (if any) that apply.
- What is achievable? (discussion with EU expert team)

If time allows and depending on how developed the preliminary draft roadmap is prior to the meeting, the discussion can also address the following components:

- Costing of activities
- Resources needed to reach the objectives
- International support needed
- Administration instructions.

Human health aspects of AMR**AMR and IPC education**

1. Presentation: Overview of activities – [Presenter name]

2. Brainstorming discussions and review of the draft roadmap activities on:

- Investing in a professional development plan to train future healthcare professionals
- Incorporating AMS and IPC-related training into the continuous professional education priorities of professional societies.

Moderator:

Rapporteur:

[Session IV \(ECDC\) meeting link](#)

Animal health and food safety aspects of AMR**Activities to promote reduced and prudent use of antimicrobials in animals**

1. Presentation: Overview of activities – [Presenter name]

2. Brainstorming discussions and review of the draft roadmap activities on:

- Implementing existing legislation
- Alignment with EU legislation on banning the use of antimicrobials for growth promotion or to increase yield
- Withdrawal from the market of antimicrobial veterinary medicinal products not allowed in the EU.

Moderator:

Rapporteur:

[Session IV \(EFSA/EU Directorate-General for Health and Food Safety\) meeting link](#)

10:30–10:45**Coffee break**

10:45–12:30	<p>V. Public information and behavioural change interventions for AMR</p> <p>1. Presentation: Overview of activities – [Presenter name]</p> <p>2. Brainstorming discussions and review of the draft roadmap activities on:</p> <ul style="list-style-type: none"> • Promoting awareness on the prudent use of antibiotics and IPC • Long-term behaviour change communication interventions • Engaging pharmacies, regional public health institutes and behaviour change communication specialists in planning and evaluating national antibiotic awareness campaigns • Producing promotional videos and expanding media channels • Regularly evaluating the impact of the implemented campaigns via national or targeted surveys (e.g. via apps for healthcare workers), including data collected by the Eurobarometer on AMR. <p>Moderator: Rapporteur:</p> <p>Session V (ECDC) meeting link</p>	<p>V. Education and communication</p> <p>1. Presentation: Overview of activities – [Presenter name]</p> <p>2. Brainstorming discussions and review of the draft roadmap activities on:</p> <ul style="list-style-type: none"> • Training officials and practicing and future veterinarians on the principles of prudent use of antimicrobials and increasing awareness of the impact of overprescribing antimicrobials in general and the use of critically important antimicrobials in particular • Training and awareness raising activities targeting officials, veterinary students and practitioners • Training activities to take advantage of the European Antibiotic Awareness Day and/or World AMR Awareness Week (in November each year) • Engaging with human health sector to take part in the training activities as part of a One Health approach • Training resources and AMR awareness raising materials already available. <p>Moderator: Rapporteur:</p> <p>Session V (EFSA/EU Directorate-General for Health and Food Safety) meeting link</p>
12:30–13:30	Lunch break	
13:30–15:45	<p>Additional discussions on budget and resource allocation and support needed</p> <ul style="list-style-type: none"> • Costing of activities • Resources needed to reach the objectives • International support needed. <p>Additional discussion meeting link</p>	
15:45–16:00	Coffee break	
16:00–17:00	<p>Day 2 debrief/closing meeting</p> <p>Debrief discussion: Do the proposed activities, available resources and mechanisms to monitor the implementation of the roadmap address the priorities and key actions identified during the country visit?</p> <p>Defining the next steps to further refine the roadmap</p> <p>Closing meeting link</p>	

Meeting attendees

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Online attendees

No.	Name	Affiliation
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