

Scientific Network for Zoonoses Monitoring Data Minutes of the 15th specific meeting on Antimicrobial Resistance



12-13 November 2025

14:00-18:00 / 09:00-13:00

Minutes agreed on 03 December 2025

Location: EFSA - Parma (Meeting Board Room)/ Web conference

Attendees:

o **Network Participants:**

Country	Name
Austria	Austrian Agency for Health and Food Safety (AGES)
Belgium	Sciensano
Bulgaria	Risk Assessment Center on Food Chain, Ministry of Agriculture
Croatia	Croatian Veterinary Institute
Cyprus	Veterinary Services
Czechia	State Veterinary Institute Prague
Denmark	Technical University of Denmark - National Food Institute
Estonia	Agriculture and Food Board Ministry of Regional Affairs and Agriculture
Finland	Finnish Food Authority
France	French Agency for Food, Environmental and Occupational Health & Safety (ANSES)
Germany	German Federal Institute for Risk Assessment (BfR)
Greece	Ministry of Rural Development and Food
Hungary	National Food Chain Safety Office - Veterinary Diagnostic Directorate
Iceland	The Icelandic Food and Veterinary Authority - MAST
Ireland	Department of agriculture Food and the Marine
Italy	Istituto Zooprofilattico Sperimentale di Lazio e Toscana
Latvia	Food and Veterinary Service
Lithuania	National Food and Veterinary Risk Assessment Institute
Luxembourg	Luxembourg Veterinary and Food Administration
Malta	Food Safety and Security Authority (FSSA)
The Netherlands	The Netherlands Food and Consumer Product Safety Authority (NVWA)
Norway	Norwegian Veterinary Institute
Poland	National Veterinary Research Institute
Portugal	Direção Geral de Alimentação e Veterinária (DGAV)/ Instituto Nacional de Investigação Agrária e Veterinária (INIAV)
Romania	Institute for Diagnosis and Animal Health National Sanitary Veterinary and Food Safety Authority
Slovakia	State Veterinary and Food Institute Dolny Kubin
Slovenia	Veterinary Faculty Ljubljana, National Veterinary Institute
Spain	Agencia Española de Seguridad Alimentaria y Nutrición (AESAN) Ministerio de Agricultura, Pesca, y Alimentación (MAPA)
Sweden	Swedish Veterinary Agency

o **Observers:**

Federal Food Safety and Veterinary Office (Switzerland);
IPA country: Food Safety and Veterinary Institute (FSVI)/Public Health Institute (Albania);
Food and Veterinary Agency (Kosovo); Food and veterinary agency (North Macedonia);
Ministry of Agriculture, Forestry and Water Management Veterinary Directorate (Serbia);
GD-Food and Control / Ministry of Agriculture and Forestry (Türkiye).



- **EFSA:**
 - BIOHAW Unit: Pierre-Alexandre Beloel (co-chair), Raquel García Fierro (co-chair), Giusi Amore, Valentina Rizzi, Beatriz Guerra, Mirko Rossi, Ernesto Liebana, Pietro Stella, Frank Verdonck, Frank Boelaert, Megan Tumulty, Ana Zdanowicz.
 - IDATA Unit: Anca Stoicescu, Valentina Bocca, Nuria Ferrer, Edvardas Melis.
- **European Commission/Other EU Agencies representatives:**
 - Joana Mourão (EURL AR)
 - Martial Plantady (DG SANTE G5)
 - Sara Tavares, Jose Coucelo (DG SANTE F5)
 - Zoltan Kunsagi (EMA)
- **Invited speakers:**
 - Usman Zaheer (FAORAP)
 - Lucie Colineau (ANSES- France)
- **EFSA Contractors:**
 - AMR consortium: Oskar Nilsson; Frédéric Chavanel; Florian Kroell; Thomas Briere; Catherine Pahon; Diane Plouchart ; Agnès Iltis ; Patrick Etievant; Joana Pessoa; Gweneg Kerdivel, Chloe Lozano

1. Welcome and apologies for absence

The co-chair Raquel García Fierro (BIOHAW unit, EFSA) opened the 15th specific meeting on Antimicrobial Resistance of the EFSA Zoonoses Monitoring Data Network and welcomed the participants. General information on the meeting was also provided. Apologies were received from Montenegro and Bosnia and Herzegovina.

2. Adoption of agenda

The agenda was presented and adopted without changes.

3. Agreement of the minutes of the 14th Network meeting held on 06-07 November 2024

The minutes of the 14th Network meeting were previously agreed by written procedure on 27 November 2024 and published on the EFSA website on the same day.

4. Session 1: Updates

4.1. Update from the European Commission

The European Commission representative, Martial Plantady (DG SANTE G5), provided an overview of the existing regulatory frameworks and ongoing initiatives related to antimicrobial resistance (AMR) monitoring. The presentation also highlighted upcoming activities to monitor and report AMR within the food chain, which are scheduled to begin in 2028. During the discussion, a participant (DE) asked whether EFSA's technical specifications would need updating before the aquaculture BLS starts. SANTE responded that core specifications, such as surveyed species and target bacteria, are expected to remain unchanged, but aspects like sample size may require adjustments to reflect most recent population sizes, with EFSA consulted formally or informally to update these parameters. Another participant (IE) raised concerns about the practicalities of sampling aquaculture animals and laboratory validation. Martial Plantady (SANTE) noted that discussions on practical implementation will continue, and that sufficient time will be provided for proper laboratory validation, methodology, and preparations before the survey begins.



4.2. Update from EURL-AR

Joana Mourão, EURL-AMR, presented updates from the EURL-AMR, including: (1) results of the 2024 FSA–EURL-AMR Confirmatory Testing Exercise (based on 2023 data); (2) the revised “dual-step” AMR mechanism-detection strategy applied across all gene classes, with emphasis on ESBL, AmpC, and carbapenemases for regulatory reporting; and (3) the updated whole-genome sequencing (WGS) and bioinformatics analysis protocol.

1. The 2023 EFSA–EURL Confirmatory Testing Exercise, carried out in 2024, included 327 isolates selected by EFSA from 29 countries (primarily *E. coli*, along with *Salmonella* and *Campylobacter*), of which 298 (91%) passed quality controls and were retested at EURL-AMR via broth microdilution. Phenotypic concordance with Member State data remained high, with 42% showing full agreement and 42% within acceptable deviation; only 16% exhibited discrepancies, mostly for carbapenems. Genotype–phenotype agreement in *E. coli* was approximately 90%, indicating that current WGS-based interpretations are reliable for most ESBL, AmpC, and carbapenemase producers. Discrepancies were concentrated in isolates carrying *bla_{NDM-5}*, *bla_{VIM-1}*, or *bla_{OXA-181}*, where carbapenemase genes were present but some carbapenem MICs remained wild-type (MICs \leq ECOFFs), and in azithromycin cases likely attributable to variations in *mph(A)* or its regulatory region. Hybrid Illumina–MinION assemblies confirmed plasmid locations and probable conjugative potential for most carbapenemases.

2. To enhance sensitivity and variant resolution across acquired AMR genes, the EURL-AMR has implemented a two-stage “dual-step” detection workflow: (i) read-level, high-sensitivity screening of raw FASTQ files with ResFinder to capture genes that may be fragmented or lost during assembly, followed by (ii) assembly-level, protein-aware classification using NCBI AMRFinderPlus to resolve gene variants. This dual approach combines AMRFinderPlus for precise variant calling (e.g., *bla_{OXA}*, *bla_{CTX}*, *bla_{TEM}*) with ResFinder’s superior functional granularity/resolution of in silico phenotypes across AMR classes, including (but not limited to) ESBL, AmpC, and carbapenemases, which remain one of the focuses for regulatory reporting.

3. The updated AMR mechanism-detection strategy will be incorporated into a prescriptive WGS and bioinformatics protocol, with the full pipeline released as a containerized implementation (Docker/Snakemake). The protocol defines: (i) accepted input formats (FASTQ/FASTA); (ii) critical and non-critical QC thresholds, including base-quality and GC-drift checks, species-level contamination screening, minimum depth and breadth, and assembly completeness; (iii) pinned software and database versions with recommended identity/coverage cut-offs; and (iv) a documented decision tree for AMR detection. During the discussion, one participant (BE) asked whether the EURL-AR plans to validate the concordance between results obtained using ResFinder and AMRFinderPlus. The EURL-AR explained that the pipeline and decision tree are still being finalised and that isolates from the EFSA confirmatory testing exercise, with known phenotypes and genotypes, are currently being used to evaluate both tools and ensure accuracy.

4.3. Update on European Commission Audits

Sara Tavares (SANTE F5) presented the main findings, trends, and issues identified during the most recent audits assessing the implementation of harmonised AMR monitoring and reporting, as required under Commission Implementing Decision (EU) 2020/1729. The presentation focused particularly on sampling at Border Control Posts (BCPs), as this new requirement appears to pose challenges for some competent authorities. Issues were noted especially in relation to planning, identifying eligible consignments, determining sampling frequency, and the exclusion of certain consignments. The EFSA Network was also informed of a forthcoming questionnaire for competent authorities, designed to complement information collected through text forms and audits and to contribute to next year’s Overview Report on the audit series.



6. Session 2: 2024 data reporting

5.1. Feedback on 2024 AMR data reporting and data validation

Anca Stoicescu (IDATA Unit, EFSA) presented the feedback received from reporting countries via the electronic survey about the 2024 data reporting. MSs provided comments on various aspects, including the text forms, the EFSA catalogues, the data validation business rules, the reporting tools, and the EFSA Data Collection Framework (DCF). In response, EFSA outlined actions to address the feedback and enhance the data collection process for 2025.

5.2. Feedback on 2024 AMR data validation

Raquel García Fierro (BIOHAW Unit, EFSA) presented the main remarks on the critical points related to the 2024 data validation exercise (both general and bacteria-specific remarks) to be considered for the next year.

7. Session 3: Preparation of the 2025 data reporting

6.1. Information about the 2025 AMR data reporting

Anca Stoicescu (IDATA Unit, EFSA) presented the 2025 data reporting timelines. The milestones of the 2025 data reporting were agreed as follows:

- Preparation**
 - Proposals for new terms to be added in the catalogues: 30 November 2025
 - Publication of the supporting manuals: 31 January 2026
 - Requests for training: 31 January 2026
 - Revision of data providers list: 14 February 2026

- Reporting**
 - Opening of the reporting period: 15 March 2026
 - Closure^{1,2} of the reporting period: 31 May 2026
 - Text forms: 31 May 2026

- Data Validation**
 - Data validation period: 2 – 25 June 2026
 - Letters to the MSs, requesting scientific clarifications/corrections: 26 June 2026
 - Data correction by the MSs³: 2 - 22 July 2026
 - Acceptance of the data in DWH by 24 July 2026
 - Amendments⁴ to 2025 data and historical data: 1 - 28 February 2027.

Anca Stoicescu (IDATA Unit, EFSA) briefed the audience on improvements to be implemented in view of the 2025 data reporting. No changes are planned in the Data Collection Framework (DCF), in the data models and in the Excel mapping tool except for update of catalogues for PARAM (*Salmonella* servoras). Changes in business rules and catalogue terms (including deprecation or modification of existing ones and addition of new ones) were presented. If new analysis is needed,

¹ Submission of new datasets after the deadline: 31 May 2025, will not be allowed.

² Submitted data will be displayed in the EU Summary reports in MicroStrategy the day following submission; any change in data during the data reporting and correction periods will be reflected automatically in the EU Summary reports in MicroStrategy the day following a dataset submission.

³ After 22 July 2026, data cannot be changed, as data extracted on this date will be used to draft the 2025 EUSR report. Erroneous data (e.g., combination of matrix/pathogen) will not be addressed in the analyses.

⁴ Amended data will be used in National reports and DWH but will not be included in the 2025 EUSR report.



the MicroStrategy reports will be updated. EFSA proposed that MSs fill in a summary table inserted in the text forms for the next reporting cycle. The table is intended to help countries clearly indicate which datasets have been submitted, thereby improving consistency and facilitating both reporting and validation. It will also allow MSs to record any relevant derogations (e.g., non-reporting or reduced numbers of isolates/samples) for each bacteria–matrix combination, according to national meat production, and to specify whether any consignments of imported meat were received.

If a reporting country completes submission by 15 May 2025, EFSA will provide feedback on high level data validation using Quality Checks. This initial quality feedback during data submission will be provided only to those reporting countries completing the submission by 15 May. Completion of the data submission, by data model, should be confirmed by an email to zoonoses_support@efsa.europa.eu, which should arrive to EFSA by 15 May.

During the discussion, one participant (DE) asked whether a quality check could be performed prior to the availability of final prevalence data. EFSA confirmed that preliminary checks are possible, with follow-up once the final data are ready. Another participant (NL) requested clarification on the differences between the isolate-based and negative models for reporting, particularly for imported meat and the aggregation of meat types and origins. EFSA proposed developing a reporting tool with examples to clarify the process. Finally, a participant (AT) inquired about potential changes to the version of the ResFinder tool and its database for 2025 reporting; EFSA confirmed that the current version will continue to be used.

6.2. Rebuild Project: An Update

Valentina Bocca (IDATA Unit, EFSA) provided an update on the ongoing Rebuild Data Framework (DF) project, which aims to modernise data ingestion, management, and analysis within EFSA. The new terminology management system under Work Package 5 (WP5) has been completed, and APIs will be released shortly. The next phase is under development, with a new online catalogue browser expected to be available by 2027.

A focus was placed on WP2, which foresees the development of a new data collection platform to replace the current systems (DCF, SAS, and MicroStrategy). The main tools and platforms adopted in the project—Azure Cloud, Databricks, and Power BI—were presented, along with the preliminary data-ingestion process. The solution under development will allow data providers to interact with the system through multiple channels, including a user-friendly web portal, APIs, EFSA’s internal environment and tools, and dashboards for data analysis and insights. Next steps include finalisation in Q1 2026 and a pilot involving two data collections throughout 2026, one of which will be AMR, with full system deployment expected in 2027. A call for interest to join the pilot has been launched via the Teams channel, and several volunteers have expressed interest. EFSA will soon contact the selected Member States to agree on timelines and modalities.

8. Session 4: Current production of 2024 report and communication tools

7.1. Preliminary Main Findings of the 2024 EUSR on AMR

Giusi Amore, Raquel García Fierro and Pierre-Alexandre Beloeil (EFSA) presented the preliminary main findings on AMR in *Salmonella* spp., indicator *Escherichia coli*, *Campylobacter* spp. and Methicillin Resistant *Staphylococcus aureus* (MRSA) in food and food-producing animals from the draft 2024 European Union Summary Report (EUSR) on AMR.

Salmonella chapter

Preliminary results were presented on the occurrence of resistance to commonly used veterinary antimicrobials, critically important antimicrobials (CIAs) such as third-generation cephalosporins and fluoroquinolones, combined resistance patterns, the geographical distribution of Complete Susceptibility (CS), and the main resistant serovars. This is also the second year in which the report includes temporal trends in resistance to commonly used veterinary antimicrobials, as well as to ciprofloxacin and cefotaxime, at the *Salmonella* spp. level in food-producing animals. The



Network questioned the relevance of the *Salmonella* spp. category in the spatial maps showing the spatial distribution of CS. During the discussion, one participant (PO) noted that maps showing complete susceptibility at the *Salmonella* species level may be oversimplified, as they do not reflect differences between serovars—an observation echoed by a few other participants. It was proposed to explore ways to improve the maps or provide additional clarification. The objective is to prevent misinterpretation, particularly by the media or public, who may not access the full dataset and could draw overly simplistic conclusions. It is still of note that the figures for *Salmonella* spp. are intended to provide an overview of AMR across the serovars prevalent in each animal population within a country, while the analysis also considers contributions from individual serovars. To ensure careful interpretation, a note could be added to the map clarifying that comparisons of AMR in *Salmonella* spp. between animal populations and countries should be approached with caution.

Campylobacter chapter

Giusi Amore presented preliminary findings on antimicrobial resistance in *Campylobacter jejuni* and *C. coli* from food-producing animals for 2023–2024. The presentation focused on resistance to ciprofloxacin, erythromycin, gentamicin, and tetracyclines, as well as combined resistance to ciprofloxacin and erythromycin in humans, fattening pigs, bovines under one year of age, broilers, and fattening turkeys. Results on complete susceptibility and multidrug resistance to these antimicrobials were outlined and compared between humans and food-producing animals. Resistance to ertapenem and chloramphenicol in animal isolates was also reported. In addition, the estimated country-level prevalence of resistance to selected antimicrobials in *C. jejuni* and *C. coli* from poultry in 2024 was presented.

E. coli chapter

P-A Beloeil presented the main findings on AMR in indicator commensal *E. coli*. Resistance to ampicillin, sulfamethoxazole, trimethoprim or tetracycline was presented in all animal populations for 2022/2023, as well as the resistance to highest priority critically important antimicrobials (hpCIA) in human medicine, namely colistin, azithromycin, fluoroquinolones and third-generation cephalosporins (cefotaxime or ceftazidime). Results in the levels of complete susceptibility (CS) were detailed in isolates from fattening pigs and cattle under 1 year of age, as well as in broilers and fattening turkeys. The Key Outcome Indicator of complete susceptibility (KOI_{CS}) in food-producing animals, accounting for the varying sizes of the different food-producing animal populations in a country, was also presented. Statistically significant temporal trends in resistance to ampicillin, ciprofloxacin, cefotaxime, tetracycline and colistin, as well as increasing trends in CS and KOI_{CS} were detailed. The presentation also noted that, at the EU level and in some Member States, previously declining resistance trends—or increasing susceptibility trends—in indicator *E. coli* from broilers, turkeys, and KOI_{CS} have stabilised and appear to have plateaued. Although these observations are based on recent 2020–2024 data and require further investigation to determine whether the plateau reflects short-term variation or a sustained shift, they underscore the continued need for strengthened efforts to address AMR.

ESBL monitoring chapter

P-A. Beloeil presented the main findings of the monitoring of ESBL/AmpC-producing *E. coli*. The prevalence of ESBL-/AmpC-producing *E. coli* and its spatial distribution were presented, as well as the statistically significant trends observed in countries and animal populations and meat categories. Statistically significant trends in the key outcome indicator of prevalence of ESBL-and/or AmpC-producing *E. coli* (KOI_{ESC}) were also detailed. For 2024, ten countries reported WGS data, and a variety of ESBL- and AmpC-encoding genes were reported. The specific monitoring of CP-producing *E. coli* in 2024 also revealed a few CP-producers in broilers.

MRSA chapter

Giusi Amore briefly presented the preliminary findings on MRSA reported in animals and food according to voluntary monitoring in 2024 and 2023.



Enterococci section

It was eventually indicated that a short chapter/section on AMR in *Enterococci* will be also included in the 2024 EUSR on AMR. EFSA also presented a summary table with the number of countries reporting AMR data on *Enterococci* based on voluntary monitoring (Decision 2020/1729/EU).

7.2. Dashboards for visualising AMR data

Thomas Briere (Soladis, external contractor) presented a new section of the Dashboard⁵ on AMR, highlighting the prevalence of resistance to selected antimicrobials in *Campylobacter* spp. This addition aligns with the ongoing development of data visualisation tools supporting the EUSR on AMR. The new section features an updated homepage and a dedicated five-page area, following the existing layout used for *E. coli*, *Salmonella* spp., and *Campylobacter* dashboards, including an overview and temporal trends page. Enhancements allow users to filter data by year, antimicrobial, reporting country, and animal population, providing a clear view of AMR prevalence and its evolution over time. A direct link to the related *Campylobacter* story map, which presents AMR data in a clear and concise format, is embedded in the dashboard. Reciprocal links from the dashboards to the 2024 EUSR on AMR chapters will also be included. A live demo of the preliminary section on *Campylobacter* AMR prevalence was presented to the EFSA Network at the meeting. EFSA clarified that the dashboard presented at the meeting are preliminary and may be revised to improve data visualization. The underlying data for the graphs are accessible via the 'export' function.

7.3. Story Maps about AMR

Gwenneg Kerdivel (Soladis, external contractor) presented a new section on *Campylobacter* spp. for the AMR story map, related to occurrence and prevalence of resistance data and infographics. The story maps target the general public, aiming to convey complex scientific information in clear, concise language using graphical illustrations, both static and interactive. EFSA noted that the current version is preliminary and will be revised, including text and infographics, following consultation with the Network. Links between the story maps and the corresponding chapters of the EUSR on AMR will be included reciprocally. The series of story maps on AMR will be adjusted to enhance uniformity, enabling them to function as a cohesive and harmonised whole. During the discussion, one participant (DE) inquired about the frequency of visits to the story maps and the availability of user-access data. Gwenneg Kerdivel noted that while usage statistics had not been reviewed for the presentation, they could be retrieved from the website and shared later. EFSA added that discussions are ongoing regarding the potential integration of a system to track user engagement.

Next steps: The next steps planned for the consultation and publication of the 2024 EUSR on AMR and the related visualisation tools were presented to the Network. The consultation of the 2024 EUSR on AMR and related visualization tools: dashboards and story maps is planned between 18th November to 3rd of December. The new and updated online tools will be published together with the 2024 EUSR on AMR in February 2026.

⁵ Dashboards are online visualisation tools designed to present large volumes of aggregated AMR data interactively. They enable users to filter and explore data through graphs and maps. Primarily targeted at policymakers and risk managers at EU and Member State levels (e.g., European Commission, European Parliament, and national competent authorities), dashboards are also accessible to selected external stakeholders, including academic, professional, and research institutions, as well as the food-producing industry, and the general public. The dashboards have been developed in MicroStrategy using data from EFSA's scientific Data Warehouse (DWH).



10. Session 5: Scientific topics

8.1. FAO's work to strengthen sector-specific and integrated surveillance of AMR/AMU in Asia and the Pacific region

Usman Zaheer (FAO RAP) presented FAO's efforts to strengthen sector-specific and integrated AMR/AMU surveillance in the Asia-Pacific region, contextualized within the UN High-level Meeting on AMR Political Declaration and the FAO Action Plan on AMR (2021–2025), with Objective 2 specifically addressing integrated surveillance and research. The presentation highlighted the FAO RAP Strategy for AMR in the region and outcomes of the 2025 Regional Benchmarking Workshop, which recommended: (1) mapping AMR/AMU data sources and areas for integration in country case studies and establishing a regional technical working group, and (2) strengthening sectoral and intersectoral laboratory and surveillance networks, including capacities of national coordination centres. Key Regional Tripartite AMR Project activities in 2025 included national landscaping workshops and case studies to analyse and enhance One Health-integrated AMR/AMU surveillance, assessing governance and coordination across sectors, identifying integration barriers, and clarifying country-specific priorities, resources, and expertise. The EU JIACRA initiative was cited as a key reference for regional integrated AMU/AMR analyses in Region Asia Pacific. Efforts to improve technical coordination of AMR laboratories included national multisectoral lab network meetings, SWOT analyses, and strategies to overcome coordination barriers, with the aim of linking national networks to regional and global initiatives through the AMR Laboratory Community of Practice (CoP). The speaker praised the existing collaboration with EFSA and planned for further collaboration with EFSA and the other Agencies involved.

8.2. European Antimicrobial Resistance Surveillance Network in Veterinary Medicine (EARS-Vet): an update

Lucie Collineau (Anses) presented the latest developments within the European Antimicrobial Resistance Surveillance Network in Veterinary Medicine (EARS-Vet). The EARS-Vet network was established to address an important area for development in European AMR surveillance, specifically monitoring AMR in bacterial pathogens of animals. This presentation provides an update on progress since the network's launch under the first EU Joint Action on AMR and Healthcare-Associated Infections (EU-JAMRAI 1, 2018–2021) and on ongoing activities within EU-JAMRAI 2 (2024–2027). Key achievements include joint data analysis, enhanced harmonisation and comparability, and WGS analysis of selected isolates from clinical diagnostics (passive surveillance). The speaker proposed exploring opportunities for further collaboration with EFSA. During the discussion, a question was raised regarding the collection of epidemiological metadata, harmonisation of testing methods, and plans for Mycoplasma testing. Lucie explained that while basic metadata are being collected, more detailed information, such as animal treatment history, still remains challenging to obtain. On testing harmonisation, she confirmed that data are initially collected from existing passive surveillance programmes, with selected isolates subsequently re-tested using harmonised MIC plates developed by the network. Regarding Mycoplasma, she noted that it is not currently included in the scope, but a separate JAMRAI project is addressing this issue.

11. Session 6: Update on other on-going activities on AMR

9.1. CarbaCamp project (ERT-R) in *Campylobacter* isolates

Pietro Stella (EFSA) presented an update on the CARBACAMP project (grant GP/EFSA/BIOHAW/2023/04), awarded to Danmarks Tekniske Universitet (DTU). The project is aimed at gaining a deeper understanding of the prevalence, characteristics and implications of carbapenem resistance in *Campylobacter coli/jejuni* isolates from different animal species. In particular, the project aims at determining wild-type distributions, ECOFF values, comparing EUCAST vs. CLSI recommended media for MIC determination, investigating the genomic diversity of susceptible and resistant isolates from food-producing animals and humans, and investigating related resistance mechanisms. The project started in September 2023 and is expected to be finalised by February 2026.



9.2. Self-task on carbapenamase producers and Carba-R-ales project

Beatriz Guerra (EFSA) informed the Network about the BIOHAZ Panel's self-task mandate on "The status of the occurrence and spread of Carbapenamase-producing Enterobacterales (CPEs) in the food chain within the EU/EFTA", and the related activities. The Mandate will run until 2027. A first scientific opinion (Part 1), providing the state of the art on this topic, was published on April 2025. To support this work, a monopoly Partnership Grant Agreement was signed with laboratories from the EURL-AR/NRLs Network. Within the Carba-R-ales project (EFSA's Framework Partnership Grant Agreement GP/EFSA/BIOHAW/2024/01, end 2025-mid 2027), these laboratories are generating new data on detection methods, epidemiological studies, isolates characterization and comparative genomic analyses. These data and new published literature will be used by the CPEs Working Group for a further scientific opinion expected to be produced along 2027.

9.3. Azole Opinion (One Health Approach)

Pietro Stella (EFSA) presented the main outcomes of the Interagency Report on the Impact of the use of azole fungicides, other than as human medicines, on the development of azole-resistant *Aspergillus* spp., jointly produced by EFSA, ECDC, ECHA, EEA, EMA and JRC and published in January 2025. The Report dealt with a number of topics, such as: investigating the types and amounts of non-medical azole fungicides used in the EU; assessing the link between non-medical use of azoles and the development of azole resistance in *Aspergillus* spp. and related risks to human health; identifying the 'environmental hotspots' for the development of azole resistance in *Aspergillus* spp.; identifying risk management measures for preventing and controlling the development and spread of azole resistance in the environment and its spread to humans; identifying the current data gaps and recommendations for future research; recommending data requirements for future applications for approval of azole fungicides. This activity represented the first example of a joint output from all the five EU agencies and JRC. Communication materials are available on EFSA website, including a [news story](#), a [plain language summary](#) and a short [video animation](#).

9.4. Role of reused water on AMR: WateResist

Beatriz Guerra (EFSA) presented the status of the ongoing procurement OC/EFSA/BIOHAW/2023/01 on "Role of water used in the growing, handling and processing of fruits, vegetables and herbs on the spread of antimicrobial resistance (AMR)". The awarded consortium (Agencia Estatal Consejo Superior de Investigaciones Cientificas (CSIC, Spain) including CEBAS-CSIC and IATA-CSIC, National Institute for Public Health and the Environment (RIVM), Universidad de León (ULE, Spain), Technical University of Denmark (DTU), Universiteit Gent (UGent, Belgium), Universidade do Porto, Portugal (UP, Portugal), is running the project "WateResist" (March 2024-March 2027). The objectives of the project are: (1) To optimize suitable sensitive and readily standardised culturomics/genomics-based detection methods for ARB/ARGs in the FVH production sector at pre- and post-harvest including analysis of samples of reclaimed/reused processing water and the food products themselves (done); (2) To generate new data on the occurrence and potential spread of ARB and ARGs in FVH as a potential result of the use of reclaimed water for irrigation in pre-harvest and other activities at primary production (e.g. during harvest) in the EU/EFTA zone (on-going); (3) To generate new data on the occurrence and potential spread of ARB and ARGs in FVH as a potential result of the use of reused processing water in post-harvest processing activities in the EU/EFTA (on-going).

9.5. EC Mandate on Technical specifications on AMR monitoring

Beatriz Guerra also informed that EFSA have just received and accepted an EC Mandate to produce "Technical specifications on harmonised monitoring of antimicrobial resistance (AMR) in zoonotic and indicator bacteria isolated from food-producing animals and food for the period 2028-2034" to support the development of the EU rules governing the monitoring and reporting of AMR in the food chain for this period. The deadline to produce a scientific report updating previous technical specifications is December 2026. The Working Group "AMR Mon Tech Specs update" is being set up and will begin with the work very soon.



12. Session 7: Update on the baseline surveys on AMR

10.1. MRSA in fattening pigs

P-A. Beloeil (EFSA) provided an update about the preparation for the upcoming reporting of the BLS on MRSA in fattening pigs. Member States using the EFSA reporting tools are kindly requested to use the latest version available on Zenodo (version 4): <https://zenodo.org/records/17801386>. In addition, all Member States are encouraged to test the submission of MRSA data for all three data models in the Data Collection System, which has been open for testing since July 2025.

10.2. AMR in aquaculture animals

P-A. Beloeil (EFSA) updated the Network on the activities related to the preparation of the BLS on AMR in bacteria from aquaculture animals. EFSA issued the corresponding proposals for the Technical Specifications of the BLS in July 2024. The corresponding legislation supporting this BLS is planned to be prepared by the EC and discussed by comitology in 2026. This BLS is planned to be implemented in 2028.

13. Session 8: AMC and AMR monitoring

11.1. Update from the EMA

Zoltan Kunsagi (EMA) provided an update on activities related to the collection of sales and use data for antimicrobials in veterinary medicine, highlighting the first ESUAvet report, published earlier this year, which presents 2023 EU-wide data on antimicrobial sales and use. This report represents a key milestone, as it introduces, for the first time, antimicrobial use data at the animal level. The session also covered 2025 achievements, including the forthcoming second ESUAvet report, work on various guidelines, the ADRA project, and updates to Cascade advice.

11.2. Update on the Scientific report on AMC and AMR in bacteria from humans and animals - JIACRA V activity

P.-A. Beloeil (EFSA) presented an overview of the European Commission mandate for the JIACRA V report. The work aims to provide an overview of antimicrobial consumption (AMC) in human and veterinary medicine from 2014–2024 and to conduct integrated analyses of the relationships between AMC and antimicrobial resistance (AMR) in humans and food-producing animals (FPA) for 2022–2024, as well as over the period 2014–2024. These analyses will compare total AMC in humans and FPA with complete susceptibility in *E. coli*, assess third-generation cephalosporin consumption in relation to corresponding *E. coli* resistance, and examine fluoroquinolone consumption alongside resistance in *Campylobacter jejuni* across both populations. Temporal trends at EU and national levels will also be analysed. The outputs will support policy recommendations and follow a One Health framework. JIACRA V will adopt a more concise format (e.g., a 30–50-page core report supported by detailed appendices) structured around a question-and-answer format. Key graphical outputs will accompany responses, while analytical results will be presented in tabulated form in the appendices. Publication is planned for December 2026, alongside a simplified summary to facilitate communication of the main findings and recommendations.

11.3. FAO InFARM update

Valentina Rizzi (BIOHAW Unit, EFSA) presented a summary of the actions undertaken regarding the transfer of AMR data from EFSA's Scientific Data Warehouse to the FAO InFARM system. A survey was circulated to Zoonoses Network Members to assess the interest of reporting countries in receiving EFSA's support for preparing and submitting their AMR data collected by EFSA to FAO's InFARM platform. Preparatory work with FAO was carried out to map EFSA's and FAO's data models, including the alignment of data structures and terminology used in the two systems.



Member States are requested to send EFSA an official communication confirming their formal approval for the transfer of AMR data to the FAO InFARM system, under strict conditions specified in the email sent (e.g., namely that all identifiers will be pseudo-anonymised, free-text fields and sampling area information will not be shared, and only data from routine monitoring will be included). Countries are also requested to specify the scope of the data they wish to share: either only the mandatory data collected under routine monitoring in accordance with legislative requirements, or all reported data under routine monitoring, encompassing both mandatory and voluntary submissions.

11.4. Inter-Agencies WG about AMR (EC mandate received)

Ernesto Liebana (BIOHAW Unit, EFSA) informed the Network that a new mandate has been issued for the establishment of an interagency working group on AMR, involving EFSA, EMA, ECDC, EEA, and ECHA. The participating agencies have designated focal points and alternates, and EFSA will chair the initiative for its first 18 months. We are committed to ensuring an effective start and to facilitating productive collaboration among all members. The inaugural in-person meeting is scheduled for January 2026. There is broad support for formalising interagency cooperation on AMR, reflecting recognition that a coordinated One Health approach is essential for addressing the complex, cross-sectoral challenges posed by AMR. Building on existing collaborations—such as joint scientific reports and surveillance activities—the new working group will further strengthen data integration, information exchange, and coordination of communication and research efforts across agencies. These developments aim to enhance the EU’s capacity to combat AMR and to protect public health, food safety, and the environment. Interaction with the Cross-Agency One Health Task Force will be maintained while avoiding duplication of work.

14. Any Other Business

Considering the proposal by the Reporting Officer of The Netherlands to have the validation feedback provided in Excel format rather than Word format, EFSA prepared a survey to collect votes. The vast majority of participants (90%) supported receiving scientific validation feedback in Excel. Further discussions within the EFSA Network will be needed to define the template.

Additionally, the delegate from Poland highlighted discrepancies between the HADEA technical and financial reporting forms.

15. Session 9: Conclusions

13.1. Dates for the 2026 Network Meeting

It was proposed to organise the next year’s EFSA Network meeting on AMR monitoring on the second week of November, most likely a lunch to lunch hybrid meeting on 09-10 November 2026. Network members are invited to pencil those dates.

13.2. Conclusions

Once again, the annual Network meeting provided an opportunity to engage with the MSs on the harmonised monitoring of AMR in food-producing animals and derived meat in the EU. The AMR situation was reviewed using the main findings of the draft 2024 EUSR on AMR, including Key Outcome Indicators. Several countries reported decreasing AMR trends and increasing complete susceptibility, indicating progress toward reduced resistance levels. However, the detection of CP-producers remains a concern, as does the observation that previously declining resistance—or increasing susceptibility—in indicator *E. coli* from broilers, turkeys, and KOI_{CS} has stabilised or slightly increased in some Member States and at the EU level. Although based on recent 2022–2024 data points and requiring further investigation to determine whether these patterns reflect short-term fluctuations or a sustained change, the findings highlight the need to reinforce efforts to address AMR. Enhancements of the data visualisation tools (dashboard and story maps) accompanying the EUSR were presented and discussed. The reporting process for 2024 AMR data was discussed, as well as planned enhancements for the 2025 cycle. Challenges in implementing monitoring were also considered, informed by recent EC audit outcomes. Both external speakers



(FAO-RAP and EARS-Vet) referenced the current harmonised AMR monitoring and JIACRA initiative as key inputs for their ongoing activities, commended the existing collaboration with EFSA, and proposed exploring opportunities for further cooperation. EFSA also presented additional activities related to AMR risk assessments to the Network. They aim at complementing the harmonised monitoring by addressing certain aspects related to AMR-environment (e.g., WateResist project) and carbapenem resistance. The new inter-agencies WG about AMR was also presented to the Network. Regarding the interlinked monitoring of antimicrobial consumption in animals, EMA outlined recent implementation of the collection of antimicrobial-use data at the species level, which will support more detailed analyses of the AMU-AMR relationships in the future. The JIACRA V analyses are ongoing. Structures and tools have been established to support the upcoming BLS reporting on MRSA in fattening pigs. Revising the 2006 Technical Specification for AMR monitoring will allow adaptation to current conditions and technological advances while preserving core features needed for continuity and reliable trend analysis.

16. Closure of the meeting

The Chair thanked the Network Representatives for an intensive and productive meeting and closed the meeting at 12:45.

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Appendix: List of Action Points agreed at the meeting

No	Agenda point	What	Action points	Deadline
1	6.1	Preparation of 2025 data reporting	EFSA to circulate the reporting manuals to Zoonoses Monitoring Data (ZMD) network representatives - AMR subgroup for consultation on 6 January 2025 and publish them on 31 January 2026.	By 31 January 2026
2	6.1	Preparation of 2025 data reporting	EFSA to prepare one example on how to report negative results from checking meat at BCP	By 31 January 2026
3	6.1	Preparation of 2025 data reporting	ZMD network representatives - AMR subgroup, to include in the text forms the tables regarding the national meat production ("Documentation for the meeting" folder) suggested by EFSA. - Folder: Documents for the meeting - Document: Tables to include in the text form.docx	By 31 January 2026
4	6.1	Preparation of 2025 data reporting	ZMD network representatives - AMR subgroup, to express their training needs to EFSA, keeping their national Focal Point in copy.	By 31 January 2026
5	6.1	Preparation of 2025 data reporting	ZMD network representatives - AMR subgroup, to distribute to experts involved in data reporting the new timelines for data reporting (one step data validation and one step data correction)	As soon as possible
6	6.1	Preparation of 2025 data reporting	ZMD network representatives - AMR subgroup, to book the calendar of EFSA for support in data reporting: https://outlook.office.com/book/Supportfor2025AMRdatasubmission1@EFSA815.onmicrosoft.com/?ismsaljsauthenabed	As soon as possible
7	7.1	AMR major key findings	ZMD network representatives - AMR subgroup, to provide their review of the draft 2024 EUSR on AMR report (instructions will be given by email when launching the consultation).	By 3 December 2025
8	15	Updates on Baseline Surveys on AMR: - MRSA in fattening pigs	MSs/reporting countries to use the most updated reporting tools published on Zenodo (version 4): https://zenodo.org/records/17801386	As soon as possible

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No	Agenda point	What	Action points	Deadline
9	15	Updates on Baseline Surveys on AMR: - MRSA in fattening pigs	ZMD network representatives – AMR subgroup, to consider testing the MRSA data collection in DCF	As soon as possible
10	13.1	Dates for next meeting	Next meeting to be organised 09-10 November 2026 in Parma and online.	
11	13.2	Evaluation survey of the network meeting: https://ec.europa.eu/eusurvey/runner/Feed back_Survey_15thAMRsubgroupZoonoses	ZMD Network members to fill in the survey	By 30 November 2025

	Action points for EFSA
	Action points for Network Representatives
	Action points for both EFSA and Network Representatives