

# Report of the Meeting of the WOAH Working Group on Antimicrobial Resistance

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for Animal Health**  
Founded as OIE

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## 1. Welcome and opening of the meeting

The Working Group on Antimicrobial Resistance (AMR) (hereafter referred to as 'the Group') and observers from the Quadripartite organisations met between 10-12 October 2023. The meeting was conducted online via Zoom.

Dr Javier Yugueros-Marcos, Head of the Antimicrobial Resistance and Veterinary Products (AMR&VP) Department, welcomed the Group members and the observers from the Quadripartite organisations, Dr Junxia Song (FAO<sup>1</sup>) and Dr Jorge Matheu (WHO<sup>2</sup>), thanking all for their participation and congratulated the Group for their hard work. Dr Yugueros-Marcos noted the absence of a UNEP<sup>3</sup> representative in the meeting and hoped that UNEP would be able to attend future meetings.

Dr Yugueros-Marcos updated the Group on the last WOA's Council meeting that took place on 26-28 September 2023.

### 1.1. Adoption of the agenda

The adopted Agenda and List of Participants are presented in [Annexes 1](#) and [2](#) of this report, respectively.

### 1.2. Appointment of rapporteur

Dr Tomoko Ishibashi chaired the Group and Ms Barbara Freischem acted as the rapporteur.

## 2. Landscape

### 2.1. Quadripartite overview of work on AMR – Dr Holy Akwar

Dr Akwar updated the Group on the following activities on AMR coordinated by the Quadripartite.

#### 2.1.1. Quadripartite Joint Secretariat on Antimicrobial Resistance (AMR-QJS)

The Quadripartite is planning to launch an AMR-QJS website, with its own domain, that pools all AMR-QJS activities and outputs, with links to the four organizations. It is also planning to produce the first AMR-QJS annual report and the release of the Biennial Monitoring & Evaluation (M&E) Report for 2020-2021. The AMR-QJS has resumed a formal representation at the [Quadripartite One Health \(OH\) Joint Secretariat](#) as an observer. The OH Joint Secretariat has developed a guide for countries to implement the [OH joint Plan of Action \(JPA\)](#).

#### 2.1.2. AMR Global Leaders Group (GLG)

The 7th AMR GLG meeting took place on 27 July 2023. The GLG highlighted the need for inclusion of AMR in the political declarations for Pandemic Preparedness, Prevention and Response, Fight against Tuberculosis and Universal Health Coverage of the high-level meetings (HLM) at 78<sup>th</sup> United Nations General Assembly, UNGA78 (20-22 September, 2023) which should inform preparation for the UNGA 2024 HLM on AMR.

The GLG plan to organize a Global Youth Dialogue on AMR on 21 November 2023 as a way to engage youth in the fight against AMR. More GLG info can be found [here](#).

#### 2.1.3. United Nations General Assembly 2024 High-Level Meeting on AMR 2024 (UNGA 2024 HLM on AMR)

Both the GLG and AMR-QJS have developed roadmaps to UNGA2024 based on the priority areas identified by the GLG. The AMR-QJS is developing a communication plan and creating the technical contents for the following priority areas:

- a. **Financing:** Global financing and domestic resource allocation to implement National Action Plans (NAPs) and novel investment for Research and Development (R&D) and ensure equitable access
- b. **Accountable governance:** Effective and functional multisectoral governance to implement AMR response across sectors
- c. **Surveillance for action:** Strong sector-specific and integrated AMR/U surveillance systems
- d. **Transformed systems:** Effective and transformed human health, agrifood and animal health systems
- e. **Environment:** AMR addressed as part of biodiversity and climate solutions
- f. **AMR and pandemic preparedness and response (PPR):** Strong link between AMR and PPR, implementation of the WHO CA+<sup>4</sup>

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<sup>1</sup> FAO- Food and Agriculture Organization of the United Nations

<sup>2</sup> WHO- World Health Organization

<sup>3</sup> UNEP- United Nations Environment Programme

<sup>4</sup> WHO-CA+ - WHO convention, agreement or other international instrument on pandemic prevention, preparedness and response.

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g. **Targets:** Evidence- and outcome-oriented targets for actions

#### **2.1.4. Building economic case for sustainable financing of AMR**

The Quadripartite continues to advance work in estimating the economic burden of AMR in the human, animal and environmental sectors, as well as develop intervention packages that will be prioritized by sectors.

WOAH is leading a complementary project to that of the Quadripartite to assess the health and economic burdens of AMR in the human and animal sectors. All these initiatives are geared toward informing member states of the United Nations at the UNGA 2024.

#### **2.1.5. Multi-Partnership Trust Fund (MPTF)**

The MPTF Secretariat is undergoing restructuring, which, includes revising the Terms of Reference (TORs), to enable it to be efficient supporting both implementation of NAPs at country level and global governance.

#### **2.1.6. AMR Multi-Stakeholder Partnership Platform (PP)**

This platform aims to catalyse a global movement for action against AMR. The inaugural plenary assembly is planned for 15-16 November 2023, in Rome, Italy. A Steering Committee has been formed to oversee the platform. Five clusters (Governments/UN agencies, financial institutions, civil society/networks, academia, and private sectors) make up the platform and kick-off meetings of these clusters are ongoing. More information [here](#).

The Group thanked Dr Akwar for his update on the Quadripartite activities. The Group enquired if the issue of unequal financing for R&D for the animal sector (10% compared to 90% for the human health sector) has been raised to the GLG. Dr Yugueros-Marcos mentioned that WOAHA is working closely together with the GLG to advocate for more funding to be allocated to the animal sector and to get their support working towards UNGA 2024.

The Group enquired about the status of the update of the Global Action Plan (GAP). Dr Akwar informed the Group that a policy brief document is being prepared to inform the revision of the GAP, considering which sectors are not adequately covered in the current version (i.e., animal and environmental sectors) for consideration at UNGA 2024 by its Member countries.

### **2.2. WHO update – Strategic and Technical Advisory Group for Antimicrobial Resistance (STAG-AMR) conclusions & recommendations – Dr Jorge Matheu**

Dr Jorge Matheu informed the Group that the WHO STAG-AMR meeting took place in June 2023; four topics were addressed: 1) Evidence-based commitments towards UNGA 2024, including the GAP on AMR and the building of an AMR economic and investment case across sectors; 2) WHO's adoption of a people-centred framework for AMR and an essential intervention package; 3) strengthening of global capacity for bacteriology and mycology laboratory services and diagnostics through the AMR Diagnostics Initiative; and 4) prioritising pathogens and products through the WHO Bacterial Priority Pathogens List 2023 and the WHO Medically Important Antimicrobials (MIA) List, 7<sup>th</sup> edition.

The STAG-AMR welcomed the AMR-QJS' efforts to update the GAP AMR, and the OH approach taken on stakeholder engagement. The STAG-AMR recommended that the GAP is aligned with sector-specific strategies. Moreover, the STAG-AMR recommended an expedited completion of current work with the aim of building the AMR economic and investment case to inform UNGA 2024's political declaration. Consideration should also be given to environmental outcomes as well as societal cost, and the financial and other impacts on the patient, and sector-specific perspectives. The STAG-AMR further advised that the use of the WHO Bacterial Priority Pathogens list should be extended beyond R&D to AMR programmatic activities, including antimicrobial stewardship and mitigation of AMR risk. Regarding the WHO MIA List, the STAG-AMR recommended to continue making efforts on the alignment and harmonization of tools regarding the appropriate and prudent use of antimicrobials in different sectors, and on awareness and mutual understanding of AMR in both human health and non-human sectors.

STAG-AMR will have a dedicated meeting in February 2024 to discuss the target-setting ahead of the UNGA high-level meeting in September 2024.

The Group thanked Dr Matheu for his update on the STAG-AMR meeting. Dr Matheu clarified that the WHO list of priority pathogens had been initially developed for R&D of new antimicrobials. The scope of the list now extends beyond this and it is also used to control infections in healthcare settings at country level. Dr Yugueros-Marcos asked how STAG-AMR recommendations are implemented. Dr Matheu commented that specific teams at WHO are responsible for the implementation of the recommendations and for incorporating these into their workplans. STAG-

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AMR recommendations are also used to secure funding for WHO to support their implementation. Revision of the STAG-AMR recommendations takes place during the annual meeting.

### **2.3. FAO update – RENOFARM – Dr Junxia Song**

Dr Junxia Song provided an update on FAO's Reduce the Need for Antimicrobials in agrifood systems ([RENOFARM](#)) 10-year global initiative (2023-2033). RENOFARM has 2 main components; 1) to reduce the need for antimicrobials, and 2) to ensure that if the farmers really need to use antimicrobials (AMU) it should be done in a responsible and prudent manner. This initiative will capitalise on regional networks and alliances (e.g., [TATFAR](#), [ReLAVRA](#), [CAESAR](#)). It will help to strengthen multisectoral coordination and Public-Private Partnerships (PPPs) at national level amongst others. The Steering Committee and a Technical Working Group for RENOFARM are currently being set up by FAO.

The Group thanked Dr Song for the update on FAO's RENOFARM initiative. Dr Yugueros-Marcos commented that there are at least 3 areas of synergy of WOAHA activities with RENOFARM: accuracy of AMU data; transparency-WOAH encourages countries to share their data and be transparent; and advocacy for disease prevention linked to alternatives to antimicrobials, including vaccine development, based on the pathogen prioritization exercise conducted by WOAHA.

### **2.4. WOAHA AMR&VP organization & 2023-2025 roadmap, including updates on key activities – Dr Javier Yugueros-Marcos**

Dr Yugueros-Marcos provided an overview of the structure of WOAHA and of the AMR & VP departments activities on AMR and veterinary products (VP). The AMR&VP department has 7 work streams; 1) veterinary products (vaccines, diagnostics, drugs/pharmaceuticals, substandard & falsified veterinary products); 2) AMR (Working Group on AMR, AMU data collection and analysis, Aquaculture, Quadripartite actions, M&E, Companion Animals); 3) Education (standards & guidelines, FP training seminars, internal and external communications); 4) Funding (search, application and reporting); 5) Internal interactions (CRM, Gender Task Force or GTF), Data governance, Global Burden of Animal Diseases ([GBADS](#)), Codification...). 6) External interactions emphasizing that WOAHA has approximately 60 Memoranda of Understanding (MoU) with different organisations; 7) Team's life (maintaining a motivating working environment and enhance staff development).

WOAHA AMR & VP department works closely with the other Quadripartite organisations in the AMR-QJS. The AMR & VP department is also involved in the 4 MPTF global programs and the MPTF country projects. WOAHA is also involved in conducting M&E of NAPs and GAP and monitoring NAP delivery.

The Group requested if it would be possible to include the external parties with whom WOAHA collaborates per project in future presentations. Dr Yugueros-Marcos will address this at the next AMR WG meeting in February 2024.

### **2.5. Update on Substandard and Falsified Veterinary Products (SFVPs) – Dr Andrés Garcia Campos**

42 countries from all regions joined the [Pilot Phase 2](#) for the period 2022–2023, where they were required to complete a baseline reporting form. Data from this form showed that countries required most support with cooperating with other countries, post-marketing surveillance and traceability systems.

To date, WOAHA has received 24 incidents affecting 54 VPs. A significant number of incidents related to unregistered/unlicensed products, which are out of the scope of the current project. This indicates that more clarity of the scope and objectives of the project, as well as training on how to differentiate between falsified and unregistered products are necessary to optimize the use of the system. More than 20% of the VPs reported as SF were antimicrobials. Four alerts were validated and published to participants in the system, with another 9 alerts pending validation.

The monthly engagement rate of countries in the system ranged between 46.9 – 66.7%. An increase in the rate of engagement with the system is predicted if national competent authorities that fall under the Ministry of Health become involved in the reporting. This could be achieved by allowing them to participate in the pilot (subject to the Delegates' agreement) or by sharing incidents with them through their counterparts under the Ministry of Agriculture. During the [1<sup>st</sup> Global Joint Human and Veterinary Medicines Regulatory Summit](#) - organised by the AMR-QJS in May 2023 - WOAHA gave visibility to the project, highlighting the need to bridge the gap in communication and data sharing on the presence of SFVPs between Ministry of Agriculture and Ministry of Health.

WOAHA is working together with WHO's Team on [Incidents and SF](#), to refine the WOAHA global information and alert system on SFVP and to promote closer collaboration across sectors, to bring Ministries and Health and Agriculture closer, and to ensure a coordinated and balance between prevention, detection, and response to SF medical and veterinary products. Other areas of the WHO-WOAHA agreement fall within the pillars of the guidelines of post-marketing surveillance and sustainable laboratory capacity and networks at regional level.

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WOAH, Interpol and Health for Animals are in the contextualisation process of working on a roadmap on bioterrorism and agro-crime, in which incidents reported through the global information and alert system concerning SFVP are pivotal for data collection and for monitoring of the situation at regional/country level.

The next step is to finalise the pilot project phase 2 in December 2023, after which the SFVP project will be expanded (using SharePoint) with the goal of recruiting > 80 countries, to establish an electronic expert group to develop SFVP guidelines, and to conduct a workshop in the Asia and Pacific region in April 2024.

The Group thanked Dr Campos for his update on the SFVP pilot project. The Group commented that in the EU region the collaboration with Europol has been very relevant to address SF products. Therefore, there is scope to collaborate with Interpol as well as with WHO.

The Group considered that this as an important initiative by WOAHA as before the extent of this issue was unknown. Although animal health is smaller than human sector, is still relevant and important to collect this data. The Group recommended that Members join the platform for reporting of SFVP as this will allow then to access data reported to raise awareness for this problem.

## **2.6. AMR Working Group-related activities**

### **2.6.1. TAHC Chapter 6.10 and subsequent chapters – WOAHA Secretariat**

#### **2.6.1.1. Feedback from Code Commission on Chapter 6.10.**

WOAHA Secretariat updated the Group that their proposed changes to the revised Chapter 6.10. Responsible and prudent use of antimicrobial agents in veterinary medicine (hereafter, Chapter 6.10.) of the Terrestrial Animal Health Code (hereafter, the Code) following the comments from Members had been considered by the Terrestrial Animal Health Standards Commission (hereafter 'Code Commission') during their meeting in September 2023. The revised Chapter 6.10. will be circulated again to Members for a second round of comments with the indication that the Chapter 6.10. may be submitted for adoption at the next General Session in 2024; this will be decided by the Code Commission at its next meeting in February 2024.

The Code Commission requested the advice of the Group on the inclusion of the term antimicrobial stewardship, on ease of understanding of the concept for Members, and on its translatability to languages other than English noting that for many other languages there is no equivalent term.

The Group supported keeping the term "antimicrobial stewardship" in the revised chapter. It is a widely known and adopted concept, in both human and veterinary medicine, particularly in companion animal settings. Different definitions are currently available for antimicrobial stewardship; two of the definitions from the [British Society of Antimicrobial Chemotherapy \(BSAC\)](#) presented for consideration of the Group were: 1) "The optimal selection, dosage, and duration of antimicrobial treatment that results in the best clinical outcome for the treatment or prevention of infection, with minimal toxicity to the patient and minimal impact on subsequent resistance" and, 2) "Organisational or healthcare system-wide approach to promoting and monitoring judicious use of antimicrobials to preserve their future effectiveness". The Group will consider existing technical documents, including those of partner Quadripartite Organisations (e.g., WHO), to propose recommendations on the use of adequate terminology in WOAHA's official languages.

#### **2.6.1.2. Future revision of subsequent TAHC chapters**

The WOAHA Secretariat informed the Group that future revision of subsequent TAHC chapters would be conducted after adoption of Chapter 6.10 and upon request by the Code Commission.

#### **2.6.1.3. Discussion of rationale for revision of Chapter 2.1.1 of the Manual for Diagnostic Tests and Vaccines for Terrestrial Animals to be provided to the Biological Standards Commission (BSC)**

In relation to Chapter 2.1.1. Laboratory methodologies for bacterial antimicrobial susceptibility testing (hereafter, Chapter 2.1.1.) of the Manual for Diagnostic Tests and Vaccines for Terrestrial Animals (hereafter, the Manual), the Group was requested by the Code Commission to review this chapter and advise if it needed to be updated, particularly the section related to the establishment of clinical breakpoints and whether and how this topic should be covered in Chapter 6.10.

The Group informed the Secretariat that it did not consider it appropriate for the Group to review Chapter 2.1.1. The expertise on current and upcoming laboratory methodologies for AMR sits with WOAHA's Collaborating Centres. As such, the Group recommended that the review be conducted by

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experts from relevant WOAHA Collaborating Centres. Furthermore, the Group was of the view that technical text concerning the establishment of clinical breakpoints should sit in Chapter 2.1.1. of the Manual, not in Chapter 6.10 of the Terrestrial Code.

### **2.6.2. Biosecurity (new chapter of the Terrestrial Animal Health Code) – Dr Yukitake Okamura**

The Group was informed that the Code Commission agreed to circulate a new chapter on biosecurity (Chapter 4.X of the Terrestrial Code) for comments, at its September 2023 meeting.

The Code Commission Secretariat, represented by Dr Yukitake Okamura, emphasised the importance of chapters in Section 4 'Disease prevention and control' of the Terrestrial Code, which could contribute to reduction of AMU in animals.

The Group thanked the Code Commission Secretariat for the information. The Group offered to provide feedback on content related to AMR in relevant chapters of the Terrestrial Code, such as the new Biosecurity chapter, that are under revision or development.

### **2.6.3. Update on ad hoc group work on Technical Reference Documents for Antimicrobials of Veterinary Importance & categorization criteria – Dr Stephen Page and Prof Moritz van Vuuren**

Dr Page and Prof van Vuuren informed the Group about the progress made in the development of the Technical Reference Documents for bovine, and for cats and dogs. The *ad hoc* groups conducted extensive reviews of the scientific literature and of regulatory approvals in their respective countries and regions to identify antimicrobial agents used in the concerning animal species, as well as pathogens and diseases occurring in these. For both technical reference documents, antimicrobial agents used only in not well established combinations of antimicrobials (e.g., injectable formulations with ampicillin-colistin and colistin-erythromycin-oxytetracycline- streptomycin to increase spectrum of action to cover a wide range of Gram-positive and Gram-negative pathogens) were not included in the 'used' category as such combinations were not deemed to be in line with responsible and prudent use principles.

Furthermore, the *ad hoc* group working on the Technical Reference Document for cats and dogs is reviewing several aspects of off-label use, including existing guidelines and legal frameworks, as this is a common practice in companion animals in many countries and preparing a concept note on this practice for consideration of the Group.

The Technical Reference Documents will be circulated for consideration of external experts and relevant stakeholders in Q1 2024 and are expected to be ready for endorsement by the Group in October 2024.

The Group thanked both Dr Page and Prof van Vuuren for the update and congratulated the *ad hoc* groups for the progress made in the development of the Technical Reference Documents.

The WOAHA Secretariat informed the Group that after finalisation of the 2 Technical Reference Documents, the List of Antimicrobials of Veterinary Importance will go through a thorough revision by the Group or by a subgroup of the Group with support from WOAHA's Secretariat that will include the update of the antimicrobial agents, classes and sub-classes, and a review of the categorisation criteria used. WOAHA Members will also be consulted on the categorisation criteria and content of the document through a survey that will likely take place in 2025.

### **2.6.4. Revision of WOAHA List recommendations and alignment of recommendations with WHO's MIA list – Dr Javier Yugueros-Marcos**

Dr Yugueros-Marcos presented to the Group a draft of revised recommendations for antimicrobials critically important for animal and human health to ensure alignment with the upcoming WHO's List of Medically Important Antimicrobials, 7<sup>th</sup> edition.

The recommendations will be circulated to the Group for feedback. It is expected that the Group will work on the recommendations remotely, with support from the WOAHA Secretariat, with the aim to submit these as a Resolution for consideration of the Members in early January 2024 and for adoption at the General Session in May 2024.

The Group welcomed the revision of the recommendations in the WOAHA List.



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## 2.6.5. Update on ANIMUSE – AMU team

### 2.6.5.1. Update on ANIMUSE activities – Dr Morgan Jeannin

Dr Morgan Jeannin updated the Group on the ANIMUSE Global Database public launch activities, highlighting the new interactive report now available in the public interface and the success of the communication campaign. Capacity building activities through regional ANIMUSE training workshops are still being implemented with the last training planned for Europe in November 2023. New training tools such as tutorial videos are being planned and developed to ensure an effective and long-lasting uptake of ANIMUSE.

### 2.6.5.2. Guide on quantitative reporting option at species level – Dr Delfy Góchez

Dr Delfy Góchez informed the Group that the next big evolution of ANIMUSE would be the data collection at species level. The ANIMUSE team had meetings with France and Canada to understand the data collection systems at species level from these countries. From those meetings, WOAHA realised that to collect these data, there are certain questions that need to be answered, such as: which animal species should be collected at global level? How to collect the estimations by species? Which are the data sources that can be accepted? Which are the minimum requirements to collect data at species level? Should WOAHA provide a guideline to its Members?

### 2.6.5.3. Recategorization of antimicrobial (sub)classes – Dr Delfy Góchez

Dr Delfy Góchez informed the Group that for the ongoing 9<sup>th</sup> round of data collection, the antimicrobial class of polypeptides has been divided into two separate classes: cyclic polypeptides and polymyxins. This division responded to the need to compare AMU data in animals against humans; the names of the new classes are aligned with the WHO list of critically important antimicrobials for human medicine. The data collected for the new categories will be analysed in the 9<sup>th</sup> annual report that should be launched during the first quarter of 2025.

The Group thanked the AMU team for the update on ANIMUSE activities and praised the work conducted and on its value to countries. The Group supported the creation of an electronic expert group to provide technical input on the data collection and analysis at species level. The Group advised that Terms of Reference (ToRs) should be developed for the electronic expert group to clarify scope of work to be conducted for consideration of the Group.

## 2.6.6. AMR Strategy – companion animals and update from World Small Animal Veterinary Association's Therapeutic Guidelines Group (WSAVA TGG) – Dr Ana Mateus

### 2.6.6.1. AMR Strategy – companion animals

The WOAHA Secretariat informed the Group that WOAHA is currently developing a concept note concerning the application of the WOAHA's AMR Strategy across its four pillars to companion animals. The final concept note was circulated to the Group for their consideration and feedback at the time of this meeting. The Group was requested to review the document and provide feedback by early November 2023. WOAHA intends to focus initially on implementing awareness and education activities to a wider range of stakeholders (small animal veterinarians, pet owners, breeders and keepers) in collaboration with organisations such as the World Small Animal Veterinary Association ([WSAVA](#)), and to extend surveillance efforts of ANIMUSE to increase number of countries reporting AMU for companion animals.

The Group thanked the Secretariat for the update and welcomed the consideration of companion animals when developing and implementing activities and actions related to the WOAHA's AMR Strategy. Member countries will be informed through this report and the Group's presentation at the next General Session.

### 2.6.6.2. Update on WSAVA TGG activities

The WOAHA Secretariat updated the Group on the work of the [Therapeutics Guidelines Group \(TGG\)](#) of the WSAVA. The TGG was created in 2019 and currently has 10 members and 2 co-chairs; WOAHA is represented in the TGG as an external, no-voting member. The remit of the TGG is *"To advance the health and welfare of companion animals worldwide through an educated, committed and collaborative global community of veterinary peers."* Activities conducted by the TGG during 2023 included:

- Development of infographics and online training modules on responsible AMU in common infectious diseases in companion animals
- Revision of WSAVA's [Essentials Medicines List \(EML\)](#); this list is based on the WHO EML. The EML has been published in the [Journal of Small Animal Practice \(JSAP\)](#).
- Pilot project on SFVP focused on amoxicillin-clavulanic acid. The study has been published in [JSAP](#). The TGG is exploring a potential collaboration with WOAAH on SFVP.
- Parallel session 'Antimicrobial Stewardship' at [WSAVA conference](#) in Lisbon in September 2023-streams will include responsible AMU and accessibility to veterinary products. The session included four presentations, one of which from WOAAH and a panel discussion.
- Expansion of [WSAVA library on responsible AMU and AMR](#)- to include [ENO VAT](#) guidelines.

The Group thanked the WOAAH Secretariat for its update on WSAVA TGG activities.

### **2.6.7. Alternatives to Antimicrobials (ATA) plan – Dr Javier Yugueros-Marcos**

Dr Yugueros-Marcos informed the Group of the need to offer alternatives to antimicrobials (ATA) to address this global issue. ATA were a recommendation from the 2<sup>nd</sup> OIE Global Conference on AMR that need to be addressed. Three reports have been produced by WOAAH in [2015](#) and [2018](#) that have worked on prioritisation of diseases for different animal species (large and small ruminants, swine, poultry and fish) in which vaccines could reduce the need for AMU. Dr Yugueros-Marcos also emphasized the significant imbalance in investment for human and animal R&D, including for new vaccines. There is lack of scientific evidence for autogenous vaccines and lack of standards for these. STAR-IDAZ is looking into research priorities in alternatives to antimicrobials. WOAAH is advocating with GLG to increase investment on R&D in the animal sector. The action plan proposed to the Group is to review the content of the Manual for Diagnostic Tests and Vaccines for Terrestrial Animals with respect to existing information on ATAs and to hold a brainstorming session at the next Group meeting in Spring 2024.

The Group thanked Dr Yugueros-Marcos for the update on planned work on ATAs. The Group recognised the need to address ATAs in the near future. Dr Yugueros-Marcos clarified that the mapping exercise should start with autogenous vaccines but should also be expanded other vaccines and other ATAs. WOAAH Secretariat could do the mapping exercise with the support from 1-2 Group Members. The Group recommended looking at past categorisation exercises on ATAs. The Group also mentioned that VICH had made recommendations for autogenous vaccines and noted the [EU's RONAFA opinion](#) on reducing AMU in animal husbandry. Dr Song referred to FAO work on a technical report for alternatives to feed additives to reduce AMU, in which WOAAH also participated, which is expected to be published within the next few months. Dr Song suggested to explore synergies and complementarity between FAO's and WOAAH's work on alternatives to antimicrobials. This work is planned for next year in preparation of UNGA2024.

### **2.6.8. Update on Aquatics – Dr Dante Mateo**

#### **2.6.8.1. Updates on Aquatics: Guideline for AMU monitoring for aquatic species at farm level**

Dr Dante Mateo informed the Group about the progress made by the Electronic Expert Group (EEG) on the development of the Guideline for AMU Monitoring for Aquatic Species at Farm Level. After two EEG meetings the table of contents was developed. It was considered that when applicable, the guideline could also be used for ornamental fish, mollusc, and amphibian aquaculture. At the next meeting, on 18 of October, the drafted content for each chapter will be discussed. It will also be decided when the document could be shared with expert reviewers. Ten expert names have been proposed as candidates to review the draft guideline. Up to six experts will be selected considering expertise, geographical distribution, and gender balance.

#### **2.6.8.2. Inventory of studies of AMU data collection at field level**

The development of an inventory for studies on AMU data collection at field level have been communicated to Focal Points during the regional ANIMUSE workshops and other workshops dedicated to AMU and AMR in aquaculture. The reception of studies to feed the inventory will be closed after the last regional ANIMUSE workshop to be held in Serbia, in November 2023.

The Group thanked Dr Mateo for the update and recommended that consideration be given to request feedback regarding the draft guideline from external experts from countries with significant aquaculture production.

### **2.6.9. Workplan review & agenda of Spring meeting**

The Group revised and updated its workplan ([Annex 3](#)).

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## 2.6.10. Any other business

### 2.6.10.1. Update on the “Responsible and prudent use of anthelmintic chemicals to help control anthelmintic resistance in grazing livestock species” publication – Dr Mariá Szabó

The Working Group was updated that the EEG on Antiparasitic Resistance had completed their mandate. The last meeting of EEG took place on 17 April 2023. The implementation of the Recommendation of the [publication](#) (*Responsible and prudent use of anthelmintic chemicals to help control anthelmintic resistance in grazing livestock species*) is planned to start in 2023. The publication was first presented to WOAAH’s Members with a call for implementation during the Focal Points Seminar for English Speaking Africa on 5-7 September in Malawi, aiming to identify Members who will participate. WOAAH HQ intends to work with WOAAH Collaborating Centers for Veterinary Products to provide support to countries during the implementation phase. In the African Region the aim is to also collaborate with the World Association for Advancement of Veterinary Parasitology Africa Network (WAAVP-AN).

In 2023, FAO and WOAAH HQ with its Collaborating Centres (ANSES and FDA) have started a collaboration and developed a survey to gather information on the regulatory situation on acaricides. The first draft of the *Community Practice Guidelines* is expected in July 2024 and the final document is anticipated to be published in 2025. Dr Song informed the group that a meeting will be held in March 2024 in Costa Rica, to discuss the guideline. The Community of Practice is composed by 40 experts divided into four areas.

## 3. Date of next meeting

The next meeting of the Group will take place face-to-face in Paris in 27-29 February 2024.

### CLOSED SESSION- AMRWG members ONLY

- New AMRWG members
- Closure of meeting

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.../Annexes

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## Annex 1. Adopted Agenda

### MEETING OF THE WOAHP WORKING GROUP ON ANTIMICROBIAL RESISTANCE

Virtual, 10–12 October 2023

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#### Day 1 (Tuesday 10 October – 12:00-15:00 CET)

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##### Welcome and opening of meeting (10')

- Adoption of the agenda
- Appointment of rapporteur

##### Landscape

- Quadripartite activities (20'+20') – Holy Akwar- for info
- WHO update - STAG-AMR conclusions & recommendations (20'+10') – Dr Jorge Matheu – for info
- UNEP update (tentative)- for info
- FAO update – Feed alternatives to reduce AGPs and AMU doc (20'+20') – Dr Junxia Song – for info and discussion
- AMR&VP organization & 2023-2025 roadmap, including updates on key activities (20'+20')- Javier Yugueros-Marcos for info
- Update on SFVPs (10'+15') – Andrés Garcia Campos- for info

#### Day 2 (Wednesday 11 October – 12:00-15:00 CET)

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Day 2 (175/180)

##### AMRWG-related activities

- TAHC Chapter 6.10 and subsequent chapters (20'+20') – Ana Mateus – for info and discussion
  - Feedback from Code Commission on Chapter 6.10
  - Future revision of subsequent TAHC chapters
  - Discussion of rationale for revision of Chapter 2.1.1 of the Manual for Diagnostic Tests and Vaccines for Terrestrial Animals to be provided to the Biological Standards Commission (BSC)
- Biosecurity chapter update (5'+5') – Standards Secretariat – for info
- Update on *ad hoc* groups work on Technical Reference Documents for Antimicrobials of Veterinary Importance & categorization criteria (15'+15'+30') – Dr Stephen Page and Prof Moritz van Vuuren for info and discussion
  - Cats and dogs
  - Bovine animals
- Revision of WOAHP List and alignment of recommendations with WHO's MIA list (20'+20') – Ana Mateus – for discussion

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**Day 3 (Thursday 12 October – 12:00-15:00 CET)**

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- Update on ANIMUSE (15'+15') – AMU team TBC for info & discussion
  - Update on ANIMUSE activities – Dr Morgan Jeannin
    - Guide on quantitative reporting option at species level
    - Recategorization of antimicrobial (sub)classes
- AMR Strategy – companion animals & update from World Small Animal Veterinary Association's Therapeutic Guidelines Group (WSAVA TGG) (20'+30') – Ana Mateus – for info & discussion
- Alternatives to Antimicrobials (ATA) plan (10'+30') – Javier Yugueros-Marcos – for info and discussion
- Update on Aquatics (15'+10') – Dante Mateo for info
  - Guidelines for AMU data monitoring for aquatic species at field level
- Workplan review & agenda of Spring meeting (TBC) (30') for info and discussion
- Any other business
  - Update on "*Responsible and prudent use of anthelmintic chemicals to help control anthelmintic resistance in grazing livestock species*" publication – 5' + 5') – Mariá Szabó for info

**CLOSED SESSION- AMRWG ONLY (20')**

- New WG AMR members
- Closure of meeting

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## Annex 2. List of Participants

### MEETING OF THE WOAHP WORKING GROUP ON ANTIMICROBIAL RESISTANCE

Virtual, 10–12 October 2023

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#### MEMBERS

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**Dr Tomoko Ishibashi** (Chair)  
Project Researcher  
Graduate School of Agricultural  
and Life Science  
The University of Tokyo  
Tokyo,  
Japan

**Ms Barbara Freischem**  
(Rapporteur)  
AMR Senior Specialist  
Veterinary Medicines Division  
European Medicines Agency  
Amsterdam  
THE NETHERLANDS

**Dr Donald Prater**  
Acting Director  
Centre for Food Safety and  
Applied Nutrition (CFSAN)  
Washington DC- Baltimore area  
UNITED STATES OF AMERICA

**Dr Fajur Sabah Al Saloom**  
Director, Animal Health  
Ministry of Works, Municipalities  
Affairs and Urban Planning  
Manana,  
KINGDOM OF BAHRAIN

**Dr Stephen Page**  
Director  
Advanced Veterinary Therapeutics  
Sidney  
AUSTRALIA

**Prof. Moritz van Vuuren**  
Emeritus Professor in Microbiology  
Pretoria  
SOUTH AFRICA

#### OBSERVERS

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**Dr Junxia Song**  
Senior Animal Health Officer  
FAO AMR focal point, Unit Head  
The Joint FAO/WHO center  
(zoonotic disease and AMR)  
Food and Agriculture Organization  
of the United Nations (FAO)  
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ITALY

**Dr Jorge Matheu**  
Team Lead  
Department of Global Coordination  
and Partnership  
WHO – World Health Organization  
Geneva  
SWITZERLAND

#### WOAHP PARTICIPANTS

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**Dr Javier Yugueros-Marcos**  
Head of Department  
Antimicrobial Resistance and  
Veterinary Products Department  
(AMR-VP)

**Dr Morgan Jeannin**  
Chargé de mission  
AMR-VP Department

**Dr Ana Luisa Pereira Mateus**  
Scientific Coordinator  
AMR-VP Department

**Dr Holy Teneg Akwar**  
Deputy Head of AMR-VP  
Department

**Mr Mduduzi Welcome Magongo**  
Business Project Manager  
AMR-VP Department

**Dr Maria Szabó**  
Scientific Coordinator  
AMR-VP Department

**Dr Andrés Garcia Campos**  
Project Officer  
AMR-VP Department

**Dr Dante Mateo**  
Chargé de mission  
AMR-VP Department

**Dr Yukitake Okamura**  
Scientific Officer for International  
Standards  
Standards Department

**Dr Delfy Gochez**  
Chargée de mission  
AMR-VP Department

**Annex 3. Workplan of the Working Group on AMR (update October 2023)**

**MEETING OF THE WOAHP WORKING GROUP ON ANTIMICROBIAL RESISTANCE**

**Virtual, 10–12 October 2023**

<b>Subject</b>	<b>Action</b>	<b>Status</b>	<b>Next milestone</b>
<b>1. To continue updating OIE standards in the OIE Terrestrial and Aquatic Codes relevant to AMR and needed capacities of Member Countries and to complete standards in the OIE Terrestrial and Aquatic Manuals,</b>			
Terrestrial Animal Health Code (TAHC)	Update of Chapter 6.10. Responsible and prudent use of antimicrobials in veterinary medicine	Completed – waiting for comments from Members (2 <sup>nd</sup> round)	Feedback from TAHSC- Feb 2024
	Recommend update of other TAHC chapters 6.8 and 6.9	Preselection and prioritization done; revision to be conducted after Chapter 6.10	Feedback from TAHSC – Feb 2024
Manual of Diagnostic and Vaccines for Terrestrial Animals	Assessment of content of Chapter 2.1.1. to inform future update - to engage Collaborating Centres to do this task	WOAH Secretariat to liaise with BSC Secretariat to contact Collaborating Centres after meeting.	Feedback from Collaborating Centres to be submitted to BSC – Feb 2024
<b>2. To provide WOAHP Member Countries, through activities undertaken under the PVS Pathway, with tools and capacity-building activities, with a greater focus on AMR including update of policy and legislation;</b>			
No active action for WG	No active action for WG		
<b>3. To continue to develop the OIE List of Antimicrobial Agents of Veterinary Importance, considering a) the inclusion of antimicrobials only used in companion animals, b) the sub-division of the List in the different animal species, and c) the expansion of the List, to include over time antiparasitic agents of veterinary importance such as anthelmintics, insecticides and acaricides;</b>			
WOAH List of Antimicrobial Agents of Veterinary Importance, subdivision by species	Poultry subdivision pilot exercise, including development of pilot methodology	Completed	April 2021
	Adapt/apply poultry of the methodology to swine	Completed	Oct. 2022
	Consider other species: completed an initial discussion on prioritisation	Completed	April 2022
	Oversight technical reference document for aquatic animals	Completed	Oct. 2022
	Discuss other animal species [small ruminants, camels, companion animals...]	Completed	Oct. 2022

Subject	Action	Status	Next milestone
	Discuss the addition of companion animals	Completed	April 2021
	Approve technical reference document for bovine animals	Development of Technical Reference by AD Hoc group Document- Ongoing.	Progress report – Feb. 2024 Final deliverable – Sep. 2024 (tentative)
	Approve technical reference document Cats and dogs	Development of Technical Reference Document- Ongoing.	Progress report – Feb. 2024 Final deliverable – Sep. 2024 (tentative)
WOAH List of Antimicrobial Agents of Veterinary Importance	Review WOAHL List	Planned after completion of ongoing lists	Launch TBD (Q4 2024- Q1 2025)
	Revise recommendations of the WOAHL List of Antimicrobials of Veterinary Importance so that it is aligned with the WHO MIA List	Planned after Oct 2023 in anticipation of WHO MIA List publication (Nov 2023)	Resolution to be submitted early 2024 for endorsement of Members at next GS May 2024
<p><b>4. To further develop the OIE data collection on Antimicrobial Agents Intended for Use in Animals, converting the current spreadsheet format to a database system, able to accommodate data submissions by animal species, and its connection to the World Animal Health Information System (WAHIS) and also allowing addition of data from field studies;</b></p>			
WOAH Global AMU Database (ANIMUSE)	Guide and oversight transition of data collection from spreadsheet to a database system, expert advice	Completed	Oct. 2022
	Advise on the refinement of the numerator, denominator (biomass), and reporting	On stand by	Rediscuss - February 2024
	Guide on having a quantitative reporting option on species level	Create and develop ToRs electronic experts group	Rediscuss – February 2024
Field level data	Oversight of repository of studies and methodologies for data collection	Ongoing. FPs informed during ANIMUSE training seminars.	Progress report – Feb. 2024
	Oversight of guidelines in collaboration with FAO for development of guidelines for Asia and Pacific region	Ready for publication. Launch event planned for WAAW 2023.	Final deliverable – Nov. 2023
	Oversight of guidelines for data collection of aquatic species at field level	Started in May 2023.	Progress report – Feb. 2024 Final deliverable – July 2024
<p><b>5. To work with Animal Food Production sectors and institutions such as the World Veterinary Association and related professional bodies for supporting the development of species-specific treatment guidelines to be used at sub-regional and national level and the establishment of a global repository of existing clinical treatment guidelines and tools;</b></p>			
Essential Medicines Lists for livestock species (Brooke-WVA)	Be informed and comment Brooke and WVA EML lists for bovine, small ruminants, swine and equine.	Lists under development at Brooke/WVA – to be circulated to WVA members via app Q4 2023	Progress report – Feb. 2024



Subject	Action	Status	Next milestone
<b>6. To explore the possibility of building an information system of falsified or substandard drugs in the animal sectors illegally circulating within and between countries and building on the experience of the monitoring systems set up by WHO for drugs designated for human use taking a “One Health” approach;</b>			
Substandard and falsified products	Guide WOH's work on substandard and falsified veterinary products app project	Ongoing.	Progress report – Feb. 2024
<b>7. To encourage research based on robust methodologies, aiming at comparison of results, that focuses on a better understanding of the dynamics and epidemiology of AMR, from an integrated “One Health” perspective, on the development of priority vaccines and other alternatives to antimicrobials, of proven safety, efficacy and quality and on rapid diagnostic and sensitivity tests specific for veterinary medicine, building on public-private partnerships;</b>			
Alternatives to antimicrobials (ATA)	Inform on categorisation of products	On stand by	Rediscuss – Feb. 2024
<b>8. To explore the opportunity to develop standards or guidelines related to autogenous vaccines and other alternatives to antimicrobials, including guidance for quality, safety and efficacy, as tools to reduce the need to use antimicrobials;</b>			
Alternatives to antimicrobials (ATA)	Review of related existing information in the WOH Manual	Mapping exercise of Manual on autogenous vaccines and other ATAs;	Brainstorming AMRWG session- Feb. 2024
<b>9. To develop a Monitoring and Evaluation (M&amp;E) framework to monitor the progress of the implementation of the OIE Strategy on AMR and the Prudent Use of Antimicrobials, adopted by Resolution No. 36 by the OIE World Assembly of Delegates at the 84th General Session of the OIE in 2016;</b>			
Monitoring and Evaluation framework for the WOH Strategy on AMR	Oversight framework development	Completed	October 2021
	Oversight progress and implementation	Ongoing	Progress report – Feb. 2024
<b>10. To continue to support OIE Member Countries in the development of their communication activities and national action plans involving all animal health stakeholders, specifically supporting capacity building activities for behavioural change initiatives tackling antimicrobial resistance;</b>			
	No active action for WG		
<b>Others</b>			
WOAH work on antiparasitics	Oversight WOH's antiparasitic resistance work	Guidelines dissemination ongoing, with identification of countries to pilot its implementation	Progress report – Oct.2023
Biosecurity chapter	Be informed about development of new biosecurity chapter within TAHSC	Action coming from Oct. 2023 meeting- Review draft chapter to provide comments	Progress report – Feb. 2024
AMR&VP work on AMR	Be informed of actions and mapping of activities/actors and ongoing collaborations	Ongoing	Presentation – Feb. 2024