



REPORT OF THE MEETING OF THE OIE WORKING GROUP ON ANTIMICROBIAL RESISTANCE
Paris (via Zoom), 26-28 October 2021

1 Opening

The OIE Working Group on Antimicrobial Resistance (AMR) (hereafter referred to as ‘the Group’) met from 26th to 28th October 2021 via an on-line application, 12:30 – 15:30 (Central European Time), coordinated by the OIE Headquarters in Paris, France.

Dr Montserrat Arroyo Kuribreña, OIE Deputy Director General International Standards and Science, welcomed the Group members and thanked them for their participation in the Group. Dr Elisabeth Erlacher-Vindel, Head of the OIE’s Antimicrobial Resistance and Veterinary Products (AMR&VP) Department, introduced the Group to the AMR&VP Department’s new staff members.

2 Adoption of the agenda and appointment of the rapporteur

The agenda was adopted without additions or revisions. The Group was chaired by Dr Tomoko Ishibashi, and Dr Donald Prater acted as rapporteur. The adopted Agenda and List of Participants are presented in Annexes I and II of this report, respectively.

3 Landscape: Tripartite, Codex Alimentarius update, EU legislation/categorisation, OIE communication on AMR

a) Tripartite Work on AMR (Global Leaders Group, Partnership Platform, AMR Multi-Partner Trust Fund (MPTF), Tripartite Strategic Framework on AMR), AMR Research

Dr Ólafur Valsson presented the work of the Tripartite on AMR.

i. Global Governance Structures

The establishment of the global governance structures was recommended by the Interagency Coordination Group (IACG) on Antimicrobial Resistance.

The role of the One Health Global Leaders Group on antimicrobial resistance (GLG) (<https://www.who.int/groups/one-health-global-leaders-group-on-antimicrobial-resistance>) is to provide advocacy and advisory functions to ensure that action is taken to address the challenge of antimicrobial resistance. The GLG has since being established issued some Statements and Information Notes, with a focus on animal health and production’s use of antimicrobials, and on financing the response to AMR, also highlighting the lack of funding in the animal health sector. Furthermore, the need to better understand the role that the environment plays in the development of AMR is recognised. The GLG is working on key performance indicators for their actions. The OIE Director General is an Ex-Officio Member of the GLG.

The future AMR Multi-Stakeholder Partnership Platform (the Platform), facilitated by the Tripartite, aims to bring together different voices across the human, animal, plant and environment interface (One Health approach). Membership of the Platform will be open to government representatives, UN agencies, international, intergovernmental and regional organisations, international financial institutions, civil society, academia and research organisations, and the private sector, will enhance the accessibility of all stakeholders to each other. The Tripartite has recently completed an online survey to collect feedback from a broad range of stakeholders about the Platform. The response was very encouraging, with over 670 responses across sectors and regions, of which over 93 percent were positive. The Platform's launch is currently planned for early 2022 and is dependent on securing complementary finances.

The Independent Panel on Evidence for Action Against Antimicrobial Resistance's Terms of Reference (ToRs) were sent to the UN Secretary-General for further decision. It will not be launched until financing has been secured.

ii. Tripartite Strategic Framework on AMR and Workplan

The Tripartite has drafted a Strategic Framework for the joint work of the organisations on AMR in collaboration with the United Nations Environmental Programme (UNEP). The development of a workplan for 2022/23 is ongoing and the launch is planned for the end of 2021 or beginning of 2022.

iii. Multi-Partner Trust Fund (MPTF) on AMR

The four global projects on the Tripartite Integrated Surveillance System on AMR/AMU (TISSA), Legislation, Environment, and Monitoring and Evaluation (M&E) are being implemented. The OIE is leading on the global programme on M&E. Nine country projects have been approved and are in different stages of implementation. Two more country projects are expected to be approved by the MPTF Steering Committee on 27 October 2021. More information can be found at: <https://mptf.undp.org/factsheet/fund/AMR00>. Additional donors have committed to provide funds to the MPTF in the short-medium term. Currently the Tripartite is proposing to extend the fund to 2030 and to expand the fund to include more countries and other global projects.

iv. One Health Global Plan of Action

The Tripartite and UNEP are developing a One Health Global Plan of Action, led by the One Health Tripartite Secretariat. The plan is currently being drafted with five Action tracks of which AMR is one.

Dr Jorge Matheu provided an update on current WHO activities concerning research related to AMR, and on three projects in particular:

- i. Project on shortages France and the EU requested the WHO to provide technical support on a project that aims to ensure the availability of antibiotics in France across different sectors and to identify effective countermeasures. The project began in November 2020 and will run for three years. The scope of the project explores shortages, the supply chain, production, procurement, funding, regulation, and use of antimicrobials.

ii. One Health Priority Research Agenda for AMR

The Tripartite is developing a prioritised One Health research agenda on AMR with the aim to catalyse investment and scientific interest among researchers, donors, and professionals in AMR. This work will begin with an open call to identify research, followed by a scoping review and a technical consultation to analyse the results. Research questions will then be prioritised by the Delphi method.

iii. The Advisory Group of the Critically Important Antimicrobials for Human Medicine (AG-CIA)

The [Advisory Group of the Critically Important Antimicrobials for Human Medicine \(AG-CIA\)](#) will develop a new plan to review the WHO list of critically important antimicrobials for human medicine for 2021-2024. The aim is to review the scope of this list, and ensure harmonisation with other national, regional, and global lists (such as the *OIE List of Antimicrobial Agents of Veterinary Importance*). The AG-CIA will also review some classes and subclasses of antimicrobials, starting with macrolides, and different WHO tools (the AWaRe List, the bacterial priority pathogen list, and the fungal priority pathogen list). The AG-CIA includes six members from the animal sector.

The Group was informed that FAO is working on a list for antimicrobials considered critical for use in plants and agriculture, built on the same principles as the OIE and WHO lists. The Group agreed that communication around the *WHO list of critically important antimicrobials for human medicine*, the *OIE List of Antimicrobial Agents of Veterinary Importance*, and other similar tools, needs to be considered carefully to avoid misunderstanding by different stakeholders including the general public.

b) **Codex *ad hoc* Intergovernmental Task Force on AMR (TFAMR)**

Dr Donald Prater provided an update on the work of the Codex *ad hoc* Intergovernmental Task Force on AMR (TFAMR). The TFAMR has been discussing two tasks.

The first task is to review and revise the Code of Practice to Minimise and Contain Antimicrobial Resistance (CoP) (which was adopted in 2005 in the Codex Committee on Veterinary Drug Residues in Food), to address the entire food chain (including plants and crops, food processing, and distribution). A previous Task Force developed a guideline on risk analysis for foodborne AMR which includes a framework for risk assessment, risk analysis, and risk communication. The update of the CoP contains many new AMR risk management concepts. In addition to being broad throughout the food chain, the CoP takes a One Health approach to developing definitions that are not sector specific. Some new terminology and definitions relevant for the environment and plant/crop sectors have been included (such as ‘food production environment’). The concept of medically important antimicrobials has been expanded to make a distinction between the use of medically important antimicrobials to assure the health of animals and plants/crops from production uses, such as growth promotion. The terminology of “veterinary medical use” has been adopted in line with OIE terminology to describe the use of antimicrobials for treatment, control/metaphylaxis, and prevention/prophylaxis of a specific disease. The CoP includes references to the *OIE List of Antimicrobial Agents of Veterinary Importance*, the *WHO list of critically important antimicrobials for human medicine*, and other relevant tools. The CoP is now proposed for final adoption at Step 8 at the upcoming 44th meeting of the Codex Alimentarius Commission (CAC44).

The second task of the TFAMR is to consider the development of Guidelines on Integrated Surveillance and Monitoring of Antimicrobial Resistance, taking into account the work of the WHO Advisory Group on Integrated Surveillance of AMR (AGISAR) and relevant OIE guidance in the Terrestrial and Aquatic Animal Health Codes. This document has been recommended for adoption at Step 5/8 (an accelerated adoption) at the CAC44.

Both documents will be presented for discussion at a Codex Alimentarius meeting in November 2021. If adopted at step 8 and 5/8 respectively, these documents would then form a suite of chapters together with the Guidelines for Risk Analysis of Foodborne AMR.

c) **New EU legislation/categorisation**

Ms Barbara Freischem provided an overview of the changing rules regarding the use of antimicrobials in animals in the EU, within the context of larger EU strategies, as a result of veterinary medicinal product regulation 2019/6.

Since the last Group meeting in April 2021, progress has been made on drafting the legal act “format of the data to be collected on antimicrobial sales and use in animals.” Some delays have been encountered due to discussions on the legal act “criteria for the designation of antimicrobials to be reserved for use in humans”, which was eventually passed by the European Parliament in September 2021 and has now been published. This has an impact on three other lines of work, the legal acts “list of antimicrobials to be reserved for use in humans”, “list of antimicrobials not to be used outside the terms of their marketing authorisation” and “list of antimicrobials which may be used outside the terms of their marketing authorisation subject to certain conditions”. It was clarified that the legal act “rules on imports from third countries”, will mean that the list of antimicrobials reserved for human use will also be applied to imports from outside the EU (for food or food-producing animals). As a consequence, the EU rules on imports for third countries will need to be changed.

Related work by the European Food Safety Authority (EFSA) is being done on maximum levels of cross-contamination in non-target feed for 24 active antimicrobial substances. The deadline for this work is January 2023.

In June 2021, the Joint Inter-Agency Report (JIACRA) report on integrated analysis of antimicrobial agent consumption and occurrence of AMR in bacteria from humans and food-producing animals in the EU/EEA was published. One of the significant messages to be taken from this report is that for the first time, the quantity of antimicrobials used in animals per kg of body mass has decreased below the quantity of antimicrobials consumed by humans per kg of body mass. It can be accessed here: https://www.ema.europa.eu/en/documents/report/ema/ecdc/efsa-third-joint-report-integrated-analysis-consumption-antimicrobial-agents-occurrence_en.pdf.

d) **OIE communication on AMR**

Ms Yael Farhi provided an update on OIE communication on AMR. The OIE is currently undertaking an important work to update its narrative on AMR, with the aim to notably incorporate all new initiatives which have been developed in recent years. The current portal on AMR is available at the following link: <https://www.oie.int/en/what-we-do/global-initiatives/antimicrobial-resistance/>

4 OIE Aquatic Animal Health Strategy 2021-2025

Dr Stian Johnsen provided the Group with an update on the OIE’s Aquatic Animal Health Strategy (AAHS), which was launched at the OIE General Session in May 2021, after being announced at the 4th Global Conference on Aquatic Animal Health in Chile in April 2019. It can be viewed here: <https://www.oie.int/en/document/oie-aquatic-animal-health-strategy-2021-2025/>.

The AAHS has four objectives: Standards, Leadership, Capacity Building, and Resilience. For the implementation of the AAHS, the OIE is building cross-organisational teams, and working closely with the OIE community (stakeholders, OIE Members, and partners). Project plans for most of the activities will be developed under the strategy by the end of 2021.

Dr Dante Mateo informed the Group that the OIE's AMR&VP Department will participate in the implementation of the OIE's Aquatic Animal Health Strategy (AAHS). It will be specifically involved in the implementation of *Activity 3.4 – Provide practical AMR guidance*, which is one of the activities planned for achieving *Objective 3 – Resilience*. Work on the development of a project plan for this activity is currently being done. This activity is divided in four sub-activities, which are also included within the Workplan on AMR in Aquaculture developed by the AMR&VP Department: (1) Develop an annex for aquatic animals in the *OIE List of Antimicrobial Agents of Veterinary Importance*, (2) Develop a sub-categorisation of aquatic animals for the AMU database, (3) Provide practical AMU/AMR guidance through Focal Point training, and (4) Update Section 6 of the Aquatic Code. The implementation of these sub-activities will be led by the AMR&VP Department except for sub-activity 4 which will be led by the Standards Department, with the support of the AMR&VP Department. Sub-activity 3 will be co-led by the Regional Representation for Asia and the Pacific. Monthly meetings with the Project Team are organised to report progress.

The Group requested to remain informed on developments to update the *Aquatic Animal Health Code* as part of this work.

5 Monitoring and Evaluation (M&E) of the OIE AMR Strategy

Dr Elisabeth Erlacher-Vindel informed the Group of the completion of a monitoring and evaluation framework for the OIE's implementation of the OIE Strategy on AMR and the Prudent Use of Antimicrobials, and presented this document to the Group. The framework is aligned with the OIE's 7th Strategic Plan (2021-2025) and includes many of the activities of the Group.

6 OIE List of Antimicrobial Agents of Veterinary Importance in Animals

6.1 Review of the reports of the OIE *ad hoc* Group on Technical References for Aquatic Animals

Dr Dante Mateo presented the work of the OIE *ad hoc* Group (AHG) on Technical References for Aquatic Animals formed for the development of the *Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Aquatic Species* (hereafter referred to as the *Aquatic Species Technical Reference Document*). The AHG on Technical References for Aquatic Animals, which includes several members of the Group (Dr Donald Prater (Chair), Dr Gérard Moulin, and Prof. Moritz van Vuuren), held two meetings in May and September 2021. An Excel template has been created that gathered information from different sources on antimicrobial agents used in aquaculture globally. Some issues were identified for this task, such as the lack of a list of antimicrobial agents authorised for use in aquaculture in some regions, the lack of specific product names for some used molecules, and the uncertainty of having up to date information. To address these issues, the AHG on Technical References for Aquatic Animals decided to organise an outreach to additional sources of information in specific countries. The AHG on Technical References for Aquatic Animals will select the countries and is preparing specific questions to address to them by early November 2021.

Following the approach used for the *Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Poultry* (hereafter referred to as the *Poultry Technical Reference Document*), the AHG on Technical References for Aquatic Animals decided to avoid including off-label use in the main table of antimicrobials, to include only antimicrobials which have been identified as authorised for use in aquatic animals in at least one country, to include only well-established combinations of antimicrobials, and to exclude biocides and disinfectants. However, there will be an accompanying explanatory text, acknowledging the importance of common off-label use of antimicrobial agents and use of disinfectants in aquaculture.

External experts will be contacted to provide additional information and should include individuals such as veterinarians, producer groups, industry, and representatives from different countries and regions. The feedback received will be reviewed by the AHG on Technical References for Aquatic Animals.

The next (3rd) meeting of the AHG on Technical References for Aquatic Animals will be in February 2022, by which time it is expected that the information from the outreach will have been collected.

The Group noted that in many countries there is a lack of authorised antimicrobials for aquatic species, and that there are special considerations for aquatic species (such as authorisation in some circumstances being based on temperature grouping rather than species grouping, and the off-label use of antimicrobials in aquatic species) which will need to be considered. The Group agreed that there may also be a lack of authorised products for other animal species which will need to be considered during development of future annexes to the OIE List.

The Group endorsed the work of the AHG on Technical References for Aquatic Animals, and the next steps proposed for this AHG's work. The reports of the first two meetings of the AHG on Technical References for Aquatic Animals are presented in Annexes III and IV.

6.2 Update on the Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Swine

Dr Gérard Moulin and Dr Rebecca Hibbard presented the current progress and next proposed steps for development of the *Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Swine* (hereafter referred to as the *Swine Technical Reference Document*), based on the process undertaken for development of the *Poultry Technical Reference Document*.

The Group agreed that the Swine Subgroup (Dr Barbara Freischem, Dr Donald Prater, Dr Gerard Moulin, Prof. Moritz van Vuuren, Dr Stephen Page) should hold a virtual meeting in early December 2021, to which all Group members are invited to attend. In preparation for this meeting, the Swine Subgroup will:

- continue to provide inputs to the draft of the *Swine Technical Reference Document*,

During the December 2021 meeting, the Swine Subgroup will update the draft *Swine Technical Reference Document* based on the feedback received from Swine Subgroup members and agree on the swine experts to be proposed for support.

After the December 2021 meeting of the Swine Subgroup, the updated draft of the *Swine Technical Reference Document* would be sent to the external experts for their feedback.

7 OIE Antimicrobial Use (AMU) Database

7.1 Current stage

Dr Delfy Góchez presented the preliminary results of the sixth round of data collection. The OIE received 157 submissions, of which 80% (126 out of 157) reported quantitative data. It was highlighted that countries have shown an engagement to the data collection since its creation, but also have increased their engagement to provide more detailed data through the different OIE Reporting Options. The sixth round demonstrated that more countries chose to report the quantities through Option 3; most of them thanks to the OIE Calculation Tool. The sixth AMU Report will be published at the beginning of 2022.

The seventh round was launched on 13th September 2021 and the key deadlines were presented. The questionnaire and accompanying documents of the seventh round are available at the OIE website.

7.2 Update on the IT project

Mr Mduduzi Magongo updated the group on the IT project for the AMU database. He indicated the timelines and milestones that have been achieved and pending. He demonstrated the AMU System live, specifically the following key modules and functionalities: Access Rights and Permissions, Country Portal, Questionnaire, Calculation Module, Administration Module and Historical Data.

The IT project of the AMU database will allow integration with the Tripartite Integrated System for Surveillance on Antimicrobial Resistance and Use (TISSA) and the European Surveillance of Veterinary Antimicrobial Consumption (ESVAC). The AMU database will receive only the sales data (numerator) from ESVAC; while it will provide data to TISSA at a regional level; no data at a country level will be shared.

7.3 Technical Reference Group debriefing

Dr Morgan Jeannin presented feedback of the nine meetings held with the Technical Reference Group, on AMU database development. These meetings functioned as a platform for sharing of experiences to ensure an efficient transition from the collection of AMU data via an Excel template into a database system. Since the Group's last meeting, four additional meetings of the Technical Reference Group were held, in which, three major themes were discussed: Communication, change management and data visualisation and analysis.

The OIE AMR&VP Department and Digital Transformation and Information Systems Department continue to benefit from the experience shared by the members of the Technical Reference Group to further improve the development of the AMU database. Three members of the Technical Reference Group have kindly agreed to pilot the system during the development stage.

7.4 Species/field level data future development

Dr Idrissa Savadogo reminded the Group that the recommendation of the 2nd OIE Global Conference on AMR and Prudent Use of Antimicrobials pertains to the possibility of "addition of data from field studies" in the future AMU database system. The OIE has initiated the mapping of ongoing field level data collection projects in certain countries. From the experience of these projects, the OIE will explore how to bring its methodological or analytical support to OIE Regional and Sub-Regional Representations in piloting AMU field level monitoring data collection methodologies.

8 Planning of the update of the *Terrestrial Animal Health Code*: revision of chapter 6.10

At its February 2019 meeting, the Code Commission agreed to include a review of Chapter 6.10 Responsible and prudent use of antimicrobial agents in veterinary medicine (hereafter Chapter 6.10), and asked advice from the Group. At its April 2021 meeting, the Group considered the Code Commission's request and identified the main areas of Chapter 6.10 that it considered should be updated. At that time, the Group highlighted that given the current chapter is not limited to food-producing animals, some additional references to companion animals could be considered for inclusion and that the addition of elements relating to the environment, although important in the context of AMR, may be outside of the scope of this chapter. The Code Commission agreed that it would be beneficial to consider explicitly expanding the scope of Chapter 6.10. to companion and leisure animals and considered that the addition of elements relating to the environment was within the scope of this chapter given that the circulation of antimicrobial agents from veterinary medicinal products and AMR bacteria from animals in the environment may impact animal and public health. After discussing the Group's proposal at its September 2021 meeting, the Code Commission proposed that the Group be asked to proceed with the revision of Chapter 6.10.

The Group discussed the scope of Chapter 6.10, and the need to consider the extent to which the environment could be included. The Group recognised that the environment would be an important part of the One Health approach to minimising and containing AMR, and that the work of other standard setting bodies and organisations, including Codex Alimentarius, WHO, FAO, UNEP, and the International Plant Protection Convention (IPCC), should be considered. The Group noted that several references are already made to the environment in Chapter 6.10, notably under the responsibility of the Competent Authority, including the importance of studies to assess the impact of antimicrobial agents and disposal of antimicrobials. The Group took note of the approach of the Codex Alimentarius Task Force on Antimicrobial Resistance considering

the appropriate scope for guidance related to the environment. The Group discussed sections of Chapter 6.10 where guidance on the responsible and prudent use of antimicrobial agents with respect to the environment could be developed.

The Group agreed to work by creating a Subgroup including members from the Group to advance on the update of Chapter 6.10 before the next meeting of the Group in April 2022. This Subgroup will include Dr Tomoko Ishibashi, Ms. Barbara Freischem, Dr Gérard Moulin, Dr Stephen Page, Prof. Moritz van Vuuren, and Dr Donald Prater.

The Group agreed that the next steps to begin work on the update of Chapter 6.10 would progress as follows:

- A review of Chapter 6.10 would be undertaken by two members of the Group to prepare a document identifying the specific parts of the Chapter that would need revision. This document would be shared with the Subgroup by end of December 2021.
- The Subgroup would send written comments on this document by January 2022.
- A first meeting of the Subgroup would be held in January 2022 to discuss the document.
- Based on the discussion during the first meeting of the Subgroup, a zero draft would be prepared by two members of the Group by March 2022.
- A second meeting of the Subgroup would be held in March 2022 to discuss the zero draft.
- An update would be provided to the Group at their next meeting in April 2022.

The Code Commission had also proposed that the Group consider whether other chapters in the *Terrestrial Animal Health Code* (Chapters 6.7., 6.8., 6.9., and 6.11.) would need to be amended as a consequence of the revision of Chapter 6.10. The Group agreed that they would focus on Chapter 6.10 for the time being and consider other chapters in due course once substantial progress on the update of Chapter 6.10 has been made. The Group decided to include consideration of other chapters as an agenda point at the April 2022 meeting.

The Group agreed that once the update of Chapter 6.10 is completed, they could consider collaborating on an update of the corresponding chapters in the *Aquatic Animal Health Code*, pending an update from the OIE's Aquatic Animal Health Standards Commission.

9 Review of the work programme and feedback from the brainstorming sessions

The work programme was reviewed by the Group and updated. It is available in [Annex V](#).

The Group further discussed the follow-up of the brainstorming that took place at the April 2021 meeting, and particularly focused on education and e-learning related to AMR. The Group was informed that there is ongoing work on this topic at OIE in coordination with the OIE Collaborating Centres, and expressed interest in continuing to be updated on this work. It was noted that for some of the topics raised in the brainstorming session, collaboration with others may be needed. The Group agreed that any further updates to the work programme should be based on the recommendations of the 2nd OIE Global Conference on Antimicrobial Resistance and Prudent Use of Antimicrobial Agents.

The Group considered the possibility of allocating additional time for brainstorming at future meetings.

10 Any other business

10.1 World Veterinary Association (WVA) List of Essential Medicines

Dr Stephen Page provided an update on the World Veterinary Association and Brooke's Global List of Essential Medicines for Food-Producing Animals, which will consist of a list of core medicines and a list of complementary medicines. He noted that it is intended to be applicable globally, to assist veterinarians in advocating for improved access to veterinary medicines, to support the process of self-

evaluation, registration, and licensing, and facilitate the regulatory oversight of veterinary pharmaceuticals, but that it is not intended to function as a treatment guideline or to provide a complete oversight of all available treatment options.

The Global List of Essential Medicines for Food-Producing Animals will be drafted by eight species-specific working groups (large ruminants, small ruminants, equids, poultry, porcine, aquaculture, bees, rabbits) by late December 2021. It would subsequently be reviewed by a designated committee commencing in January 2022 before endorsement by the WVA and Brooke. It is expected to be published in April 2022. The Group noted that the development of this list could be relevant to the Group's work in preparing species specific annexes to the OIE List.

11 Date of next meeting

The proposed date of the next meeting is 27th- 29th April 2022.

12 Adoption of report (online)

The Group adopted the draft report via online consensus.

.../Annexes

MEETING OF THE OIE WORKING GROUP ON ANTIMICROBIAL RESISTANCE

Paris (virtual meeting), 26-28 October 2021

Day 1 (October 26)

1. Opening
2. Adoption of the agenda and appointment of rapporteur
3. Landscape: Tripartite, Codex Alimentarius update, EU legislation/categorisation, OIE communication on AMR
 - 3.1. Tripartite work on AMR (Global Leaders Group, Partnership Platform, AMR MPTF, Tripartite Strategic Framework on AMR, Research)
 - 3.2. Codex TFAMR
 - 3.3. New EU legislation/categorisation
 - 3.4. OIE Communication on AMR
4. OIE Aquatic Animal Health Strategy 2021–2025
5. Monitoring and Evaluation (M & E) of OIE AMR Strategy

Day 2 (October 27)

6. OIE List of antimicrobial agents of veterinary importance in animals
 - 6.1. Review of the reports of the OIE *ad hoc* Group on Technical References for Aquatic Animals
 - 6.2. Update on the *Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Swine*
7. OIE Antimicrobial Use (AMU) Database
 - 7.1. Current stage
 - 7.2. Update on the IT project
 - 7.3. Technical Reference Group debriefing
 - 7.4. Species/field level data future development

Day 3 (October 28)

8. Planning of the update of the *Terrestrial Animal Health Code*: revision of chapter 6.10
 9. Review of the work programme and feedback from the brainstorming session
 10. Any other business
 - 10.1. WVA List of Essential Medicines
 11. Date of next meeting
 12. Adoption of report (online)
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Annex II
MEETING OF THE OIE WORKING GROUP ON ANTIMICROBIAL RESISTANCE
Paris (virtual meeting), 26-28 October 2021

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**REPORT OF THE MEETING OF THE OIE *AD HOC* GROUP ON TECHNICAL REFERENCES
FOR AQUATIC ANIMALS
Paris (via Zoom), 4-5 May 2021**

1 Opening

The OIE *ad hoc* Group on Technical References for Aquatic Animals (hereafter referred to as ‘the Group’) met from 4th to 5th May 2021 via an on-line application, 13:00 – 16:00 (Central European Time), coordinated by the OIE Headquarters in Paris, France.

Dr Elisabeth Erlacher-Vindel, Head of the OIE Antimicrobial Resistance and Veterinary Products (AMR & VP) Department, welcomed the Group members and thanked them for their participation in the Group. She informed them that the OIE is scaling up its work on antimicrobial resistance (AMR) in aquaculture, and has several future projects in this area, including the development of a *Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Aquatic Species* which will be the output of the Group’s work and the main topic of this meeting. She clarified that the work of the Group is hosted under the OIE’s permanent Working Group on AMR and will be linked to the OIE’s Aquatic Animal Health Standards Commission (AAHSC).

2 Short self-introduction by participants

The Group members each made a short self-introduction.

3 Adoption of the agenda and appointment of the rapporteur

The agenda was adopted without additions or revisions. The Group was chaired by Dr Donald Prater and Dr Siow Foong Chang acted as rapporteur. The adopted Agenda and List of Participants are presented in Appendices I and II of this report, respectively.

4 Brief description of the OIE

4.1 Antimicrobial Resistance and Veterinary Products (AMR&VP) Department

Dr Elisabeth Erlacher-Vindel presented the Group with information on the AMR &VP Department, which hosts AMR related issues, and collaborates with colleagues in other OIE Departments, the OIE Regional Representations, and the AAHSC on topics related to AMR in Aquaculture. An internal OIE AMR in Aquaculture Network has been formed to ensure the flow of regular information on related topics between these entities.

4.2 OIE List of Antimicrobial Agents of Veterinary Importance

Dr Jorge Pinto Ferreira presented the current *OIE List of Antimicrobial Agents of Veterinary Importance* (hereafter the *OIE List*), available here:
<https://www.oie.int/app/uploads/2021/06/a-oie-list-antimicrobials-june2021.pdf>

He also presented the *Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Poultry* (hereafter referred to as the *Poultry Technical Reference Document*), which was the first species specific Technical Reference Document to be completed. The *Poultry Technical Reference Document* is currently published as an Appendix to the October 2020 report of the Working Group on AMR here:

https://www.oie.int/fileadmin/Home/eng/International_Standard_Setting/docs/pdf/WGAMR/A_WG_AMR_Oct2020.pdf

A Subgroup of the Working Group on AMR has now commenced work to develop a *Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Swine*, which will be undertaken in parallel with the work of this Group to develop a *Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Aquatic Animals* (hereafter referred to as the *Aquatic Technical Reference Document*). Each of these Technical Reference Documents will in the future be an annex to the *OIE List*.

5 Overview of Terms of Reference – deliverables

5.1 Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Aquatic Animals

The Group reviewed their Terms of Reference (ToRs), available in [Appendix III](#). Dr Dante Mateo highlighted the three deliverables of the Group:

- Main table, an updated version of the OIE List of Antimicrobial Agents of Veterinary Importance, targeting PIS (Pisces) species (fish, and crustaceans only)
 - o Appendix 1: List of major pathogens and diseases affecting the main aquatic animal species (fish and crustaceans only)
 - o Appendix 2: Antimicrobial classes used to treat aquatic animal infections (based on Appendix 1)

Dr Dante Mateo also presented the template documents for commencing work on the *Aquatic Technical Reference Document*. The Group agreed to use the same methodology to develop the *Aquatic Technical Reference Document* as that used for the *Poultry Technical Reference Document*, adapting this as needed and making note of any necessary changes to the methodology in the meeting reports for transparency.

The Group discussed several considerations for the scope of the *Aquatic Technical Reference Document*, which are listed below.

- The aquatic species to be included within the scope of the *Aquatic Technical Reference Document*

Food-producing aquatic animals: The *OIE List* includes only antimicrobial agents for use in food-producing animals. The Group agreed that as an annex to this list, the *Aquatic Technical Reference Document* should also limit its scope to food-producing animals. Consequently, the Group decided that ornamental fish would not be included in the *Aquatic Technical Reference Document* at this stage. However, the Group acknowledged the importance of antimicrobial use in ornamental fish and proposed that if the *OIE List* is updated in the future to include companion animals or other non-food-producing species, ornamental fish could also be included. The Group was informed that this would be consistent with the approach in other AMR workstreams, noting that ornamental fish will be included in the coming update to the OIE Template for the OIE AMU Data Collection within the category of companion animals. The Group agreed to add a sentence to its ToRs indicating that the *Aquatic Animal Reference Document* will be limited to food-producing aquatic species. The Group also agreed to add text to the “Scope” of the *Aquatic Technical Reference Document* explaining the limitation to food-producing aquatic species, while acknowledging the importance of ornamental fish and other non-food producing aquatic species that will not be included.

Subcategorisation of aquatic species: The Group also discussed the possibility of using subcategories of fish and crustaceans. Dr Dante Mateo presented the subcategories for fish and crustaceans that will be included in the most recent update of the OIE Template for the AMU data collection: “cyprinids

(carps)”, “cichlids (tilapia)”, “siluriforms (catfishes)”, “salmonids (salmon/trout)”, “other (freshwater/diadromous) fish”, and “marine fish”, and “penaeids (marine shrimp/prawns)”. The Group agreed to consider use of subcategorisation once more information had been collected on the molecules that may be included in the *Aquatic Technical Reference Document*, noting that use of a molecule in a particular species or subcategory could be indicated in the comments.

The Group suggested adding text to the “Scope” of the *Aquatic Technical Reference Document* to indicate that it is not intended to be an exhaustive list of all food-producing species of fish and crustaceans. Furthermore, as products may be registered for a range of aquatic species, it was proposed that comments in the table of molecules could also be used to indicate where a molecule is of importance for a particular species.

– The criteria for inclusion of antimicrobial molecules on the *Aquatic Technical Reference Document*

The Group identified several issues of antimicrobial use that may need to be given special consideration when determining the criteria for including an antimicrobial molecule on the *Aquatic Technical Reference Document* – off-label use of antimicrobial agents, use of combination antimicrobial agents, use of compounded antimicrobial agents, and use of antimicrobial agents other than antibacterials.

Authorised antimicrobial agents: The Group was informed that the *Poultry Technical Reference Document* only included antimicrobial molecules which were authorised for use in at least one country. However, it was acknowledged that a different approach may need to be used in the context of aquatic animal species, as there are comparatively fewer veterinary antimicrobials authorised for use in these species, and off-label use of veterinary products may be more common. It was proposed to include these products with the notification “used but not authorised” in the comments section for the molecules in question, and to decide on the basis of all inputs whether these are included.

Combinations of antimicrobial agents: The Group also raised the issue of use of combinations of antimicrobials in aquatic species. It was noted that although the OIE List and the *Poultry Technical Reference Document* contain some instances of combinations of antimicrobials, this is only in rare cases where use of these combinations is well recognised. The Group agreed to have further discussion on how to determine when combinations of antimicrobials can be considered to be “well-recognised” in aquatic animals.

Compounded antimicrobial agents: The Group also discussed the use of compounded antimicrobials in aquatic species and considered whether further input might be needed.

Antimicrobial agents other than antibacterial agents: The Group also considered that these other antimicrobial agents (e.g. antiprotozoal agents) may need to be included on the *Aquatic Technical Reference Document*, as was the case for the *Poultry Technical Reference Document*.

– Inclusion of recommendations on the *Aquatic Technical Reference Document*

The Group reiterated that the *Aquatic Technical Reference Document* is not intended to function as a treatment guideline, although it may be used as a tool to assist countries in the development of their own national treatment guidelines. Where appropriate, some general recommendations for certain molecules could be included in the comments section (as was done for the *Poultry Technical Reference Document*).

– Data sources for the *Aquatic Technical Reference Document*

The Group was informed that the data sources used for the *Poultry Technical Reference Document* included consultation with external experts, and information extracted from the OIE AMU Database, and considered that the same approach could be used for the *Aquatic Technical Reference Document* where necessary. External expertise could be helpful to address any specific areas identified by the Group.

The Group discussed the ways of working for the next eighteen months. The Group agreed to start by working on the Excel Spreadsheet template. Dr Gérard Moulin agreed to start providing input to the Excel Spreadsheet template before this is circulated to the rest of the Group for continued input.

The Group agreed to seek information from a variety of sources, including the initial report used to establish the OIE List, marketing authorisations and publicly available databases of authorised veterinary products in different countries, and proposed that Group members should share any potentially useful resources that they are aware of to the OIE, to then be shared with the Group.

It was agreed to use taxonomically validated pathogen names for Annexes 1 and 2 of the *Aquatic Technical Reference Document* when these are completed.

6 External expert group

It was agreed to postpone discussion on consulting external experts until the need for additional expertise has been better identified by the Group.

7 Date of next meeting

The proposed date of the next meeting is September 21st – 22nd 2021.

8 Any other business

None.

9 Adoption of report (online)

The Group adopted the draft report via online consensus.

.../Appendices

Appendix I

**MEETING OF THE OIE AD HOC GROUP ON TECHNICAL REFERENCES
FOR AQUATIC ANIMALS
Paris (via Zoom), 4-5 May 2021**

Day 1 (May 4)

1. Opening
2. Short self-introduction by participants
3. Adoption of the agenda and appointment of rapporteur
4. Brief description of the OIE
 - 4.1. AMR & VP Department
 - 4.2. OIE List of antimicrobial agents of veterinary importance
5. Overview of Terms of Reference – deliverables
 - 5.1. Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Aquatic Animals
 - Representative fish and crustacean species
 - Major pathogens and diseases affecting fish and crustaceans
 - Antimicrobial classes used in veterinary medicine for fish and crustacean infections

Day 2 (May 5)

6. External expert group
 7. Date of next meeting
 8. Any other business
 9. Adoption of report (online)
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MEETING OF THE OIE AD HOC GROUP ON TECHNICAL REFERENCES FOR AQUATIC ANIMALS

Paris (via Zoom), 4-5 May 2021

List of Participants

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Appendix III**OIE AD HOC GROUP ON TECHNICAL REFERENCES FOR AQUATIC ANIMALS
TERMS OF REFERENCE****Purpose**

The purpose of the OIE *ad hoc* Group on Technical References for Aquatic Animals is to develop a complementary appendix/annex to the OIE List of Antimicrobial Agents of Veterinary Importance based on up-to-date information on the current use of authorised antibiotics for aquatic animals.

Background

The first OIE List of Antimicrobial Agents of Veterinary Importance was adopted by the OIE World Assembly of OIE Delegates in May 2007. The List was further updated and adopted in May 2013, May 2015, May 2018 and May 2019 by the World Assembly. The List was discussed at the 2nd OIE Global Conference on Antimicrobial Resistance and Prudent Use of Antimicrobial Agents. Among the recommendations to the OIE arisen from the participants was to continue the development of the List, including its sub-division in the different animal species.

The task of sub-dividing the List was delegated to the Working Group on Antimicrobial Resistance. It has been recommended that the sub-division of the List by animal species will constitute “Annexes” of the main List. This sub-division is undertaken by Technical Reference *ad hoc* Groups. A first exercise has been recently done for the antimicrobial agents used in poultry including the development of a methodology that could apply to other species. The second group to be addressed are the species under the category of “aquatic animals”.

Objectives

The document will provide relevant information, without serving as a treatment guideline, complementing the current OIE List of Antimicrobial Agents of Veterinary Importance. This document is expected to be achieved by further testing of the methodology used to establish the "Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Poultry”.

By identifying antimicrobial agents used in aquatic animals, it can contribute to the development and update of national treatment guidelines, advice on prevention and best practice management, risk management, and risk prioritisation to minimise and contain AMR.

The document to be produced will be focused on fish and crustaceans, taking into account the information available in the existing the OIE List of Antimicrobial Agents of Veterinary Importance.

It is acknowledged that the situation of antimicrobial agents in aquaculture is very diverse in different regions for licensing, availability, off-label use and the general information provided in the document will need to be interpreted in light of the local context.

Aquatic species-related recommendations stated in the OIE Standards and Guidelines (namely on the OIE List of Antimicrobial Agents of Veterinary Importance) will be considered alongside the document to be produced.

Deliverables

The output is expected to be a table or a chart and appendices that complements the OIE List of Antimicrobial Agents of Veterinary Importance and should include classes of antimicrobials, use patterns and relevant pathogens/diseases in the main species, as follows:

- Main table, an updated version of the OIE List of Antimicrobial Agents of Veterinary Importance, targeting PIS species (fish and crustaceans only)

- Appendix 1: List of major pathogens and diseases affecting the main aquatic animal species (fish and crustaceans only)
- Appendix 2: Antimicrobial classes used to treat aquatic animal infections (based on Appendix 1)

The Technical Reference *ad hoc* Group should draft explanatory text to support the table or chart also recognising challenges such as variations among countries in:

- the availability of data;
- the distribution of aquatic animal populations and diseases with respect to the need for different antimicrobial classes;
- production, systems, environments and management practices;
- access to different antimicrobial classes, vaccines and other tools.

It should be noted that the table is not intended to be used as a treatment guideline.

Prerequisites

The Group members should:

- Sign the OIE Undertaking on Confidentiality of information;
- Complete the Declaration of Interest Form;
- Understand that the membership of the Group may be retained between its meetings to ensure continuity of the work.

Timelines

18 months to complete the work

Recommended working plan

Electronic meetings with additional physical meetings if necessary and feasible.

Sources of information

- OIE List of Antimicrobial Agents of Veterinary Importance
 - Existing treatment guidelines
 - Literature search
 - Existing marketing authorisations for the species
 - Expert advice
-

**REPORT OF THE MEETING OF THE OIE *AD HOC* GROUP ON TECHNICAL REFERENCES
FOR AQUATIC ANIMALS**

Paris (via Zoom), 21-22 September 2021

1 Opening

The OIE *ad hoc* Group on Technical References for Aquatic Animals (hereafter referred to as ‘the Group’) met from 21st to 22nd September 2021 via an on-line application, 13:00 – 16:00 (Central European Time), coordinated by the OIE Headquarters in Paris, France.

Dr Ólafur Valsson, Deputy Head of the OIE Antimicrobial Resistance and Veterinary Products (AMR & VP) Department, welcomed the Group members and thanked them for their participation in the Group.

2 Adoption of the agenda and appointment of the rapporteur

The agenda was adopted without additions or revisions. The Group was chaired by Dr Donald Prater and Dr Siow Foong Chang acted as rapporteur. The adopted Agenda and List of Participants are presented in Appendices I and II of this report, respectively.

3 Review of input provided to the Excel Spreadsheet template

3.1. Limitations on the sources of information and geographical coverage of antimicrobial use search

The Group was thanked for their efforts in collecting data on use of antimicrobials in aquatic animals to fill the Excel Spreadsheet template of the *Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Aquatic Animals* (hereafter referred to as the *Aquatic Technical Reference Document*).

The Group identified several challenges and limitations associated with the information collected so far. It was noted that:

- Information is not always available on whether use of a particular antimicrobial agent in a given country is in accordance with its officially permitted usage. It can therefore be difficult to distinguish products authorised for use in aquatic species from the off-label use authorised for other species. In some cases, direct contact would need to be made with the veterinary services of a country to obtain this information.
- Information on use taken from published articles and other text-based sources may not be up to date. It is also difficult to confirm if the information from such sources is reflective of current use in the field.
- The information collected may not be comprehensive for all geographic areas with aquaculture production systems, and has less information for crustaceans than for fish. Further information may need to be sought in consultation with external experts.

3.2. Consideration of off-label use of antimicrobials

The Group discussed the off-label use of antimicrobial agents in aquatic species, and whether antimicrobial agents used in this way should be included in the *Aquatic Technical Reference Document*. It was noted that in many countries, very few or no antimicrobial agents are authorised for use in aquatic species. In these cases, antimicrobial agents that are not authorised for use may in fact be commonly used in aquatic animals, and in some countries, such use may be the norm. Some countries do have regulations to permit off-label use of antimicrobial agents in aquatic animals under certain circumstances.

The Group also considered the methodology and approach used for the Technical Reference Document Listing Antimicrobial Agents of Veterinary Importance for Poultry (hereafter Poultry Technical Reference Document), for which antimicrobial agents were only included if they were found to be authorised for use in poultry species in at least one country. It was agreed that it would be important to use a similar approach for all Technical Reference Documents Listing Antimicrobial Agents of Veterinary Importance for different animal species for consistency. Furthermore, as the Aquatic Technical Reference Document is to be used as a risk management tool for the prudent and responsible use of antimicrobial agents, it was considered preferable to avoid including off-label use of antimicrobial agents in the main table as it could be interpreted as an endorsement for their use.

Based on this, the Group agreed that the *Aquatic Technical Reference Document* should only include antimicrobial agents which have been identified as authorised for use in aquatic animals in at least one country.

However, the Group agreed that off-label use of antimicrobial agents in aquatic animals will be addressed in the accompanying explanatory text to the *Aquatic Technical Reference Document*. This explanatory text will acknowledge the importance of off-label use of antimicrobial agents in aquatic species and discuss their use in context. Further information could also be included where relevant in the annexes (*List of major pathogens and diseases affecting the main aquatic animal species (fish and crustaceans only)* and *Antimicrobial classes used to treat aquatic animal infections*). In this way, the *Aquatic Technical Reference Document* will function as a positive list (including only those antimicrobial agents which are authorised for use in aquatic animals) while acknowledging that individual countries may take a different approach to regulation of off-label use of antimicrobial agents in aquatic animals.

3.3. Consideration of combinations of antimicrobials (pending discussion on off-label use)

The Group discussed use of combinations of antimicrobial agents in aquatic species, and whether such combinations should be included in the *Aquatic Technical Reference Document*. It was agreed by the Group to use the same approach as for the *Poultry Technical Reference Document*, and therefore to only include well-established combinations for use in aquatic animals, with proven efficacy and proven synergism.

3.4 Antimicrobials other than antibiotics

The Group discussed the use of antimicrobial agents other than antibiotics (such as antiprotozoals, antifungals, antivirals, as well as use of biocides and disinfectants) in aquatic species, and whether such agents should be included in the *Aquatic Technical Reference Document*.

It was noted that many chemical products with antibacterial properties are used in aquaculture, as are certain antifungals with antibacterial properties (such as pyceze/bronopol) and that such products may be authorised for this use. In other cases, chemical products used in hatcheries of crustaceans and fish as disinfectants are, in some cases, used to treat live adult fish.

The Group provisionally agreed to exclude biocides and disinfectants in the *Aquatic Technical Reference Document*, but to include the reasons for this decision in the explanatory text, as well as

recognising that these are important substances used in aquaculture. It was agreed that further information could be added on the types of chemicals, as well existing guidance and references for their use.

3.5. Consideration of the Excel Spreadsheet template

The Group reviewed the updated Excel Spreadsheet template of the *Aquatic Technical Reference Document* which had been updated to include the Group's feedback following the previous meeting.

It was noted that this feedback included information on use of antimicrobial agents for which no authorised product had been identified. The Group agreed to seek further information on these products and, in line with the decision on off-label use, to not include these antimicrobial agents unless an authorised product could be found. This was identified as an area that external experts could potentially help with.

It was also noted that some information related to several antimicrobial agents obtained from the *OIE Global database on antimicrobial agents intended for use in animals* may be difficult to understand due to the language barrier. The Group members requested that the OIE contact the OIE National Focal Points for Veterinary Products and/or Aquatic Animals to seek clarification. The Group noted that where differences existed between information collected by the Group, information from the OIE database, and the *OIE List of Antimicrobial Agents of Veterinary Importance* (hereafter the *OIE List*), criteria should be developed to determine whether an antimicrobial agent should be included in the *Aquatic Technical Reference Document* or not. It was agreed that if an antimicrobial agent was listed as "Used" for aquatic species in the *OIE List*, but no other information could be found on its current use in aquatic species, careful consideration should be given as to whether this would be removed from the *OIE List*.

The Group discussed whether the species category of "fish" (currently "PIS" in the *OIE List of Antimicrobial Agents of Veterinary Importance*) should be considered separate to "crustaceans", or whether these should be grouped under one category. It was noted that separating the two categories would create a list that would be more user-friendly, though this would require some additional work.

The Group discussed the issue of terminology for species. For example, it was noted that the current draft of the Excel spreadsheet template makes reference to "shrimps" and "lobsters", whereas the terms used in other parts of the world are "prawns" and "crayfish". The Group agreed to use the Latin name of aquatic species and to use the current terminology for subcategories of fish (Cyprinidae, Cichlidae, Salmonidae, Siluriformes for freshwater fish) and crustaceans (Penaeidae for shrimp/prawn) used in the *OIE Global database on antimicrobial agents intended for use in animals*,

4 Evaluate need for external experts

The Group agreed that there is a need to reach out to external experts to provide additional information for the *Aquatic Technical Reference Document*. The Group was reminded that any feedback received from external experts would be reviewed by the Group, and that the final draft of the *Aquatic Technical Reference Document* result would be sent to the Working Group on AMR.

The Group found that there may be additional opportunities for outreach to and engagement with other networks and resources to request information on lists of antimicrobials authorised for use in aquatic species before contacting external experts. The Group was informed that the OIE currently runs a Network on AMR in Aquaculture who could be contacted. It was also proposed that information could be sought from the OIE Focal Points for Veterinary Products and/or Aquatic Animals, and to potentially target questions to Focal Points from countries which have significant aquaculture production and/or for which information has been identified as missing. It was suggested that it would also be important to engage with major producer associations, the pharmaceutical industry, the medicines regulatory authorities of a country or region, and aquatic veterinary associations.

The Group agreed to conduct some additional targeted outreach – for this, the Group would develop questions to send as part of this outreach that would be applicable for all antimicrobial classes, and a list of contacts. The information collected would be reviewed by the Group in the next meeting.

Any outstanding questions or information gaps would be sent to additional external experts, and the feedback would be reviewed in a subsequent meeting of the Group.

The Group members will be requested to provide suggestions for the additional external experts. It was noted that the experts should include individuals such as veterinarians, producer groups, industry, and be representative of different countries, regions, species groups (including marine vs. freshwater species) and temperature ranges.

5 Date of next meeting

The proposed date of the next meeting is 8th-9th February 2022.

6 Any other business

None.

7 Adoption of report (online)

The Group adopted the draft report via online consensus.

.../Appendices

Appendix I

**MEETING OF THE OIE AD HOC GROUP ON TECHNICAL REFERENCES
FOR AQUATIC ANIMALS
Paris (via Zoom), 21-22 September 2021**

Day 1 (September 21)

1. Opening
2. Short self-introduction by participants
3. Adoption of the agenda and appointment of rapporteur
4. Review of input provided to the Excel Spreadsheet template.
 - 4.1. Limitations on the sources of information and geographical coverage of antimicrobial use search
 - 4.2. Consideration of off-label use of antimicrobials
 - 4.3. Consideration of combinations of antimicrobials (pending discussion on off-label use)
 - 4.4. Antimicrobials other than antibiotics

Day 2 (September 22)

5. Evaluate need for external expert group
 6. Date of next meeting
 7. Any other business
 8. Adoption of report (online)
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**MEETING OF THE OIE AD HOC GROUP ON TECHNICAL REFERENCES
FOR AQUATIC ANIMALS**

Paris (via Zoom), 21-22 September 2021

List of Participants

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Updated Work Programme for the OIE Working Group on Antimicrobial Resistance

Subject	Issue/Action	Status	Timeline
OIE List of Antimicrobial Agents of Veterinary Importance, subdivision by species	poultry subdivision pilot exercise, including development of pilot methodology	completed	April 2021
	adaptation/application of the methodology to swine	ongoing	April 2022
	consideration of other species: completed an initial discussion on prioritisation	completed	
	aquatics	in progress	October 2022
	bovine	future work	commence 2022
	discussion on other animal species [small ruminants, camels, companion animals...]	future work	April 2022
	discussion on the addition of companion animals	completed	April 2021
review of the Main OIE List	future work	TBD	
OIE Global AMU database	transition of data collection from spreadsheet to a database system, expert advice	IT project ongoing	October 2022
	refinement of the numerator, denominator (biomass), and reporting	ongoing	
	having a quantitative reporting option on species level	future work	April 2023
Field level data	reflection on obtaining field level data	ongoing; pilot project in countries	
OIE work on antiparasitics	oversight	ongoing	
	update on OIE antiparasitic resistance work	in progress	April 2022
Terrestrial and Aquatic OIE Code chapters related to AMR	update of the Chapters: TAHC 6.10	in progress	October 2023, tbc
	discussion of update of other TAHC chapters	future work	April 2022
Alternatives to Antimicrobials (ATA)	information on categorisation of products	future work	
	review of related existing information in the OIE Manual	future work	
Substandard and falsified products	oversight	ongoing	
	update on OIE work on substandard and falsified veterinary products	in progress	April 2022
Monitoring and Evaluation framework for the OIE Strategy on AMR		completed	October 2021
	update on progress and implementation	ongoing	

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