



**REPORT OF THE MEETING OF THE OIE AD HOC GROUP ON TECHNICAL REFERENCES  
FOR AQUATIC ANIMALS  
Paris (via Zoom), 8–9 February 2022**

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**1 Opening**

The OIE *ad hoc* Group on Technical References for Aquatic Animals (hereafter referred to as ‘the Group’) met from 8 to 9 February 2022 via Zoom, 13:00 – 16:00 (Central European Time), coordinated by the OIE Headquarters in Paris, France.

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

Dr Javier Yugueros-Marcos, the new AMR-VP Department Head was introduced to 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 Information resulting from the outreach and from additional feedback from Group members**

Dr Dante Mateo reminded the Group that, due to the limitations associated with the information collected on antimicrobial use in aquaculture, an outreach for additional information on authorized use was conducted in African and Asian countries. From this outreach, information was obtained from China, Chinese Taipei, Indonesia, Japan, Thailand, Vietnam, Burkina Faso, Cabo Verde, Eswatini, Lesotho, Malawi, Mauritius, Nigeria, Tchad, Togo, Tunisia, and Cote d’Ivoire.

An updated version of 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*) that included the information obtained from the outreach and additional feedback provided by Group members was presented to the Group.

Discussion on each molecule was carried out to establish if they should be considered “used” or “not used” based on their authorization for use in aquatic animals for aquaculture in at least one country.

### 3.2 Consideration of the Excel spreadsheet template

3.2.1 The Group agreed that the following molecules should be **included as “used”** in the *Aquatic Technical Reference Document*, and recommended to **keep** the species reference PIS in the *OIE List of Antimicrobial Agents of Veterinary Importance* (hereafter the *OIE List*):

- Florfenicol
- Thiamphenicol
- Lincomycin
- Erythromycin
- Kitasamycin
- Amoxicillin
- Ampicillin
- Fosfomycin
- Flumequin
- Oxolinic acid
- Enrofloxacin
- Sulfamerazine
- Sulfamonomethoxine
- Ormethoprim + Sulfadimethoxine
- Trimethoprim + Sulfonamide
- Doxycycline
- Oxytetracycline
- Tetracycline

3.2.2 The Group agreed that the following molecules should be **included as “used”** in the *Aquatic Technical Reference Document*, and recommended to **add** the species reference PIS in the *OIE List*:

- Gentamicin
- Tilmicosin
- Tiamulin
- Ciprofloxacin
- Sulfadiazine
- Chlortetracycline

3.2.3 The Group agreed that the following molecules should **not be included** on the *Aquatic Technical Reference Document*, and recommended to **remove** the species reference PIS from the *OIE List*:

- Novobiocin
- Spectinomycin
- Streptomycin
- Josamycin
- Mirosamycin
- Spiramycin
- Tobicillin
- Miloxacin
- Sulfafurazole
- Sulfamethoxine

3.2.4 The Group agreed that **further information/review is needed** before making a decision for the following molecules **with** species reference PIS in the *OIE List*:

- Kanamycin, to confirm if used in combination with amoxicillin as it is not a well-established combination
- Neomycin, to confirm if used individually or in combination with doxycycline
- Bicozamycin, to confirm if still commercialized
- Sarafloxacin, to confirm if its use is authorized
- Sulfadimethoxine, to confirm if its use is authorized

- 3.2.5** The Group agreed that **further information/review is needed** before making a decision about the following molecules **without** species reference PIS in the *OIE List*
- Rifampicin, a restricted molecule for specific use in certain diseases. To check the use in combination with doxycycline, as it is apparently not a well-established combination
  - Cefalexin, to confirm if its use is authorized
  - Sulfadimethoxazole, used in combination with erythromycin and trimethoprim; apparently a not well-established combination (see also Trimethoprim, below). The name should be revised as sulfamethoxazole
  - Trimethoprim, used in combination with erythromycin and sulfamethoxazole (see also sulfamethoxazole, above)
- 3.2.6** The Group agreed that the following molecules **NOT** currently included in the *OIE List* should be **included** as “used” in the *Aquatic Technical Reference Document*, and recommended to **add** them in the *OIE List* with the species reference PIS:
- Levomycin
  - Sulfisozole sodium
- 3.2.7** The Group agreed that the following molecules **NOT** included in the *OIE List* should **not be included** on the *Aquatic Technical Reference Document* despite some indications of use in aquatic species:
- Flavomycin, used in aquatic species as growth promoter
  - Metronidazole, used in aquatic species but not as an antibacterial
- 3.2.8** The Group agreed that for the following molecules **NOT** included in the *OIE List* **further information/review is needed** before making a decision:
- Amoxicillin trihydrate, used in aquatic species but decision is needed on whether to include different salts of the same molecule or not
  - Ormetoprim in combination with sulphamonomethoxine, used in aquatic species, but to confirm if it is considered a well-established combination

#### 4 Addressing List of Major Pathogens and Diseases

The Group discussed the methodology to be used for the development of the list of major pathogens and diseases of fish and crustaceans. It was suggested that the first source of information should be the “specific comments for aquatic animals by class” that will be included in the final version of the *Aquatic Technical Reference Document*. This information will be collected from the data already gathered in the Excel spreadsheet.

It was pointed out that, unlike other species-specific lists being developed for single species, the number of aquatic species of fish and crustaceans used in aquaculture is large. This will require selection of representative species to be included prioritizing the major aquaculture species from different regions.

It was also suggested to seek similar lists of main diseases and pathogens in aquaculture obtained from other international organisations as they would be useful sources of information.

Some Group members offered to support Dr Mateo to develop a first draft on the list of diseases and pathogens of fish and crustaceans. This draft will later be circulated by email for input within the Group.

#### 5 Evaluate need for external experts

The need for external expertise to complement the work of the Group was evaluated. It was considered that since there is enough expertise within the Group, it will not be necessary to seek for external expertise to complement the work developed. A group of peer reviewers will be sought for feedback on the *Aquatic Technical Reference Document* once it has been completed. It will include the list of diseases/pathogens and the list of antimicrobial classes used to treat them.

For completion of the *Aquatic Technical Reference Document*, another round of review by the Group members will be necessary to make decisions on the addition or deletion of some molecules, including various combinations, and to have a final version of the specific comments by antimicrobial class in the table.

Additional information such as confirmation of the authorization for use in aquaculture of some molecules will be obtained by Group members. Feedback will be provided by email exchange before the next meeting.

It was suggested that the Group will start evaluating the composition of the peer reviewer group. It is expected that peer reviewers would also represent commercial organisations as their perspective is considered useful. It was also suggested to consider OIE experts in the search of peer reviewers. Geographic representation from major aquaculture areas and expertise covering both finfish and crustaceans is desirable for selecting the peer reviewers. Names will be proposed beforehand and selections made during the next Group meeting.

## 6 Dates of next meeting (and coming tasks)

Action	Timeframe
Further review/information of various molecules listed in 3.2.4, 3.2.5, and 3.2.8	Before June 2022
Preparation of final draft of the <i>Aquatic Technical Reference Document</i> with draft of table of diseases/pathogens	Before June 2022
Selecting candidates for peer reviewers	Before June 2022
Meeting <ul style="list-style-type: none"> <li>- Review draft of <i>Aquatic Technical Reference Document</i> with specific comments by class and list of diseases/pathogens</li> <li>- Discuss development of table of molecules used for main diseases/pathogens</li> <li>- Selection of peer reviewers</li> </ul>	8-9 June 2022 1-4 PM (Paris time)
September meeting	Exact dates to be identified during the June meeting
Finalization of the Technical Report	October 2022 (before the meeting of the Working Group on AMR)

## 7 Other business

OIE statement on meetings remains to be online/virtual. A suggestion was made to consider having an in-person final meeting in September (month/dates to be confirmed) that would facilitate work for delivering the expected technical documents on-time.

## 8 Adoption of report (online)

OIE minutes will be passed to Dr Chang and will then be circulated to everyone for comments. The final version of the minutes will be sent by e-mail once inputs have been incorporated.

.../Annexes

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**Day 1 (8 February 2022)**

1. Opening
  2. Adoption of agenda and appointment of chair and rapporteur
  3. Review of input provided to the Excel Spreadsheet template
- Points for discussion:
- Additional information provided by AHG members
  - Results of outreach for additional (countries from Asia and Africa)

**Day 2 (9 February 22)**

4. Review of input provided to the Excel Spreadsheet template (continuation)
  5. Addressing list of major pathogens and diseases
  6. Evaluate need of external experts
  7. Date of next meeting
  8. Other business
  9. Adoption of report (online)
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**List of Participants**

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