Report of the Meeting of the *ad hoc* Group on Risk management practices at domestic-wild animal interface

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21–23 January 2025
Paris

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1. Background

Transboundary animal diseases (TADs), such as African swine fever (ASF), avian influenza (AI) or foot and mouth disease (FMD) continue to spread worldwide and have detrimental impacts on global animal health, trade and livelihood. In several countries such diseases are endemic, they can spread from wild to domestic animals and vice versa, keeping the infection transmission cycle active and difficult to control due to the complex and multiple factors and risk pathways.

For some diseases, WOAH standards include the possibility of recognition of animal health status in animal subpopulations, differentiated by livestock and wild (e.g. ASF). For some other diseases (e.g. avian influenza, classical swine fever), standards require Members to not impose bans on the international trade of livestock animals in response to the detection of those diseases in wildlife.

WOAH has launched a consultancy to provide practical guidance on how to effectively manage risks at the domestic-wild animal interface according to WOAH international standards to preserve animal health status of domestic subpopulations for business continuity. This consultancy was awarded to Dr Christian Gortázar, Dr Ursula Höfle and Dr Joaquín Vicente from the IREC institute, Universidad de Castilla-La Mancha, Spain.

The *ad hoc* Group (hereafter referred to as 'the Group') was convened to peer-review the first draft of the guidelines and provide expert opinions and recommendations on the specific technical content identified by the consultants.

2. Welcome

Dr Emmanuelle Soubeyran, Director General of WOAH, welcomed the members of the Group and thanked them for their contribution and support. WOAH strongly relies on the scientific expertise of its experts to provide guidance to its Members through the development of standards and guidelines, with the objective of their correct implementation by Members. She pointed out that the risk management practices at the interface between livestock and wild animals are important to address spillover events from wild animals to livestock animals and vice versa. Dr Soubeyran also shared some other updates with the Group, including the development of WOAH's 8th Strategic Plan for the 2026 to 2030, a project to review WOAH's Basic Texts and the plan for the Animal Health Forum as part of the 92nd General Session that will be dedicated to vaccines and vaccination.

3. Adoption of the agenda and appointment of Chair

Dr Mark Schipp was appointed as Chair for the meeting and the WOAH Secretariat acted as rapporteur. The *ad hoc* Group adopted the provisional agenda. The agenda, list of participants and Terms of Reference are provided as Annexes 1, 2 and 3, respectively.

4. Key concepts and structure

The Group agreed that while the guidelines should provide Members with guidance on how to effectively manage risk at the wildlife-livestock interface (hereafter referred to as 'WLI') as described in WOAH disease-specific standards, they should also be applicable to mitigate the risk of disease spillover between these two subpopulations for diseases where these provisions are not explicitly mentioned in the standards. For this reason, the Group advised that the guidelines should consider a broad spectrum of diseases and farming systems for which this concept may be applied. It agreed that the guidelines should not be prescriptive for selected cases of the WLI. Instead, the aim is to provide a structured methodology that will support Veterinary Services in any WLI scenario to identify and address problems through their own customised risk mitigation programme with specific interventions tailored to local circumstances. The Group reviewed the draft structure of the guidelines presented by Dr Gortázar and agreed on the headings and coverage outlined from 4.1. to 4.8. below.

In addition, the Group recommended that the definitions of terms used in the guidelines should align with the terms and Glossary definitions used in the WOAH *Terrestrial Animal Health Code* to avoid introducing new terms that may be confusing for Members.

The Group emphasised that the Members should consider the impact of the risk mitigation measures on environment and biodiversity (e.g. use of insecticides or acaricides), in addition to disease control in livestock.

4.1. Understanding the wildlife-livestock interface (WLI)

WLI is an interplay of many actors, factors and scales. The Group agreed that geographical scale, livestock species, farming systems, wildlife species, disease epidemiology, seasonality, and human factors are the critical elements in defining and understanding the WLI. Furthermore, the Group highlighted that WLI risk management alone is not the silver bullet, rather, WLI risk management should be part of a comprehensive disease control programme including movement control, biosecurity, vaccination, etc. It also highlighted the need for the Veterinary Services and wildlife authorities to work together on disease surveillance and WLI risk management.

4.2. Defining the scenario: how to assess and map WLI-related risks at the subnational or national level

The Group agreed on the importance of identifying key risk factors for targeted livestock and diseases across different production systems, mapping the WLI, and characterising the main scenarios not only at epidemiological unit level but also at large scale (local, national and regional level). Understanding and mapping the characteristics of the WLI at a large scale would enhance the capacity to assess the spatial and temporal likelihood of disease transmission at the WLI. It would also enable the definition of the geographical scope of control strategies including biosecurity programmes, the use of zoning or compartments, and the selection of appropriate measures to mitigate risks at a specific interface, while considering their impact on the environment and wildlife.

The Group discussed the need to identify the minimum requirements that Members should meet to effectively manage risk at the WLI. This could include basic epidemiological data, capacity to conduct basic risk analysis, appropriate legal framework and the public and private commitment to implement the risk mitigation measures described in the guidelines.

4.3. How to assess the WLI-related risks at the epidemiological unit level

The Group agreed on the need to provide guidance to conduct risk assessment at epidemiological unit level to complement the risk assessment at larger scale described in the previous section. It discussed the multiple risk factors and risk pathways to be assessed and managed at the epidemiological unit level and suggested the inclusion of a checklist to guide this process.

The Group agreed to include only key points pertaining to the epidemiological unit and specifically targeting the WLI to avoid conducting a broad epidemiological outbreak investigation which is beyond the purpose of the guidelines. Dr Gortázar proposed to include a questionnaire to identify potential risk points that should be assessed and scored. The Group noted that the scoring should be detailed and clearly explained. It also highlighted the importance of participatory methods to involve farmers and the use of visual aids like maps and diagrams to enhance understanding of the potential risk points at the WLI.

4.4. Communicating the risk and transferring knowledge to vets, farmers & others

The Group emphasised the importance of communication with veterinarians and farmers, highlighting the need for a section on risk communication. The Group recommended including methods of the risk assessment and risk mitigation in a detailed WLI risk report for communicating risk assessment. Also, it agreed that farm-specific action plans should be developed, and involving farmers in developing the plan ensures better feasibility, compliance and effectiveness. It is also essential to establish a cyclical process that incorporates learning from both successes and failures to continuously refine and enhance future plans.

The Group also raised the need to consider social aspects in the communication plan to avoid unwanted reaction, especially when unpopular measures are proposed such as fencing.

Finally, the Group emphasised that communication should occur at every level of the WLI disease risk analysis (i.e. risk identification, risk assessment and risk management) involving all the stakeholders and when relevant, the community and/or the public.

4.5. Training and community engagement

The Group recommended dedicating a specific section on training, education and community engagement to emphasise the importance of a participatory approach and ensuring that stakeholders have the relevant knowledge and tools for effective risk mitigation. The Group suggested including existing training materials as a complementary resource of the guidelines. For effective education, the Group emphasised the importance of providing farmers with successful examples that demonstrate the positive outcomes of mitigation measures, helping them understand the benefits of adhering to the guidelines. A ‘bottom-up’ approach is also recommended, where successful measures applied by farmers could be highlighted and shared with the wider community to encourage buy-in.

In addition, the Group recommended that the concept of community engagement be introduced in the guidelines, noting that community leaders and the private sector play a significant role in making decisions and mitigating risks.

4.6. Risk mitigation at the WLI

WLI is a dynamic system that may evolve depending on factors including those listed in 4.1. and influence the degree of spill-over/spill-back of pathogens. The Group noted that while several strategies to mitigate risk at the WLI could be described in the guidelines, it is important for those using the guidelines to fully understand their risk context (points 4.2. and 4.3.), the cost-benefit of the proposed risk mitigation interventions, and to recognise the barriers to implementing and maintaining these interventions.

Regarding the types of risk mitigation interventions, the Group highlighted that good farming practices (e.g., cleaning and disinfection, implementing and maintaining biosecurity, and promoting biodiversity of plants and wildlife at the farm level) are essential. The Group also recommended adding a section on pest and vector control, highlighting the challenges of managing vectors, particularly the difficulty in controlling tick populations while avoiding environmental contamination.

Even if the risk mitigation measures are correctly applied, the Group clarified that there is not a perfect risk mitigation strategy as a single lapse in the biosecurity, e.g. feeding untreated swill or contaminated meat products to animals, could introduce a pathogenic agent to the premises and lead to an outbreak.

The Group also discussed the barriers to implementation and emphasised that risk mitigation measures must be socially acceptable and practical for farmers to implement. Additionally, it was recommended to incorporate risk mitigation strategies derived from farmers' experiences, as this fosters a trusting relationship with them.

4.7. Assessing the impact of risk mitigation at the WLI

The Group stressed the importance to regularly monitor the effectiveness of the interventions as well as to conduct periodic evaluation of the entire strategy to be able to timeously implement corrective actions when needed. The Group recommended creating a section on the monitoring and evaluation of the risk mitigation measures, including a procedure to ensure their correct implementation. The verification of the strategy could be in the form of implementing surveillance to demonstrate absence of the disease, for early detection or measuring the reduction of the likelihood of spill-over events. References to the disease specific article on surveillance in *Terrestrial Code* and Chapter 1.4 should be considered.

4.8. Case studies

The Group agreed to include real case studies to demonstrate the use of the different risk mitigation strategies. It recommended including a variety of examples involving different species (e.g., pigs, cattle, poultry), farming systems (e.g., large commercial farms, small-scale backyard farms), and geographical regions. Individual members of the Group agreed to source studies from their contacts and locality to enrich the guidelines.

5. Dissemination strategy

The Group recommended employing a comprehensive dissemination strategy to maximise the impact of the guidelines and suggested targeted communication campaigns for Veterinary Services, including a launch webinar. Additionally, the Group emphasised the importance of disseminating information to the wildlife sector, livestock keepers, and the private veterinary sector (e.g. World Veterinary Association). The Group proposed exploring dissemination through internal WOAH channels, such as the General Session, WOAH publications, and other events (e.g. SGE-ASF meetings).

6. Next steps

The Secretariat informed the Group that the consultants will revise the guidelines based on the recommendation of the Group. The guidelines will also be presented to the Scientific Commission for Animal Diseases in February 2025 for its opinion.

…/Annexes

Annex 1. Agenda

MEETING OF THE *AD HOC* GROUP ON RISK MANAGEMENT PRACTICES AT DOMESTIC-WILD ANIMAL INTERFACE

21 - 23 January 2025

Day 1: 21 January

1. Opening
2. Welcome and brief introduction of the participants
3. Adoption of the agenda and appointment of Chair
4. Group discussion and Recommendations
   - Section 2 – Key Concepts
   - Section 3 – How to use these guidelines
   - Section 4 – Understanding the wildlife-livestock interface (WLI)
   - Section 5 – Defining the scenario: how to assess and map WLI-related risks at the national/regional level

Day 2: 22 January

5. Group discussion and Recommendations
   - Section 6 – How to assess the WLI-related risks at the production unit level
   - Section 7 – Communicating the risk and transferring knowledge to vets, farmers & others
   - Section 8 – Risk mitigation at the WLI
   - Section 9 – Case studies

Day 3: 23 January

6. Conclusions
   - Presentation of key changes in Second draft of the guidelines
   - Presentation of key recommendations for the AHG report
   - Way forward

Annex 2. List of Participants

MEETING OF THE *AD HOC* GROUP ON RISK MANAGEMENT PRACTICES AT DOMESTIC-WILD ANIMAL INTERFACE

21 - 23 January 2025

MEMBERS OF THE *AD HOC* GROUP

Dr Mark Schipp (Chair)
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Annex 3. Terms of Reference

MEETING OF THE *AD HOC* GROUP ON RISK MANAGEMENT PRACTICES AT DOMESTIC-WILD ANIMAL INTERFACE

21 - 23 January 2025

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TERMS OF REFERENCE

1. Purpose

The purpose of the *ad hoc* Group is to review the guidelines developed through the WOAH consultancy project on 'Risk management practices at the domestic-wild animal interface' and provide recommendations and experts' opinion on specific aspects identified by the authors.

The *ad hoc* Group is convened under the authority of the Director General of the WOAH and reports through the Scientific Commission for Animal Diseases.

2. Background

Transboundary animal diseases (TADs), such as African swine fever (ASF), avian influenza (AI) and foot and mouth disease (FMD) continue to spread worldwide and have detrimental impacts on global animal health, trade and livelihood. In several countries such diseases are endemic, they can spread from wild to domestic animals and vice versa, keeping the infection transmission cycle active and difficult to control due to the complex and multiple factors and risk pathways.

For some diseases, WOAH standards recognise the possibility of recognition of animal health status in animal subpopulations, differentiated by domestic and wild (e.g. ASF). For some other diseases (e.g. avian influenza, classical swine fever), standards require Members to not impose bans on the international trade of domestic animals in response to notification in wildlife.

Therefore, WOAH is committed to provide specific recommendations to guide Members on how to mitigate the risk of disease transmission between wild and domestic animals. These guidelines will consider that the spread of the disease at the interface between wild and domestic animals is influenced by several factors, such as livestock husbandry (e.g., enclosed, herded or free-ranging, level of biosecurity), landscape and land use, wild animal management practices, among other factors. The guideline will also include the best surveillance options to demonstrate the effectiveness of the implemented control measures.

In such a context, WOAH has launched a consultancy to provide practical guidance on how to effectively manage risks at the domestic-wild animal interface according to international standards to preserve animal health status of domestic subpopulations for business continuity. The guidelines will include specific recommendations on the following:

- How to conduct risk assessments at the domestic-wild animal interface;
- Design, implementation and evaluation of risk management measures at the domestic-wildlife interface based on risk assessment in the interface;
- Implementing surveillance for early detection and demonstration of freedom in the domestic population at risk;
- Risk communication targeting domestic and wildlife sector;
- Case studies on specific TADs such as ASF

At the WOAH *ad hoc* Group meeting, the consultants will present the first draft of the guidelines. Based on the feedback from this *ad hoc* Group, the consultants will revise the guidelines and present to the WOAH Scientific Commission for Animal Diseases in 2025 for its opinion and subsequently to the WOAH DG for validation.

3. Actions to deliver

The *ad hoc* Group will:

- **Review and discuss the draft guidelines on risk management at domestic-wild animal interface.** The guidelines should be suitable to the target audience (Veterinary Services, animal keepers, wildlife sector), providing tools on how to implement the measures covered and how to monitor success, with illustration using practical examples.

- **Provide expert opinion and recommendations on the specific technical content of the guidelines identified by the consultants.**

4. WOAH Considerations

Ad hoc Group members are expected to be familiar with:

- Draft guidelines for risk management practices at the domestic-wild animal interface.
- WOAH international standards in particular, surveillance, disease specific *Terrestrial Code* Chapters on ASF, AI, FMD, CSF, etc.
- All other relevant material shared by the WOAH and *ad hoc* Group's members.

5. Expectations

Ad hoc Group members should:

- Sign the WOAH *Undertaking on Confidentiality of Information* (if not done already).
- Complete the *Declaration of Interests* form.
- Read and study in detail all materials provided by the WOAH prior to the meeting.
- Agree on the appointment of the Chair of the Group.
- Contribute to discussions and recommendations on the first draft.

6. Deliverables

Deliverables of this *ad hoc* Group include:

- Provide feedback on the draft guidelines developed through the consultancy.
- Produce a report of the meeting summarising its recommendations within 2 weeks of the meeting.

7. Tentative timeline

An introductory video call will be organised in January 2025 to provide the *ad hoc* Group with the necessary background information including materials to be discussed during the in-person *ad hoc* Group meeting, which will take place from 21st to 23rd January 2025 at WOAH Headquarters in Paris, France.