Ad hoc Group on Disinfection and Disinsection[1]

Original: English (EN)

5 May to 7 May 2026
Paris

Table of Contents

1. **Introduction** **2**
2. **Adoption of agenda, terms of reference and appointment of chair.** **2**
3. **Welcome** **2**
4. **Review of existing Glossary definitions and proposal of new definitions** **2**
5. **Structure of the new chapter 4.14.** **2**
6. **Proposed structure of a new chapter on 'Disinsection'** **5**

List of Annexes

Annex 1. Agenda **7**
Annex 2. List of Participants **8**
Annex 3. Terms of Reference **9**

1. **Note**: This *ad hoc* Group report reflects the views of its members and may not necessarily reflect the views of the OMSA. This report should be read in conjunction with the September 2026 report of the Terrestrial Animal Health Standards Commission. For the draft Chapter 4.14, Cleaning and disinfection, please refer to **Annex 23.**

World Organisation for Animal Health

Standards Department and Science Department
standards.dept@woah.org

12, rue de Prony
75017 Paris, France

T. +33 (0)1 44 15 18 88
F. +33 (0)1 42 67 09 87
woah@woah.org
www.woah.org

1. Introduction

The *ad hoc* Group (hereafter 'the Group') was convened by the Director General following the request of the Terrestrial Animal Health Standards Commission (hereafter 'the Code Commission') to update Chapter 4.14. 'General recommendations on disinfection and disinsection'. For this meeting, the Group was asked to determine if both topics should be included in one chapter or if 'disinsection' should become a new chapter, and to determine the information to be covered based on the Terms of Reference that they were provided. The existing Chapter 4.14. had not been updated in many years so the Group would need to determine the structure of the chapter.

The Group met in person between May 5-7, 2026.

2. Adoption of agenda, Terms of Reference and appointment of chair and rapporteur

Dr Dewulf accepted to chair the Group. The Group adopted the agenda and the terms of reference. The agenda, the list of participants and the Terms of Reference are presented in Annex 1, Annex 2 and Annex 3 respectively.

3. Welcome

The WOAH Secretariat welcomed members of the Group and representatives from the Code Commission and the Scientific Commission for Animal Diseases (hereafter 'the Scientific Commission'), and thanked them for their support for this important WOAH work.

Dr Montserrat Arroyo, the WOAH Deputy Director General, Standard Setting and Implementation, welcomed members of the Group and thanked them for their availability and contribution to the work of WOAH. She extended her appreciation to their institutes and national governments for allowing their participation in this meeting. She discussed the diversity among WOAH Members in terms of having different production methods and different levels of resources to support their Veterinary Services. Dr Arroyo talked about the importance this chapter will have in the *Terrestrial Code* as disinfection is an important horizontal topic mentioned in many other chapters in the *Terrestrial Code*. Therefore it is important that the *Terrestrial Code* provide practical guidance that can be implemented at some level by Members regardless of their availability of resources. She stressed that the Code should provide high level guidance that is easily understood by all Members. She invited the members to contribute during the meeting and outside the formal meeting.

The Secretariat introduced WOAH and its standards setting process and provided an overview of the Terms of Reference, and an overview of relevant documents from WOAH that should be taken into consideration during the discussions.

4. Review of existing Glossary definitions and proposal of new definitions

The Group discussed Glossary definitions 'disinfection' and 'disinsection' which are currently being circulated for comment and adoption at the May 2026 General Session. The Group noted that the definition of disinfection had been modified to remove the reference to 'cleaning.' The Group did not propose any new definitions or suggest revisions to existing definitions for the Glossary.

The Group considered whether there was a need for a Glossary definition of 'cleaning' and felt that the dictionary definition was adequate.

5. Structure of the revised Chapter 4.14.

Initial Considerations

The Group acknowledged the recommendations provided by the Code Commission and the Scientific Commission in their February 2026 reports and the Terms of Reference as a starting point for discussion. The Group discussed that the existing chapter does not include any information about disinsection and they recommended that disinsection be covered in a separate chapter. While the two topics are similar in some areas, the Group felt that some significant differences between disinfection and disinsection merited the creation of a separate chapter for disinsection. Specifically, the two topics

differ substantially in their objectives, scientific basis, risk management approaches and implementation considerations. The Group also noted that the development of a dedicated chapter on disinsection would benefit from the participation of experts in entomology, vector management and vector control.

The Group reviewed the existing Chapter 4.14. 'General recommendations on disinfection and disinsection', and recommended starting over with a new chapter as the existing information was considered to be very outdated. The Group was specifically requested to determine if the information in Article 4.14.2 should be retained in Chapter 4.14. or elsewhere in the *Terrestrial Code*. They agreed that it did not need to be retained, and would be replaced by new information in Chapter 4.14.

The Group noted that effective disinfection depends on appropriate cleaning and that both activities should be considered as part of an integrated cleaning and disinfection process. The Group therefore decided that the title of the chapter should be 'Cleaning and Disinfection' to capture the importance of both activities. Based on the chapter on disinfection in the *Aquatic Code* and Chapter 4.20. 'Biosecurity' of the *Terrestrial Code* proposed for adoption, the Group drafted an outline of the new chapter.

In order to be consistent with the proposed definition of 'disinfection', the Group incorporated terminology of 'inactivate or destroy' pathogenic agents in the chapter when referring to the outcome of cleaning and disinfection. The Group discussed the use of the term 'decontamination' and agreed to avoid its use to prevent misunderstandings.

The Group discussed the difference in how cleaning and disinfection could be applied in routine circumstances vs application of cleaning and disinfection during an outbreak of a disease that requires eradication. It determined that the role of Veterinary Authorities in cleaning and disinfection during a disease outbreak would be more extensive due to a need to justify that resources were being expended appropriately, and validate that an establishment met requirements to be considered free of disease[1]. These concepts were captured throughout the chapter.

Article 4.14.1. Purpose and Scope

The Group discussed the overarching purpose of the chapter and how it relates to other chapters of the *Terrestrial Code*. The Group incorporated a summary of sub-topics included in the remainder of the chapter to explain the scope of the chapter.

The Group noted in this article that there is additional information in disease-specific chapters about inactivation of pathogenic agents in animal products.

Article 4.14.2. General Principles

The Group discussed the overarching goals of cleaning and disinfection and the importance of proper planning before starting a cleaning and disinfection procedure. They emphasised that water used and water released during the cleaning and disinfection process should not be a source of pathogenic agents.

Article 4.14.3. Planning

The Group discussed at length the importance of planning for a successful outcome of cleaning and disinfection, and developed a comprehensive list of the factors that should be considered[2].

[1] NAHEMS Guidelines: Cleaning and Disinfection. Iowa State University Center for Food Security and Public Health and the U.S> Department of Agriculture Animal and Plant Health Inspection Service: 2014. Available at: https://www.aphis.usda.gov/sites/default/files/cleaning_disinfection.pdf

[2] Disinfection 101: Dvorak, G.,: Iowa State University Center for Food Security and Public Health:2008.Available at: https://www.regulations.gov/document/FDA-2018-D-3631-0042

Article 4.14.4. Steps of Cleaning and Disinfection

The Group broke down the cleaning process into several steps, and did the same for the disinfection process. They noted the importance of testing at various points during the process to ensure the best overall outcome. The Group also included the use of a waiting period to allow for natural inactivation of pathogenic agents, which can be used in situations where complete cleaning and disinfection is not possible, while noting that this is not possible for all pathogenic agents[3].

The Group discussed whether to incorporate details regarding the temperature of water used for cleaning and disinfection and concluded that research has not demonstrated a significant difference between the use of hot or cold water.

The Group stressed the importance of cleaning and noted that the success of disinfection is strongly dependent on effective cleaning.

Article 4.14.5. Types of materials, equipment, premises and environments to be cleaned and disinfected

The Group outlined in more detail the special considerations for cleaning and disinfecting various types of materials and environments, and disinfection methods that are best suited for the disinfection of certain materials and environments.

The Group originally only listed 'means of transport' referring to vehicles needing cleaning and disinfection. However, they noted that 'means of transport' only covers vehicles used to transport animals, and there are other types of vehicles that move within and between establishments that are also a risk of transmitting pathogenic agents. Therefore, they determined that 'other vehicles' should be listed as well to address this potential risk.

Article 4.14.6. Types and Selection of Detergents

The Group made a distinction between two main groups of detergents and when it is appropriate to use each of them.

Article 4.14.7. Disinfection methods

The Group categorised disinfection methods as either physical or chemical and listed the different types of each.

The Group discussed the fact that there are three types of physical disinfection methods but chose to only list two methods in this chapter. The third method, ionising radiation, was not included because it requires specialised facilities and is used in laboratories and controlled industrial settings.

The Group purposely limited the amount of detail around each type of disinfectant. The information provided focused on the spectrum, precautions needed and general applicability of types of disinfectants. More detailed information on specific disinfectants could be included in disease-specific chapters or a guidance document if needed.

[3] Commission Delegated Regulation (EU) 2020/687 of 17 December 2019 supplementing Regulation (EU) 2016/429 of the European Parliament and the Council, as regards rules for the prevention and control of certain listed diseases. European Union:2026. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02020R0687-20260512

Article 4.14.8. Selection of disinfectants

Given that the selection of an appropriate disinfectant relies on multiple criteria, the Group recommended the inclusion of a table that facilitates the identification of a relevant disinfectant for a group of pathogenic agents to be inactivated or destroyed[4].

Article 4.14.9. Roles and responsibilities

The Group discussed that detergents and disinfectants should be approved for use by a Competent Authority, and the Veterinary Authority should have adequate legal and regulatory authority to take the necessary actions for oversight of cleaning and disinfection. The Group also listed the roles and responsibilities of veterinarians, veterinary paraprofessionals, other relevant advisors, animal breeders, owners, managers, keepers, transporters and other relevant actors.

6. Proposed structure of a new chapter on 'Disinsection'

Based on the work of revised Chapter 4.14. 'Cleaning and Disinfection', the Group discussed some possible article headings for a new chapter on disinsection. The article headings are not listed in any particular order.

- Introduction
- Arthropods and their ecology - to explain which arthropods are covered under this chapter and basic information
- Purpose and Scope
- General Principles
- Planning
- Steps and components of integrated pest management
- Environmental preventive measures
- Chemical, biological and physical/mechanical control methods
- Genetic control approaches
- Types of insecticides (disinsectants), selection, and resistance considerations
- Roles and responsibilities
- Types of materials, equipment, premises and environments to be disinsected

7. Next steps

The Group considered that specific information on cleaning and disinfection for listed diseases could be incorporated into the disease-specific chapters as needed. This recommendation is provided for the consideration of the Code Commission.

The Group also recommended that, should additional detailed information about cleaning and disinfection be required, a more detailed guidance document could be developed.

[4] Dewulf, J. Biosecurity in Animal Production and Veterinary Medicine 2nd ed. Cabi digital library; 2026. Cleaning and disinfection in livestock facilities. https://www.cabidigitallibrary.org/doi/book/10.1079/9781800629868.0000

The Group considered the request by the World Renderers Organization to include information on dry cleaning of rendering facilities. This information was considered too detailed for inclusion in the *Terrestrial Code* due to the limited circumstances under which it would be applicable, and would be more appropriate for inclusion in a guidance document related to safety of feed and feed ingredients. The Group noted in Article 4.14.4 that proper planning is an important first step in cleaning and disinfection where different circumstances will determine the approach to use of appropriate measures.

The Group recommends to expand the composting information in Chapter 4.13. or in a guidance document to capture the details of how composting can be used to inactivate or destroy specific pathogenic agents in disease outbreak situations, when disposing of carcasses, manure, litter and other organic waste materials on an infected establishment.

The Group requested guidance from the Code Commission and the Scientific Commission at their September 2026 meeting on whether the proposed structure was fit for purpose, whether other concepts should be added and whether the proposed content of each article reflected the Commissions' expectations.

The Secretariat informed the Group of the next steps in the process.

_____

…/…Annexes

Annex 1. Agenda

AD HOC GROUP ON DISINFECTION AND DISINSECTION

PARIS, 5–7 MAI 2026

1. Welcome from DDG
2. Adoption of the Agenda
3. Introduction of members
4. Review of feedback from Code Commission and Scientific Commission (from pre-meeting)
5. Review of pending glossary definitions
6. Outline of new Chapter
7. Fill in the text
8. Drafting of the report
9. Next steps

Annex 2. List of Participants

AD HOC GROUP ON DISINFECTION AND DISINSECTION

PARIS, 5–7 MAI 2026

MEMBERS OF THE *AD HOC* GROUP

Dr Noppawan Buamithup
Veterinary Officer
Department of Livestock Development
THAILAND

Dr Jorge Caetano Junior
General Coordinator
Ministry of Agriculture, Livestock and Food Supply, Sustainable Production Department
Brasilia
BRAZIL

Dr Francisco Fernando Calvo Artavia
Veterinary Epidemiologist
Danish Veterinary Food, Agriculture and Fisheries Agency
Glostrup
DENMARK

Prof Jeroen Dewulf (Chair)
Department Chair
Internal medicine, Reproduction, Population Medicine, Ghent University
Ghent
BELGIUM

Dr Lionel Gbaguidi
Animal Health and Production Officer
UNFAO Subregional Office for West Africa
Dakar
SENEGAL

Dr LaToya Seoke
Head, Research Section
Department of Research and Development
Botswana Vaccine Institute
Gaborone
BOTSWANA

REPRESENTATIVE OF WOAH SPECIALIST COMMISIONS

Dr Silvia Bellini
Scientific Commission
ITALY

Dr Caroline Dubé
Code Commission
CANADA

WOAH HEADQUARTERS

Dr Joyce Bowling-Heyward
Chargée de mission
Standards Department

Dr Charmaine Chng
Head
Standards Department

Dr Donghwa Park
Science Officer
Standards Department

Annex 3. Terms of Reference

AD HOC GROUP ON DISINFECTION AND DISINSECTION

PARIS, 5–7 MAI 2026

Purpose

The purpose of the *ad hoc* Group on Chapter 4.14. 'General recommendations on disinfection and disinsection' is to revise and update this chapter.

Ad hoc Groups are convened under the authority of and report to the WOAH Director General.

Background

At its February 2022 meeting, the Code Commission agreed that priority should be given to the development of a new chapter on biosecurity and noted that the broad nature of this topic would likely impact the revisions of Chapters 4.13. 'Disposal of dead animals' and 4.14. 'General recommendations on disinfection and disinsection'. At the request of the Code Commission, the Biosecurity *ad hoc* Group that met in March 2024 reviewed the current Chapter 4.14. and provided recommendations as to how to proceed.

At its February 2025 meeting, the Code Commission determined that both disinfection and disinsection should be addressed in the same chapter. The Code Commission agreed that the focus of the revised chapter should be on disease prevention and control, and how disinfection and disinsection are properly used to prevent the spread of disease, a focus of Section 4 of the *Terrestrial Code*.

Specific issues to be addressed

- Chapter should focus on the general principles of cleaning and disinfection of facilities, means of transport and fomites. Chapter should also identify special concerns.
- Explain how disinfection and disinsection should be taken into account for disease prevention and control programs
- Determine if disinsection should be included in this chapter.
- Chapter should talk about categories of disinfection agents used for different types of pathogenic agents (bacteria, viruses, fungi, prions, etc.) and issues unique to each. Consider the importance of ensuring that the chosen method and/or product used is appropriate to the pathogenic agent of concern, the environment, and the items to be disinfected.
- Chapter should consider categories of disinsection agents and different methods used to disinsect holding facilities as well as animal feed production and storage facilities. This should also include physical measures that can be used to prevent insects in facilities.
- Include guidance on fallowing and composting (to inactivate pathogenic agents), considering information already included in Chapter 4.13.
- Consider inactivation of pathogenic agents in animal products during disease outbreak control.
- Regarding pathogen specific disinfection information in current Article 4.14.2, determine if that information should be updated and moved to disease-specific chapters.
- Rather than provide detailed technical information, refer to manufacturer's guidelines and Veterinary Services regulations and guidance.
- Determine if there is a need to add or revise Glossary definitions.

Considerations

- Recommendations of the Code Commission on Chapter 4.14.
- Recommendations of the ad hoc Group on Biosecurity that met in March 2024
- Comments from the World Renderers' Organization on Chapter 4.14.
- Recommendations of standard setting organisation for disinfectants

Expectations

Ad hoc Group members should:

- Sign off the WOAH Undertaking on Confidentiality of information before the meeting
- Complete the WOAH declaration of Interest Form before the meeting
- Acknowledge the WOAH personal data management policy
- Read and study in detail all dossiers provided by the WOAH prior to the meeting
- Contribute to discussions
- Contribute to drafting text and the final report
- Understand that the membership of the group may be retained between *ad hoc* group meetings to ensure continuity of the work
- Be familiar with the structure of the. *Terrestrial Code*, and the use of glossary definitions
- Be familiar with relevant *Terrestrial Code* chapters (to be provided in the working documents);
- Read all working documents provided by the Secretariat prior to the meeting.

Deliverables

1. A report that contains:
    a) The objective(s) and scope of the new chapter;
    b) A summary of the rationale for decisions and proposals;
    c) A review of the impact of changes to Chapter 4.14. on other chapters, especially Chapter 4.13.;
    d) Specific points on which guidance would be required from the Code Commission and the Scientific Commission for the future development of the draft chapter.
2. Draft texts
    a) A restructure of current Chapter 4.14. with article headings and elaboration of the content under each article
    b) Drafts of any new or revised Glossary definitions.

Reporting / timeline

The *ad hoc* Group will draft its report/deliver the above actions within 8 week(s) after the completion of the meeting.