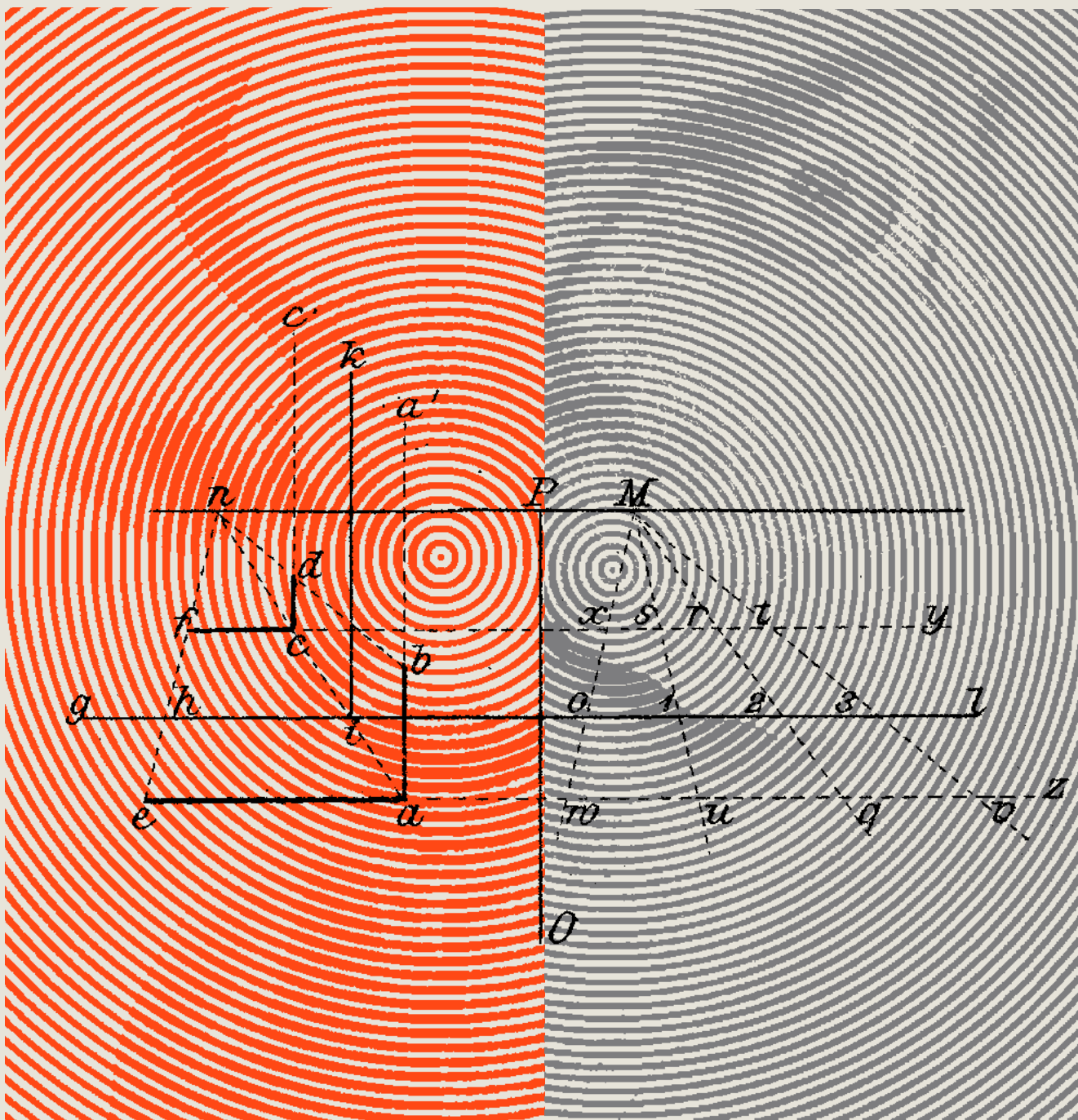


The Science System of the World Organisation for Animal Health



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Contents

Figures and tables	4
Introduction	5
The WOAHA Science System (WSS)	6
1. WSS Cycle	9
Trigger	10
Prioritisation	11
Knowledge acquisition and generation	12
Documentation and dissemination	13
Evaluation	14
2. WSS – Key participants and responsibilities	16
WOAH Delegates	17
Reference Centres	17
Specialist Commissions and their Secretariats	18
3. WSS – Selected core functions of WOAHA	20
WOAH standards	20
<i>Scientific and Technical Review</i>	21
Scientific guidance	22
Summary	23
Acknowledgements	24

Figures and tables

Figures

1 – Interface of science and policy at WOAHA	8
2 – Generic WOAHA Science System Cycle	9
3 – WOAHA Science system participants and the flow of responsibilities	16

Tables

1 – Summary of knowledge management activities in selected other organisations sourced from materials available on their websites	15
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Introduction

The [World Organisation for Animal Health](#) (WOAH) is a scientific and technical intergovernmental organisation. Its key [missions](#) include: ensuring transparency in the global animal disease situation; collecting, analysing and disseminating veterinary scientific information; encouraging international solidarity in the control of animal disease and animal welfare; and safeguarding sanitary safety by publishing health standards for international trade in animals and animal products. All of these missions are accomplished through a science- and evidence-based approach. In addition, WOAH produces technical resolutions, recommendations, guidelines, and a range of other publications, and maintains an extensive scientific network, all in support of WOAH's mandate, which recognises that 'Animal Health is our Health. It is everyone's health'.

Access to the best available science is critical to WOAH's missions and is embedded in WOAH strategies. One of the goals of WOAH's 7th Strategic Plan is to leverage scientific expertise to address multisectoral animal health and welfare issues to develop international animal health policy that is supported by science.

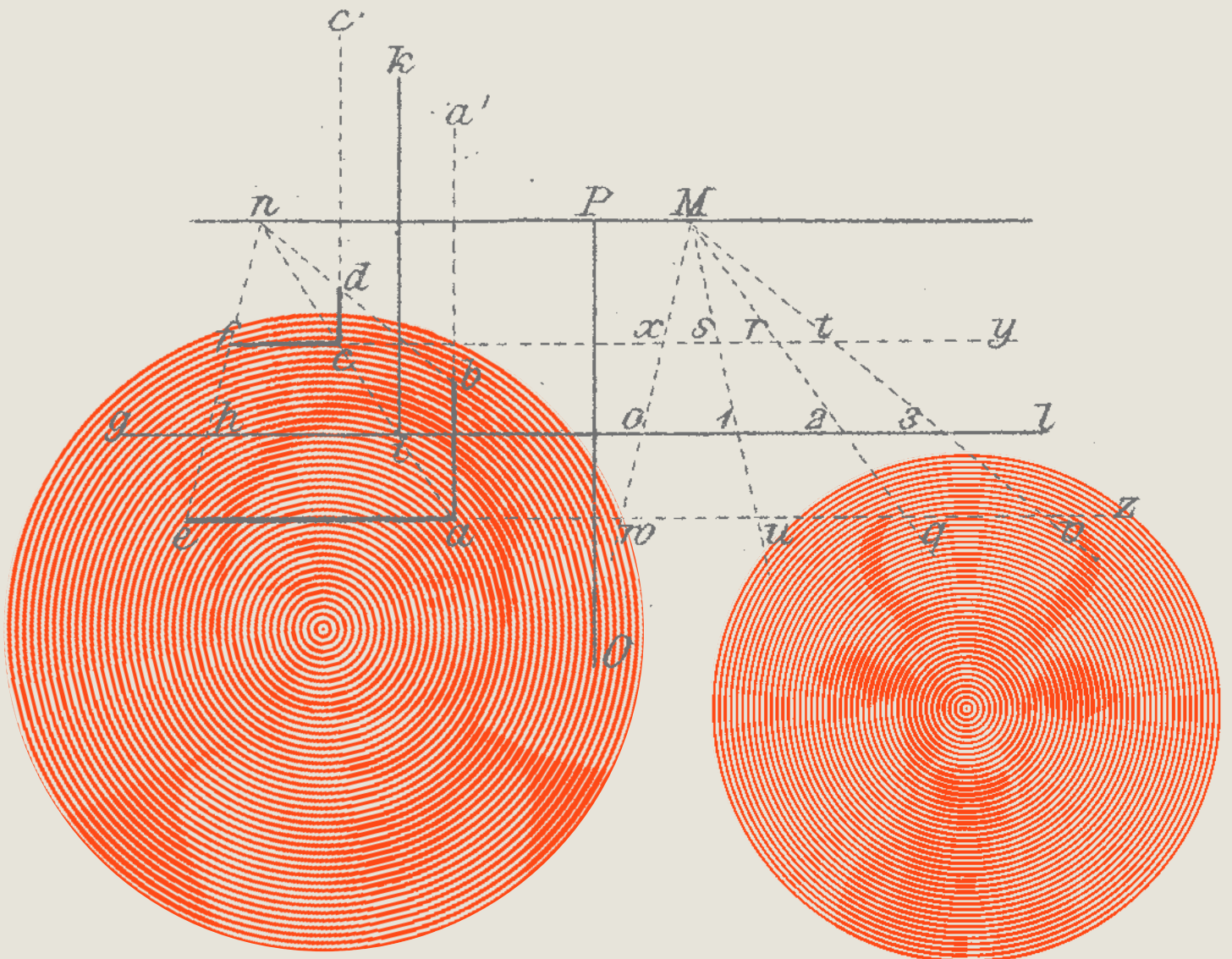
The purpose of this document is to **describe the existing structure and functioning of WOAH's science system (WSS)**. It illustrates the mechanisms by which WOAH leverages science and uses its scientific network to ensure that its recommendations and technical outputs are based on the latest science, aligned with best practices, and optimised to support WOAH's missions.

The WOAH Science System (WSS)

1. WSS cycle

2. WSS key participants and responsibilities

3. WSS selected core functions



WOAH Science System



a **System** that identifies or generates **scientific knowledge** that is evaluated according to established procedures accepted by WOAHA Members, its scientific networks and the stakeholders who are responsible for the implementation of policy or regulatory decisions



WOAH's mandate means that it is primarily a user of scientific knowledge, e.g. it synthesises evidence as the basis for animal health regulatory policy and analyses data to generate novel insights and information. In this respect, WOAHA's domain is primarily that of regulatory science¹, as opposed to research science. It sources relevant scientific knowledge that can be used by WOAHA Members to guide policy and regulatory decisions. [Figure 1](#) shows where WOAHA sits in the science–policy interface.

1. Animal Health Regulatory Science refers to the use of science to inform the development of new tools, standards, and approaches in the area of animal health and welfare policy.

WOAH's Knowledge management system

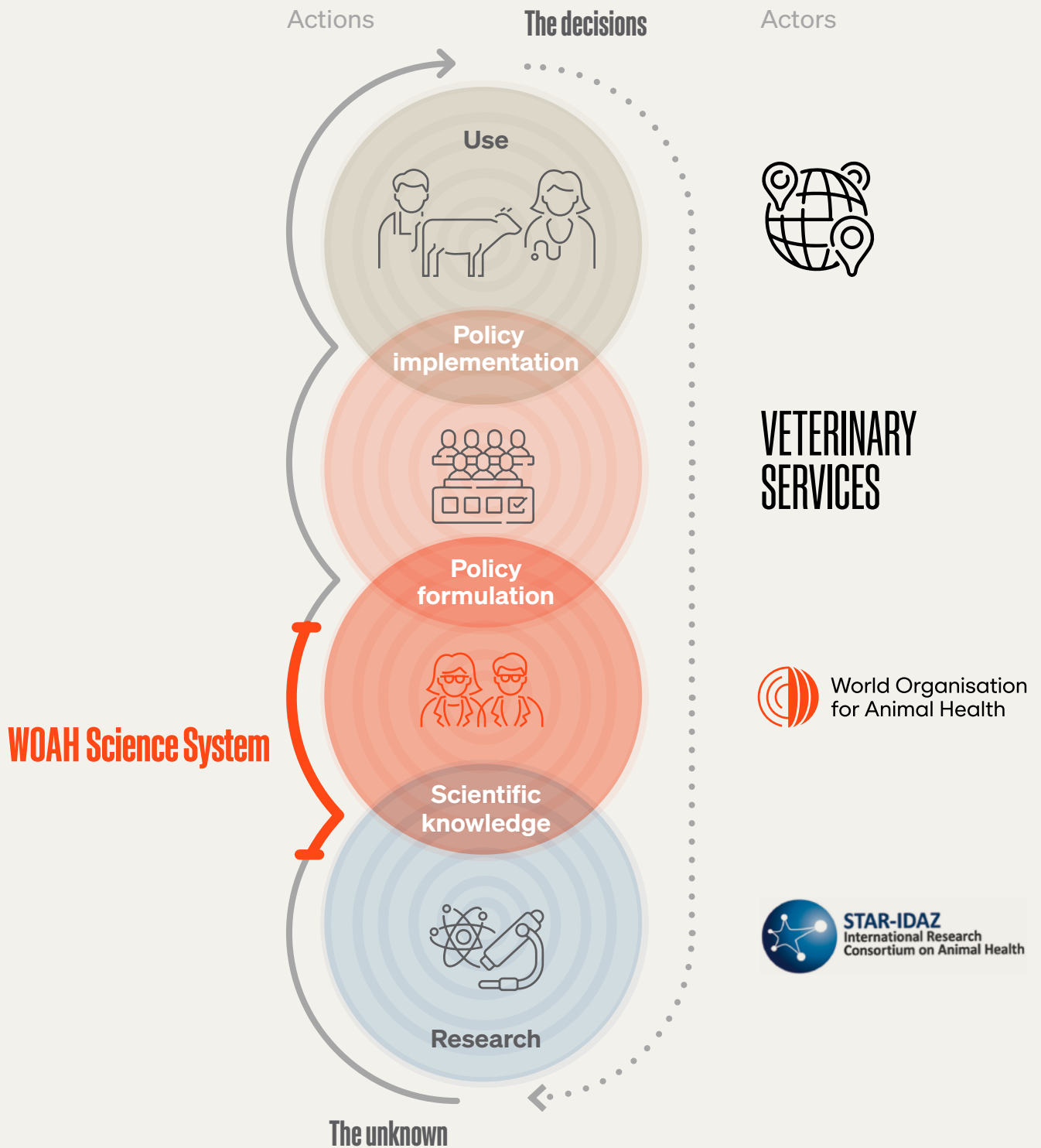


Figure 1. Interface of science and policy at WOAH

1. WSS cycle

Following consultation with WOAHA staff and stakeholders, the WSS generic cycle was established. **Figure 2** illustrates the components of the cycle, showing key decision steps that are critical in ensuring the robustness of the WSS.

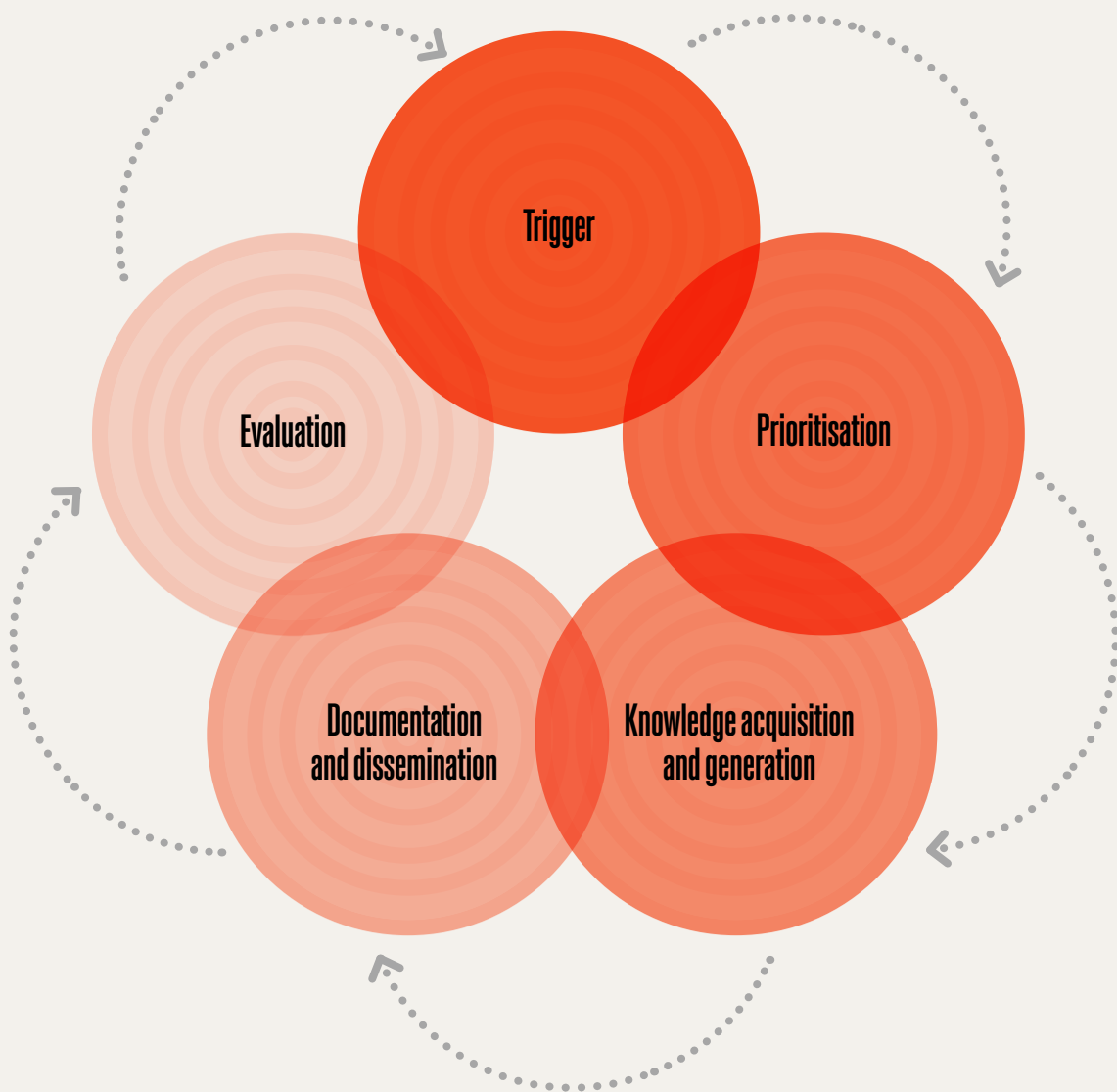


Figure 2. Generic WOAHA Science System cycle



The WSS cycle is set in motion when a WOAHA stakeholder contacts the Organisation about a need for specific scientific knowledge related to WOAHA activities or the application of regulatory policy. For example, WOAHA [Working Groups or ad hoc Groups](#) might ask that a particular topic be covered in the [Scientific and Technical Review](#), an international organisation with whom WOAHA has a cooperation agreement might ask that a particular pathogen be assessed for possible (de-)listing, a WOAHA Member might seek clarification regarding the implementation of a standard, or one of WOAHA's [Specialist Commissions](#) might request that a standard be updated ([see page 18 for more details on the Specialist Commissions](#)).

The WSS may also be triggered if WOAHA staff (at headquarters or Regional or Sub-regional Offices) identify a gap in existing scientific knowledge which, if addressed, would assist Veterinary Authorities in their policy decisions and in the implementation of animal health measures.

Horizon (or foresight) [scanning](#) can also be an important trigger of the WSS, allowing WOAHA to identify threats, risks and opportunities as the identification of threats, risks and opportunities may signal the need to generate scientific knowledge.

The request should include an accurate description of the problem and show that the need is scientifically justified. Ideally, it should include a description of the desired action or outcome, e.g. a review of an international standard, provision guidelines or training workshops.

Key actors	Process
<p>WOAHA Delegates, Specialist Commissions, Working Groups, WOAHA Reference Laboratories and Collaborating Centres (collectively known as Reference Centres), WOAHA staff, international organisations (e.g. the Quadripartite), regional economic communities, organisations with a formal agreement with WOAHA, and any other stakeholders within the WOAHA scientific network, including investors.</p>	<p>In some cases, there are specific procedures for submitting requests to WOAHA; for example, there are standard operating procedures for requesting an assessment of whether a pathogen should be listed/delisted and for asking WOAHA to determine whether a disease meets the <i>Terrestrial Animal Health Code</i> definition of an emerging disease. However, in general, there is no formal mechanism for triggering the WSS and requests can be submitted formally or informally.</p> <p>The WOAHA Director General (DG) may receive formal requests through official letters from WOAHA Members, institutions with or without an agreement with WOAHA or directly by WOAHA's Council. Formal requests can be included in the technical resolutions adopted during the General Session, Regional Commission Conferences or Global Conferences. Specialist Commissions and Working Groups also make formal requests in their meeting reports (e.g. a request to convene an <i>ad hoc</i> Group to address a specific scientific need). Informal requests can be made through personal communication (e.g. email, in-person conversations), through the recommendations of technical meetings or through the conclusions of an article in the <i>Scientific and Technical Review</i>. At times, WOAHA investors may also request certain outputs (e.g. guidelines on a specific subject).</p> <p>All requests are considered, and those that are consistent with WOAHA's mandates are progressed through the WSS. A request that is not well described or duly justified is less likely to progress through the system.</p>

Prioritisation

Once it has been decided that a request should progress through the WSS, it is further assessed to determine its relative importance with regard to other requests. The decision to prioritise a request is based on its alignment with WOA's strategic priorities, source of the request, other competing priorities and the availability of resources.

Key actors	Process
<p>The World Assembly of Delegates (the Assembly), the Council, the DG or Deputy Director General (DDG), Specialist Commissions, Working Groups and heads of Technical Departments and teams.</p>	<p>While there is no documented procedure for prioritising requests, the DG or DDG work with the relevant Working Groups, Specialist Commissions or Technical Departments to decide which of the requests should be given priority. If the request is about a strategic topic that will have a broad impact, WOA's Council and the Assembly will also be involved in the decision-making process. This would be the case if, for example, the request concerned the launch of a new global disease control strategy.</p> <p>Once a decision has been made to prioritise a request, WOAH coordinates with its internal and external stakeholders to agree upon a timeline, decide what the next steps should be, and ensure that the process can be adequately resourced.</p>



Knowledge acquisition and generation

Scientific knowledge is primarily derived from WOA's standing scientific network, which includes WOA Specialist Commissions, Working Groups and WOA [Reference Laboratories](#) and [Collaborating Centres](#), all of which play an important role in providing technical advice and knowledge products pertaining to their area of expertise. For requests falling beyond the scope of the above entities, WOA may convene *ad hoc* Groups, launch an open call for a consultancy, or make one-off requests to experts identified through its contacts. Internal expertise may also be called on if there are staff members who possess the relevant competency.

Choosing the right subject-matter experts for *ad hoc* Groups is critical for a successful outcome, as is having a clear definition of the scope, objectives and expected output of the consultation (Terms of Reference). Unless the consultation is part of an open call, experts do not charge for providing their scientific opinion.

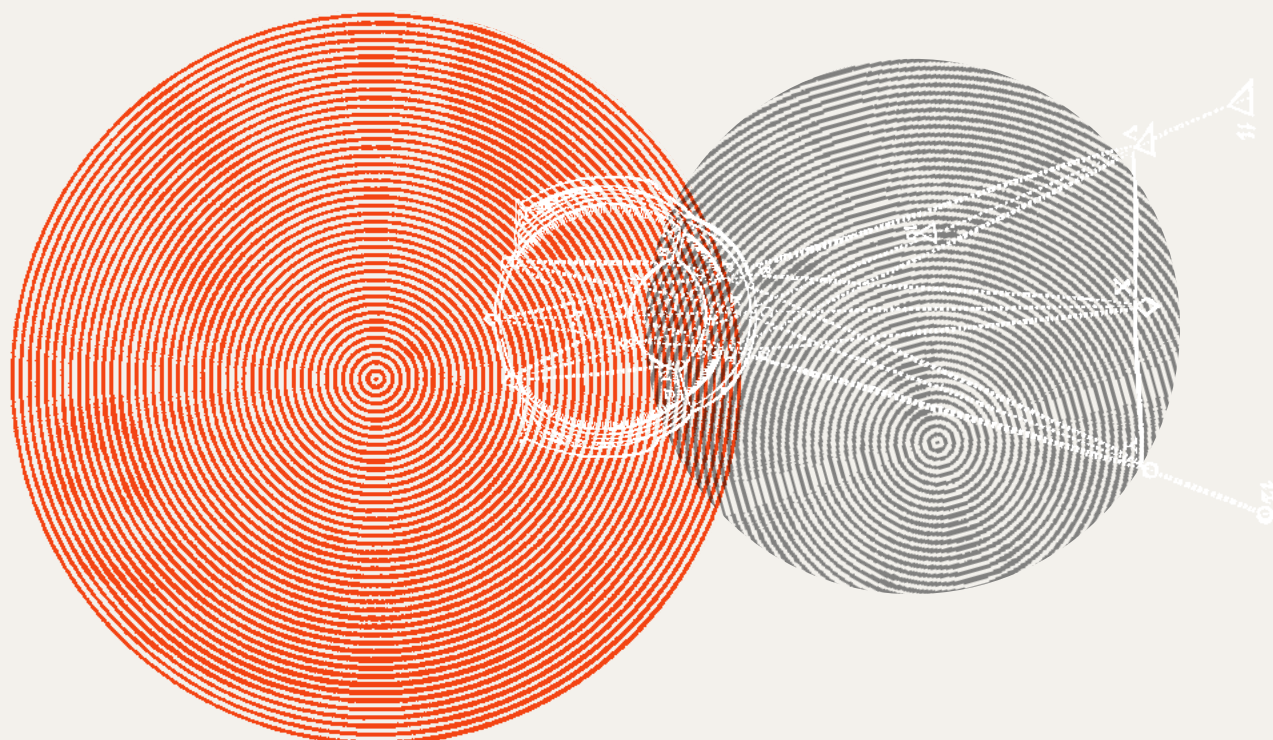
To address areas where knowledge gaps exist, WOA has established a mechanism for facilitating knowledge generation, namely the WOA Research Coordination Group. This group identifies research gaps that can be addressed by external stakeholders and WOA's Reference Centre network. It also influences the research agenda through its involvement in relevant networks, such as [STAR-IDAZ International Research Consortium for Animal Health](#). WOA also collaborates with research-oriented projects and disease-specific networks, engaging with scientists to assist Members and other stakeholders in decision-making, e.g. the [Global Burden of Animal Diseases](#) (GBADs), [Global Foot-and-Mouth Research Alliance](#) (GFRA), [Global African Swine Fever Research Alliance](#) (GARA), and [Global Research Alliance for Bovine Tuberculosis](#) (GRAbTB).

Key actors	Process
<p>DG, DDG, technical departments (HQ or Regional and Subregional Offices), Specialist Commissions, Reference Centres, Working Groups, WOA Research Coordination Group, STAR-IDAZ International Research Consortium for Animal Health, other subject-matter experts within the WOA scientific network.</p>	<p>To ensure scientific rigor, the rules for selecting subject-matter experts are described in WOA's Basic Texts. Documented processes (i.e. standard operating procedures [SOPs]) also exist for selecting members of WOA's Specialist Commissions, ad hoc Groups and Working Groups, as well as for designating Reference Centres and selecting topics, editors and authors for the Scientific and Technical Review. Members of the Specialist Commissions are elected by the Assembly and have a mandate of three years. Members of Working Groups are nominated by the DG for a renewable period of three years. In the case of <i>ad hoc</i> Groups, the choice of experts resides with the DG, who is advised by the commissioning technical departments. When assessing candidates, the DG takes into consideration both the expertise of the individual and the composition of the group (geographical representation, gender balance, diversity of expertise).</p> <p>WOA uses a database for collecting information on new expert self-submissions and expressions of interest, and uses Customer Relationship Management software to maintain a list of experts who are already part of WOA's network.</p> <p>Scientific outputs are validated by the DG or DDG prior to publication and dissemination. Similarly, the articles of the <i>Scientific and Technical Review</i> are subject to a peer-review process typical of scientific journals.</p>

Documentation and dissemination

This step consists of documenting the knowledge acquired and sharing it with the target audience. It includes organising and storing the information in ways that make it easy for WOAAH to use and for its stakeholders to retrieve. The scientific output could be in the form of a document (e.g. guidelines), part of a document (e.g. the conclusions of a meeting report), communication materials (e.g. an infographic, video, factsheet or website article), or a publication (e.g. an issue of the *Scientific and Technical Review*). All scientific outputs are now open access and are available on the WOAAH website. Most of the products are available in English, French and Spanish.

Key actors	Process
<p>DG, DDG, technical departments (HQ or Regional and Subregional Offices), Communications Department, Capacity Building Department, Publications Unit and Documentation Cell.</p>	<p>The process and method of documentation and dissemination is dependent on the nature of the output, and is usually linked to the type of expert consultation conducted. The documentation and dissemination process is well defined for outputs of the WSS that are part of the standard-setting process. For example, <i>ad hoc</i> Group reports and draft international standards are annexed to the relevant Specialist Commission reports. Similarly, a clearly defined process of review, revision and distribution exists for publications (e.g. the <i>Scientific and Technical Review</i>). The dissemination procedure for other outputs is less well defined, and relies on the initiative of the technical departments that are managing the process. They may decide, for example, to make the scientific output available through the WOAAH website, or, if the output is aimed at a particular region, they may choose to disseminate the information via regional offices or at a regional meeting.</p> <p>Currently, there is no consistent process for keeping internal records of scientific outputs; consequently, WOAAH is developing an archiving policy that will include a clear retention schedule for the various categories of scientific output, thus ensuring their preservation.</p>



Evaluation



All outputs of the WSS are subject to scrutiny by WOAHA Members and stakeholders. Direct feedback is expected as part of the standard-setting process. For other outputs, feedback is received on an *ad hoc* basis or reflected through how Members or stakeholders use the outputs. When new scientific knowledge becomes available, or if the need to identify or generate new scientific knowledge is noted, a request is made, which then triggers the WSS, reinitiating the WSS cycle ([see page 10](#)).

Key actors	Process
<p>DG, DDG, technical departments (HQ or Regional or Subregional Offices), WOAHA Delegates, Specialist Commissions, Working Groups, Reference Centre experts, international organisations such as the Quadripartite, regional economic communities, organisations with a formal agreement with WOAHA or any other stakeholders within WOAHA's scientific network.</p>	<p>Some outputs are subject to a systematic process of evaluation and others are evaluated more informally. For certain outputs, such as those that are part of WOAHA's standard-setting process, the evaluation process is well established. WOAHA has recently developed a Standard Operating Procedure (SOP) to improve the transparency, documentation and traceability of the process for receiving and responding to comments submitted during the process for the elaboration of WOAHA International Standards</p> <p>Draft standards for inclusion in WOAHA's <i>Terrestrial and Aquatic Animal Health Codes and Manuals</i> are circulated for evaluation prior to adoption. Members can and do use their own subject-matter experts to provide the basis for their review. The Assembly is responsible for the adoption of the scientific content of the international standards before publication (see the case study on page 20 for further details). Similarly, Technical Resolutions presented at the General Session or Regional Commission Conferences are expected to be scrutinised and evaluated prior to their adoption by the membership.</p> <p>Other WSS outputs, such as recommendations and guidelines, are open to continuous evaluation and feedback by WOAHA Members and stakeholders, but there is no systematic process for evaluation.</p>



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Table 1. Components of WOA's Science System summarised

WSS Component	Description	Key actors	Process
Trigger	A request describing a specific scientific need related to WOA's activities is received	Delegates, Specialist Commissions, Working Groups, WOA's scientific network, WOA's staff and international partners	Requests are received in a number of different ways, e.g.: <ul style="list-style-type: none"> • Formal letters to the DG • World Assembly resolutions • Decisions from Council • Informal requests (e.g. conversations, emails)
Prioritisation	Decision-making process to define whether the request should progress through the WSS and, if it should, whether it should be given priority over other requests or activities	World Assembly, Council, DG, DDG, Specialist Commissions	<ul style="list-style-type: none"> • No formal process • Specialist Commission prioritisation of work areas is reflected in their work programmes
Knowledge acquisition and generation	Best available scientific knowledge is identified and generated by expert consultation	DG, DDG, WOA's staff (technical secretariat), Specialist Commissions, Working Groups, WOA's scientific network	Processes are described in: <ul style="list-style-type: none"> • Basic Text. Internal rules for Specialist Commissions • Basic Text. Internal rules for Working Groups and <i>ad hoc</i> Groups • Internal SOP for convening ad hoc Groups • SOP for Reference Centres • Election of members of Specialist Commissions and Working Groups • Scientific and Technical Review • Selection of experts by open public calls
Documentation and dissemination	The scientific outputs are available on the website for information and use of the target audience or for consultation. The outputs generated can take many forms, e.g. guidelines, factsheets, videos, infographics, reports, standards, etc.	DG, DDG, technical departments, Communications Department, Documentation Cell, Publications Unit	<ul style="list-style-type: none"> • Output related to the standard-setting process are included in Specialist Commission reports. • Other outputs are also directly available (open access) in the website
Evaluation	WSS outputs are subject to continual scrutiny by Members and stakeholders to ensure that they are based on the latest science and fit for purpose	DG, DDG, technical departments, Delegates, Specialist Commissions, Working Groups, Reference Centres, WOA's scientific network	<ul style="list-style-type: none"> • Standards are subject to Member consultation before formal adoption by the World Assembly • SOP for submitting comments on Standards • Other outputs are continuously evaluated, but with no formal process

2. WSS key participants and responsibilities

Figure 3 shows the key participants in the WSS and presents a snapshot of the flow of responsibilities. A detailed description of how these participants interact with the WSS is provided below.

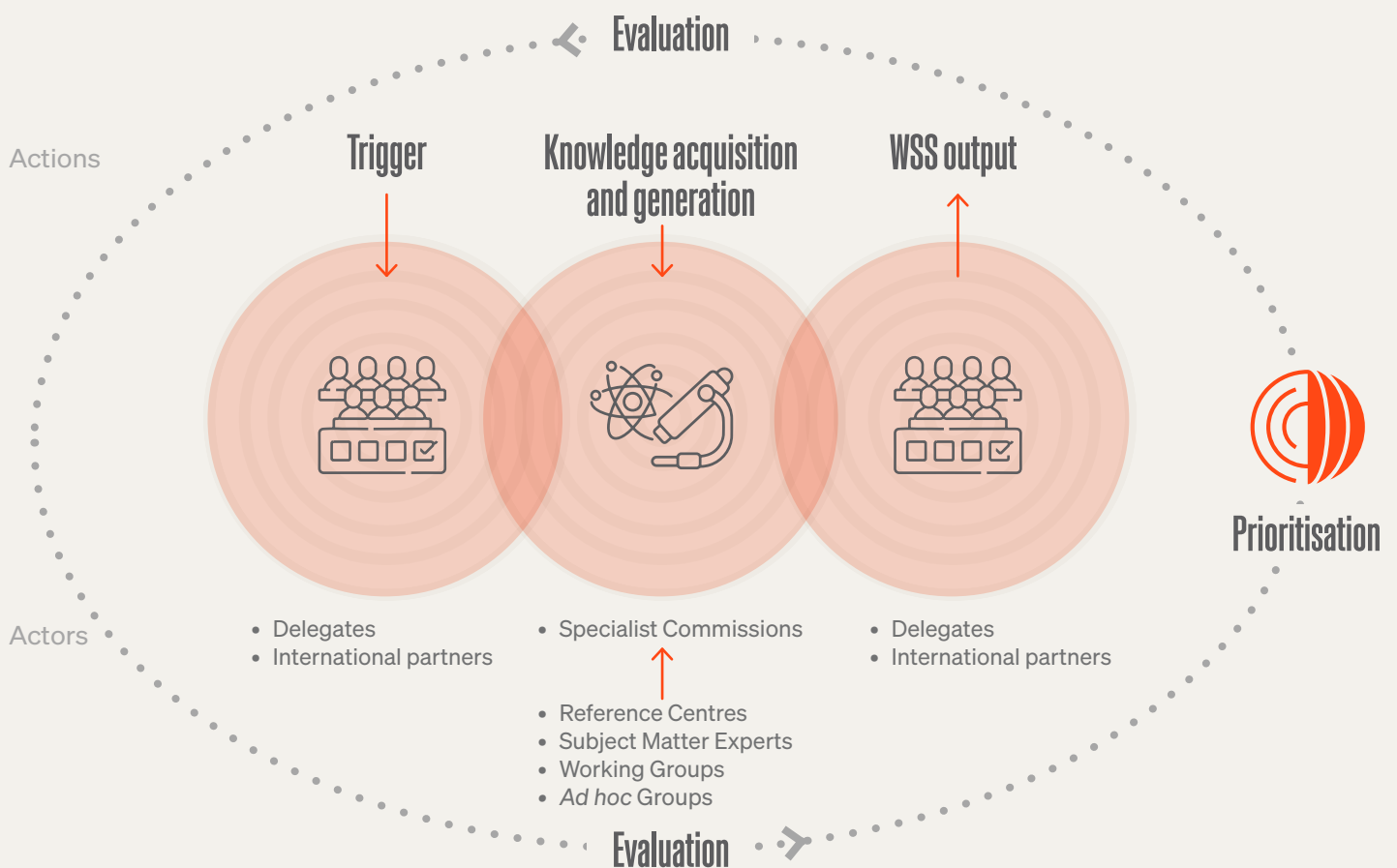


Figure 3. WOAHA Science System participants and the flow of responsibilities

WOAH Delegates

The Assembly is the highest authority of WOAH, consisting of 183 [Delegates](#) designated by the government (competent authority) of each Member. The Assembly is responsible for adopting international standards and technical resolution for animal health and welfare, and for electing the members of the governing bodies of WOAH and the Specialist Commissions.

WOAH Delegates play a critical role in **evaluating** WSS outputs and ensuring that they are based on the best available science, are fit for purpose and address their needs. They are the main users of the scientific output generated by the WSS and therefore the main audience for **dissemination** of the WSS outputs. Delegates are also made aware of advances in science through their own expert networks and can forward the new information to WOAH. If Delegates feel that the need is particularly urgent or important, they may also ask that their request be prioritised.

In acquiring the latest scientific knowledge or information, WOAH relies on its Delegates to expand its scientific network, which they can do in a number of ways. For example, they can encourage academic, government and private research institutions in their country to apply to become Reference Centres. They can also enable their national experts to contribute to WOAH activities (experts are given time to participate in *ad hoc* and Working Groups while continuing to be paid by national governments, thus allowing them to provide their services to WOAH free of charge).

In addition to engaging with the WSS by participating in the standard-setting process, Delegates interact with the system on other technical issues through Regional Commission Conferences and Global Conferences or through direct communication with the DG and DDG.

Reference Centres

WOAH Reference Centres are important to the WSS as they are the principal source of **knowledge acquisition and generation** and they provide the majority of WOAH's scientific experts. Reference Centres are also expected to identify knowledge gaps, conduct and coordinate research activities to address specific scientific needs, and provide technical support to WOAH Members (i.e. regulatory science) in their respective regions. As of 2024, WOAH has a global network of 274 [Reference Laboratories](#)² covering 109 diseases or topics in 40 countries, and 76 [Collaborating Centres](#)³ covering 36 specialties in 33 countries.

The process for applying to become a Reference Laboratory is described under WOAH's Internal Rules in its [Basic Texts](#), as is the process for designating an institution as a Collaborating Centre. The [criteria](#) for being designated a WOAH Reference Centre

-
2. Reference Laboratories function as a world reference centre of expertise on designated pathogens or diseases. Reference Laboratory staff are leading and active researchers who help provide scientific and technical assistance and expert advice on topics linked to the diagnosis and control of the designated disease.
 3. Collaborating Centres function as a world centre of research, expertise, standardisation of techniques and dissemination of knowledge on a specialty which is a clearly defined, focused topic, discipline or knowledge domain.

are based on an institution's scientific and technical standing, its leadership at a national and international level and the presence of experts within its scientific teams. The selection is also based on the institution's ability, capacity and readiness to provide the scientific support to WOAHA Members. The performance of the Reference Centres against their terms of reference is evaluated annually by the relevant Specialist Commissions.

Reference Centres may also serve as **triggers** and **evaluators** of the scientific outputs of the WSS, notifying WOAHA of scientific developments or knowledge gaps that could have an impact on WOAHA activities. They can do this directly (through technical contact points) or indirectly (through their Delegate).

In participating in scientific meetings on behalf of WOAHA and providing technical support and building WOAHA Members' capacity in animal health and welfare, Reference Centres also play a key role in **disseminating** scientific output. In this regard, WOAHA has established Cooperative Capacity Building ('Twinning') Agreements between Reference Centres to assist national institutes to build their capacity and scientific expertise, and to promote the use of and compliance with WOAHA standards and guidelines.

Specialist Commissions and their Secretariats

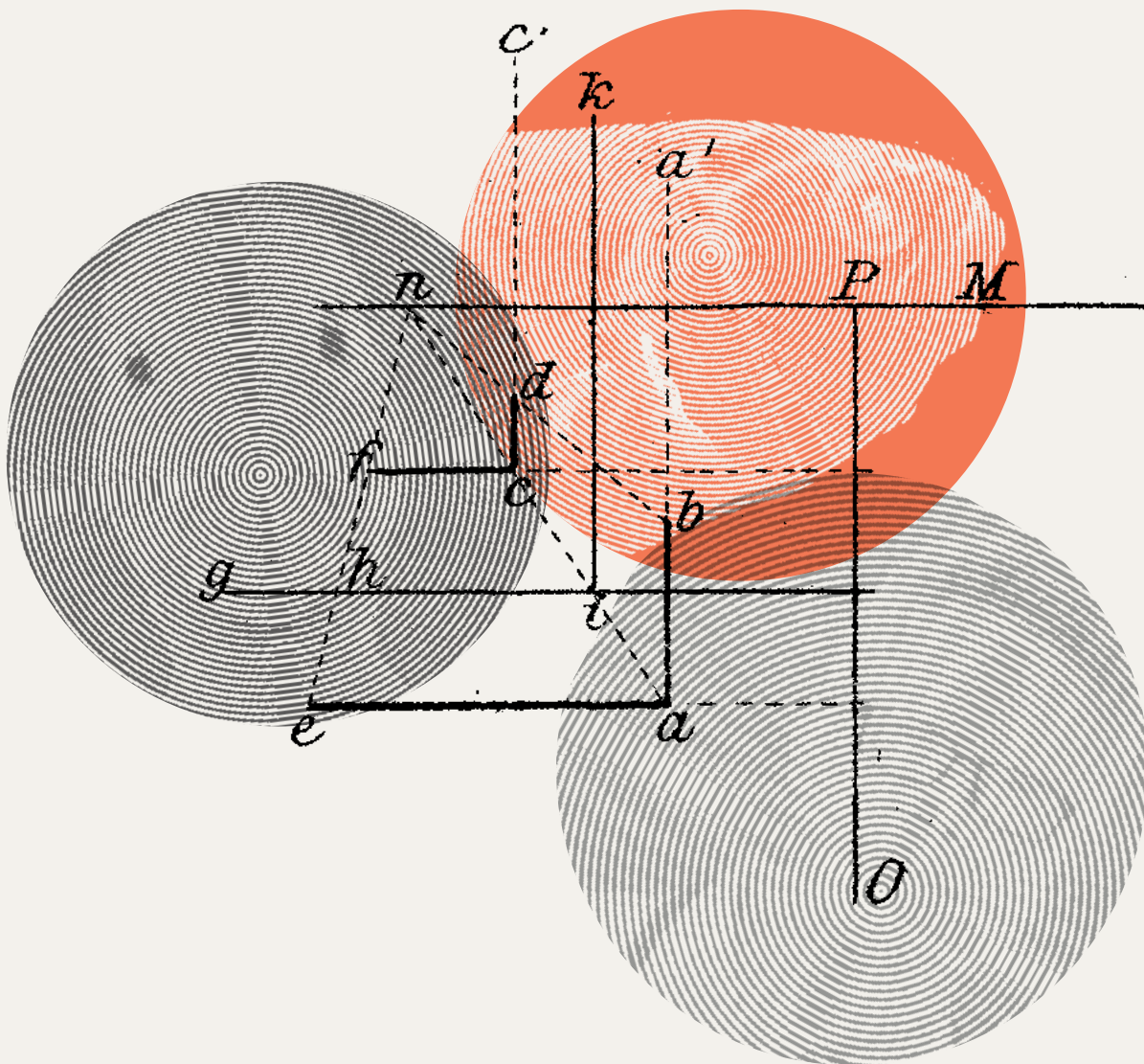
WOAHA has four elected **Specialist Commissions**, namely, the Aquatic Animal Health Standards Commission (AAHSC), the Terrestrial Animal Health Standards Commission (TAHSC), the Biological Standards Commission (BSC), and the Scientific Commission for Animal Diseases (SCAD). Each Commission is supported by a WOAHA Technical Secretariat. Together, these Commissions are responsible for developing and revising international standards for aquatic and terrestrial animals, overseeing WOAHA's Reference Centre network, providing official recognition of the terrestrial animal health status of Members, providing advice on animal welfare and the epidemiology, diagnosis, prevention and control of animal diseases, and providing recommendations for safe trade in animals and animal products.

Each Specialist Commission has its specific charge and the terms of reference, internal rules and qualifications of its members are specified in **WOAHA's Basic Texts**. The Commissions are established and **elected** by the World Assembly, taking into account the extensive expertise of candidates and the need for geographical representation. An evaluation committee exists to recommend candidates on the basis of their scientific expertise and performance.

The Specialist Commissions play a key role in several steps of the WSS, including **triggering** the WSS, making recommendations on the approach to **acquiring knowledge** (e.g. *ad hoc* Groups, subject-matter experts or the Specialist Commissions themselves), and **documenting and disseminating** their recommendations and outputs in their reports, including an annual report to the General Assembly and on occasion at Regional Commission Conferences. In addition, they represent WOAHA at technical meetings.

The agendas of the Commissions' biannual meetings include all the topics that require a revision or consideration suggested either by Members, international organisations, Reference Centres, the Commission Secretariat or the Commission itself. They are responsible for the regular **evaluation** of their scientific advice and recommendations. Some Commissions (i.e. BSC, AAHSC) have a cycle to ensure all the standards are evaluated regularly and revised as needed. Other Commissions rely on the identification of specific needs or on specific requests to signal the need to evaluate existing standards or scientific advice.

Each Specialist Commission has its own work programme that is presented to the DG and Delegates for validation. The approach to the work programme and the **priority areas** vary across Commissions, but this is normally updated at the end of each biannual meeting, taking into consideration the discussions during the General Session.



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3. WSS in selected core functions

The following core science-based functions of WOAAH were selected to illustrate the WSS in action.

WOAH standards

WOAH develops new and regularly updated international [standards](#) in accordance with new scientific information and technological advances. The standard-setting process includes the participation of its Delegates, Specialist Commissions, *ad hoc* Groups, Working Groups and Reference Centre network as well as partner international organisations and other subject-matter experts. Access to the latest science is of paramount importance for the robustness of the standard-setting process.

Trigger	<ul style="list-style-type: none"> • WOAAH Delegate may request an update to an existing standard or the creation of a new standard. • Specialist Commissions or the WOAAH scientific network may identify topics, issues or problems related to the management of global health risks and trade that require an update to standards. • Requests may be formal (to DG) or informal (to technical departments).
Prioritisation	<ul style="list-style-type: none"> • The relevant Specialist Commission, in consultation with the DG, DDG, WOAAH technical departments and other relevant Specialist Commissions, decides whether the request should advance through the standard-setting process and, if so, what priority it should be given. The decision is taken on the basis of the existing priorities of the WOAAH work programme, the availability of resources, the source of the request and the urgency of the issue on the global agenda. • Requester is informed if request will progress through the standard-setting process.
Knowledge acquisition and generation	<ul style="list-style-type: none"> • Specialist Commissions may ask the DG to convene an <i>ad hoc</i> Group or they may advise the WOAAH Secretariat to consult subject-matter experts, notably from the Reference Centre network, if they do not possess the scientific expertise or time. • The WOAAH department leading the process works with experts to determine how existing science, relevant evidence and practical considerations may be mobilised to address the specific need, and presents this to the Specialist Commissions.
Documentation and dissemination	<ul style="list-style-type: none"> • Proposed standards are circulated in the reports of the Specialist Commissions, together with the rationale. They are then subject to several rounds of comments before being adopted by the World Assembly and incorporated into the relevant WOAAH international standard.
Evaluation	<ul style="list-style-type: none"> • Delegates and relevant stakeholders (users of the standards) consider not only the scientific content of the standards but also non-scientific aspects, such as feasibility of implementation and other practical implications (e.g. social acceptance, trade and economic issues). They also express their opinion during the commenting process. • World Assembly of Delegates agrees on the adoption (or not) of the standard before publication. • WOAAH relies on Delegates, international organisations and its Reference Centre network to provide continual evaluation of standards and signal when new evidence is available that may require a standard to be revised.

Scientific and Technical Review

The *Scientific and Technical Review* (the *Review*) is a biannual peer-reviewed, open-access periodical publication containing articles devoted to current scientific and technical developments in animal health and veterinary public health, food safety and animal welfare. Issues generally focus on a specific theme and are produced under the supervision of one or more internationally renowned experts who are invited by WOAAH to serve as scientific editors for the issue. The *Review* has an Editorial Board who advises the DG on strategic and content-related issues to ensure its scientific relevance and integrity.

Trigger	<ul style="list-style-type: none"> • Topics based on issues of current or future interest or concern can be raised by the DG, DDG, Specialist Commissions, Heads of Departments, <i>ad hoc</i> groups and Working Groups, or other stakeholders. • The <i>Review</i>'s Editorial Board suggests and recommends thematic issues for consideration by the DG.
Prioritisation	<ul style="list-style-type: none"> • The DG decides on the themes to be covered and which themes should be prioritised for upcoming issues. The decision to prioritise certain themes is based on their timeliness and their relevance to WOAAH Members and the scientific community in general. • On selection of the themes, the Editorial Board makes recommendations to the DG regarding potential Scientific Editors, who will be internationally recognised experts on the topic.
Knowledge acquisition and generation	<ul style="list-style-type: none"> • The Scientific Editor works with the Editorial Board to develop the contents of the issue and identify experts to author articles. • Scientific excellence and geographical balance among the authors are key criteria when choosing experts.
Documentation and dissemination	<ul style="list-style-type: none"> • All papers are available online prior to being published in the <i>Review</i>. At this stage, they have been peer-reviewed but not formatted for publication • WOAAH published hardcopies of the <i>Review</i> until 2021. Since 2022, the organisational policy is to publish each issue's preprints on WOAAH's website and then make the full issue available on the Documentary Portal, which also contains an archive of past issues. • The <i>Review</i> is indexed in medline/PubMed, CABI, EBSCO and other databases. Each paper also has a digital object identifier (DOI) so that it can be easily retrieved. • DOI reports show that, with the exception of the <i>Terrestrial and Aquatic Codes and Manuals</i>, the <i>Review</i> is the most consulted WOAAH publication.
Evaluation	<ul style="list-style-type: none"> • All original papers go through a peer-review process coordinated by the Scientific Editor and WOAAH's Publications Unit. • The Editorial Board is responsible for evaluating the <i>Review</i>, suggesting new topics and making recommendations as to how to continuously improve the peer-review process and the quality of scientific articles. • Currently collected metrics allow some assessment of readership and content success based on individual articles or authors.

Scientific guidance

WOAH develops technical guidelines, FAQs, disease situation reports, recommendations, and a range of other informational documentation. These are developed in response to the emergence of a new disease, a change in the epidemiology of a disease, an issue that creates global or regional concern, or a stakeholder need for information, advice, or clarification about the correct implementation of standards. WOAH guidelines facilitate the implementation of existing standards and support risk assessors, risk communicators and risk managers in their responsibilities by providing practical advice that is based on the best available science.

Because guidance frequently needs to be reactive in response to a current animal health issue (e.g. lumpy skin disease, avian influenza, African swine fever, wildlife health) or public health situation (e.g. SARS-CoV-2, monkeypox), timeliness, scientific robustness and speed are essential.

Some examples of recent WOAH guidance include [FAQs on SARS-CoV-2](#) issued at the start of the pandemic and updated throughout, a set of [guidelines for working with free-ranging wild mammals in the era of the COVID-19 pandemic](#), guidance given in response to the [monkeypox](#) alert, FAQs on [lumpy skin disease](#) and [MERS-CoV](#), regular updates on the [global and regional situation of high pathogenicity avian influenza](#) or [African swine fever](#), and a [guide to implementing two chapters of the Terrestrial Animal Health Code](#), namely Chapter 4.4. 'Zoning and compartmentalisation' and Chapter 4.5. 'Application of compartmentalisation in the context of African swine fever'.

Trigger	<ul style="list-style-type: none"> • Requests for guidelines, FAQs or other technical information most frequently come directly from WOAH Members.
Prioritisation	<ul style="list-style-type: none"> • WOAH technical departments make the initial assessment of the relevance of the topic, the level of concern and the type of guidance needed given the existing scientific knowledge.
Knowledge acquisition and generation	<ul style="list-style-type: none"> • This step begins with a literature review to identify current knowledge and knowledge gaps. • Subject-matter experts are usually consulted or responsible for the scientific content. The experts are charged with responding to specific questions as defined in their terms of reference and identify critical knowledge gaps that can focus an international research agenda. • Specialist Commissions are also involved in this step.
Documentation and dissemination	<ul style="list-style-type: none"> • The guidance is generally published on WOAH's website and disseminated through WOAH's networks to allow quick dissemination and widespread access for Members. • WOAH also releases announcements of availability of documents to the general public through the WOAH Bulletin. • All Specialist Commissions reports and the associated reports of <i>ad hoc</i> Groups and Working Groups are published on the WOAH website.
Evaluation	<ul style="list-style-type: none"> • Scientific guidance is under the authority of the DG and does not need to go through the adoption process by the World Assembly of Delegates. • Guidelines for diseases that have existing international standards are evaluated as feedback is received from Delegates or other stakeholders. • For guidelines related to the emergence of a new disease or a change in the epidemiology of a disease, continuous evaluation by experts is critical to ensure the guidance is up to date, based on the latest science, fit for purpose and easy to understand.

Summary

This document has presented the WSS cycle in place at WOAHA and described the key actors and their interactions with the system. It also provides case studies of select core functions, which demonstrate the functioning of the WSS cycle and how WOAHA leverages the latest scientific information and evidence to support its mandates. One of the strengths of the system is that there are standard operating procedures for some of the WSS components related to WOAHA's key functions. This ensures coherence across the Organisation and drives improvement.

WOAHA is committed to continuously improving the WSS, increasing the efficiency of its various processes and procedures, and ensuring that its outputs and recommendations continue to be relevant and fit for purpose for its Members and stakeholders.

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