



# Third Meeting of the Standing Group of Experts (SGE) on African swine fever (ASF) of the GF-TADs for Africa

**1 – 3 August 2023 - Abidjan**

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Prof. E. Couacy-Hymann

1<sup>st</sup> – 3<sup>rd</sup> August 2023  
Abidjan

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World Organisation  
for Animal Health

Founded as OIE

❖ **Introduction**

❖ **Standards Setting process**

❖ **Update of ASF chapter**

❖ **Conclusion**



# Introduction

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- The *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals (Terrestrial Manual)* of the World Organisation for Animal Health (WOAH, founded as OIE) aims to facilitate international trade in animals and animal products and to contribute to the improvement of animal health services world-wide.
- The principal target readership is laboratories carrying out veterinary diagnostic tests and surveillance, plus vaccine manufacturers and regulatory authorities in the WOAH Member Countries.
- The objective is to provide internationally agreed diagnostic laboratory methods and requirements for the production and control of vaccines and other biological products. .



# Introduction

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- The *Terrestrial Manual*, covering infectious and parasitic diseases of mammals, birds and bees, was **first published in 1989**.
- Each successive edition has extended and updated the information provided.
- The eighth edition includes over 99 updated and 17 new chapters. This edition has a slightly different structure from former editions:



# Introduction

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- **Part 1:** contains **ten introductory chapters** that set general standards for the management of veterinary diagnostic laboratories and vaccine production facilities;
- **Part 2 :** comprises **specific recommendations and includes eight new chapters of recommendations for validation of diagnostic tests and three new chapters of recommendations for the manufacture of vaccines;**
- **Part 3 :** comprises **chapters on WOAHA listed diseases** and other diseases of importance to international trade and
- **Part 4:** is the **list of WOAHA Reference Centres** at the time of publication (the [list of WOAHA Reference Centres](#) is updated by the World Assembly of Delegates (of WOAHA Member Countries) each year; the revised list is available on the WOAHA Web site)



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# WOAH international standards



WOAH establishes standards for the improvement of animal health and welfare and veterinary public health worldwide, including the prevention of disease spread through international trade of animals and animal products.

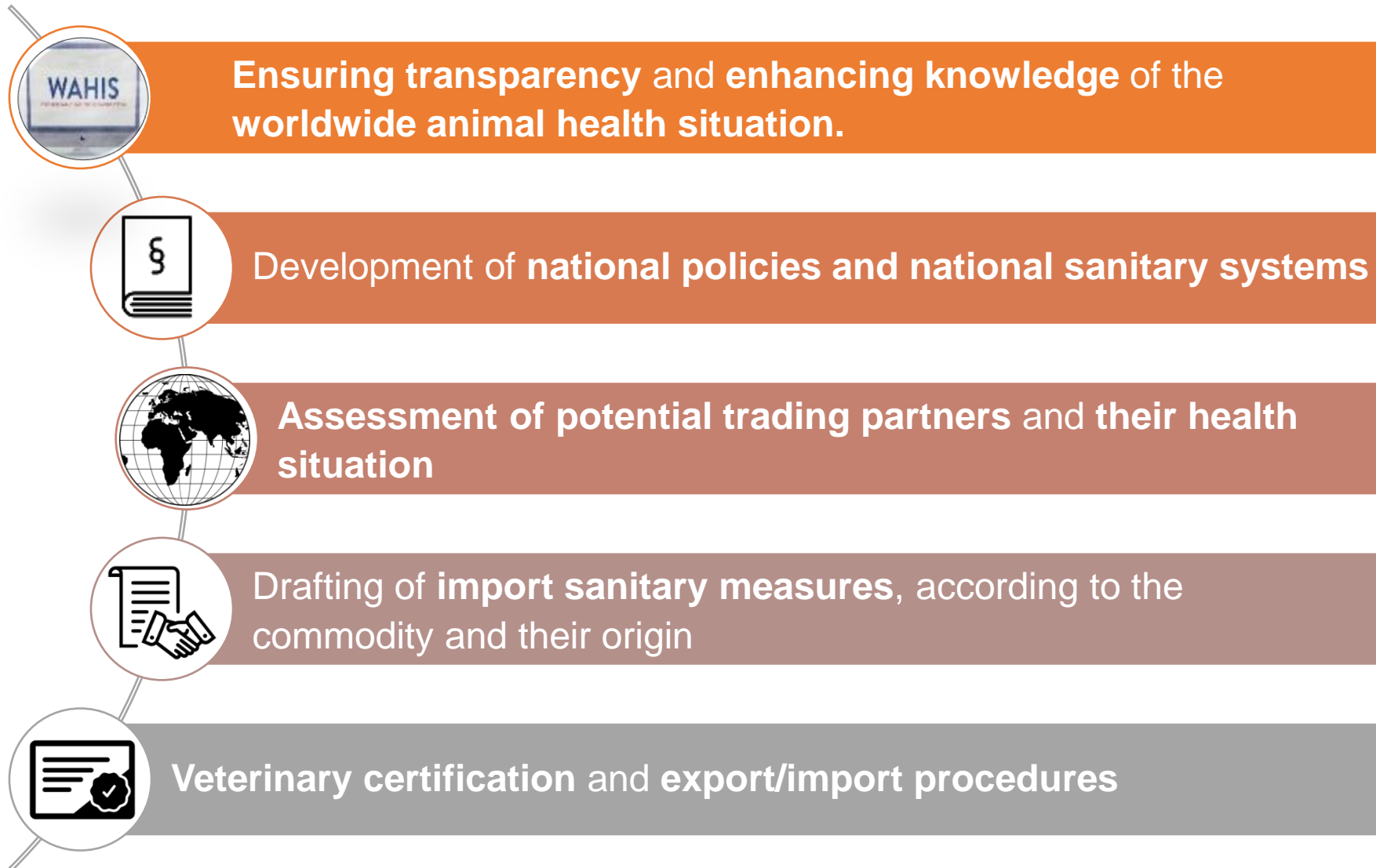
**WOAH is recognised by the WTO SPS Agreement as the international standard setting organisation for animal health and zoonoses.**



WOAH standards contribute to a **fairer rules-based trading system** by supporting **international harmonisation**.



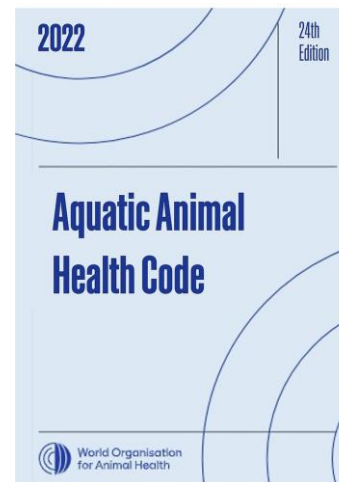
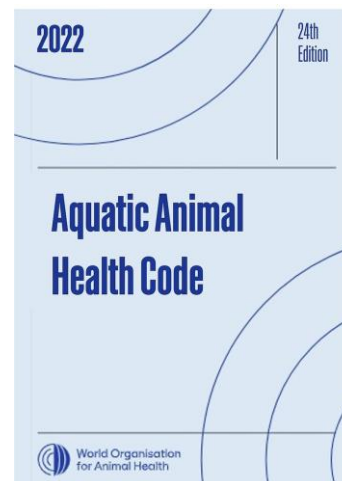
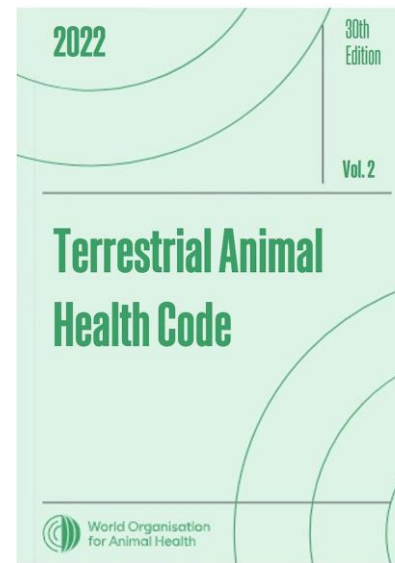
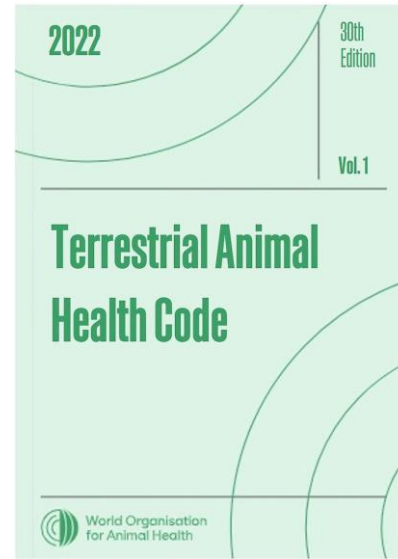
## WOAH international standards, the basis for...



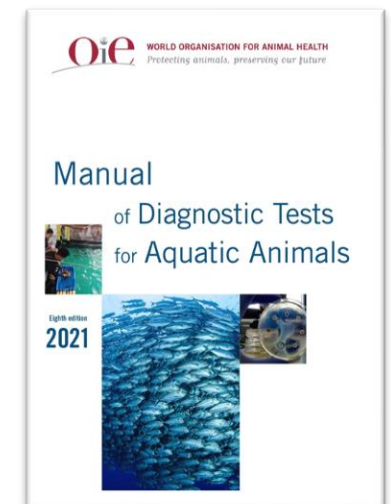


# WOAH international standards

## Codes

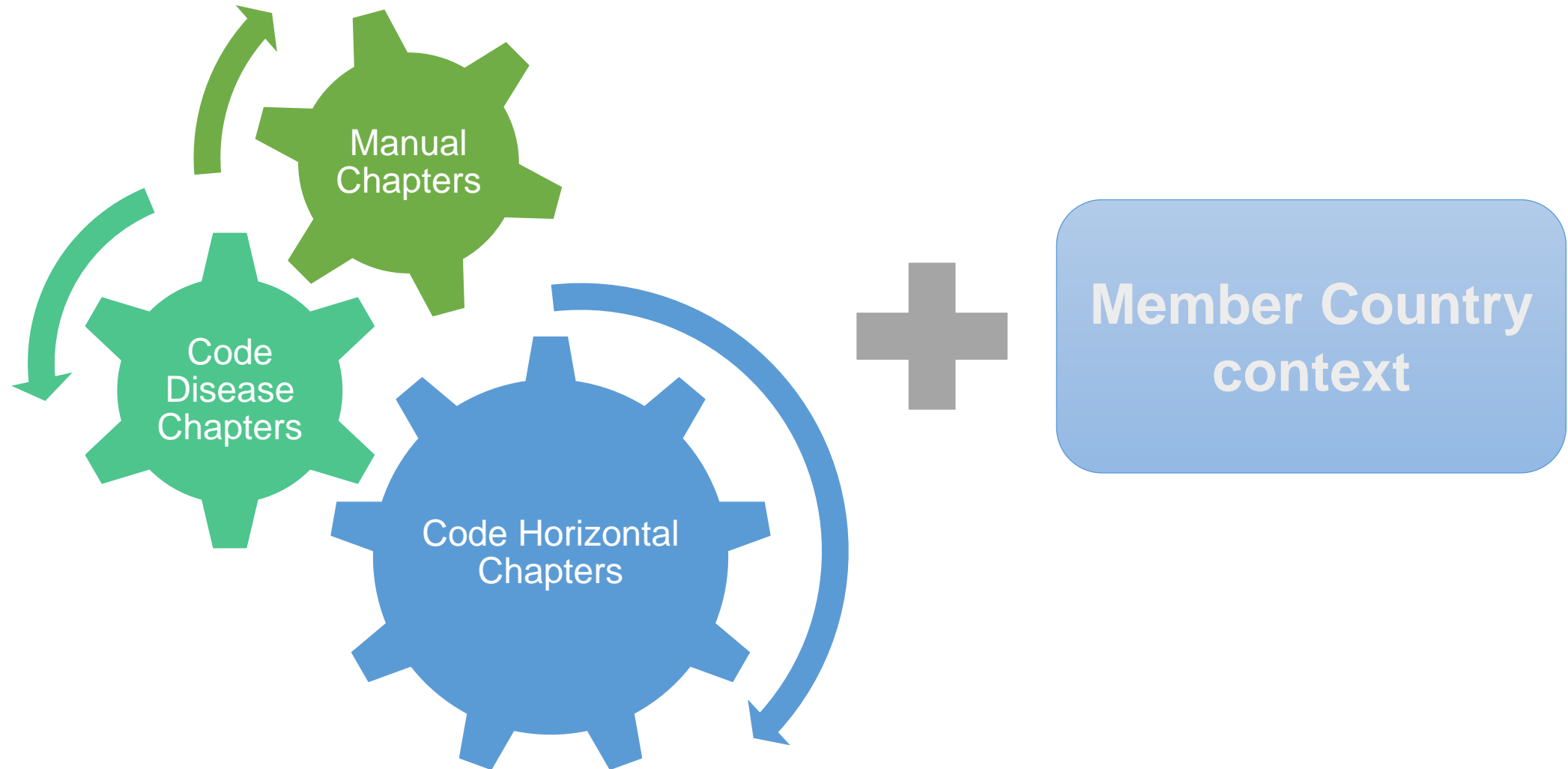


## Manuals





## Using WOAAH international standards

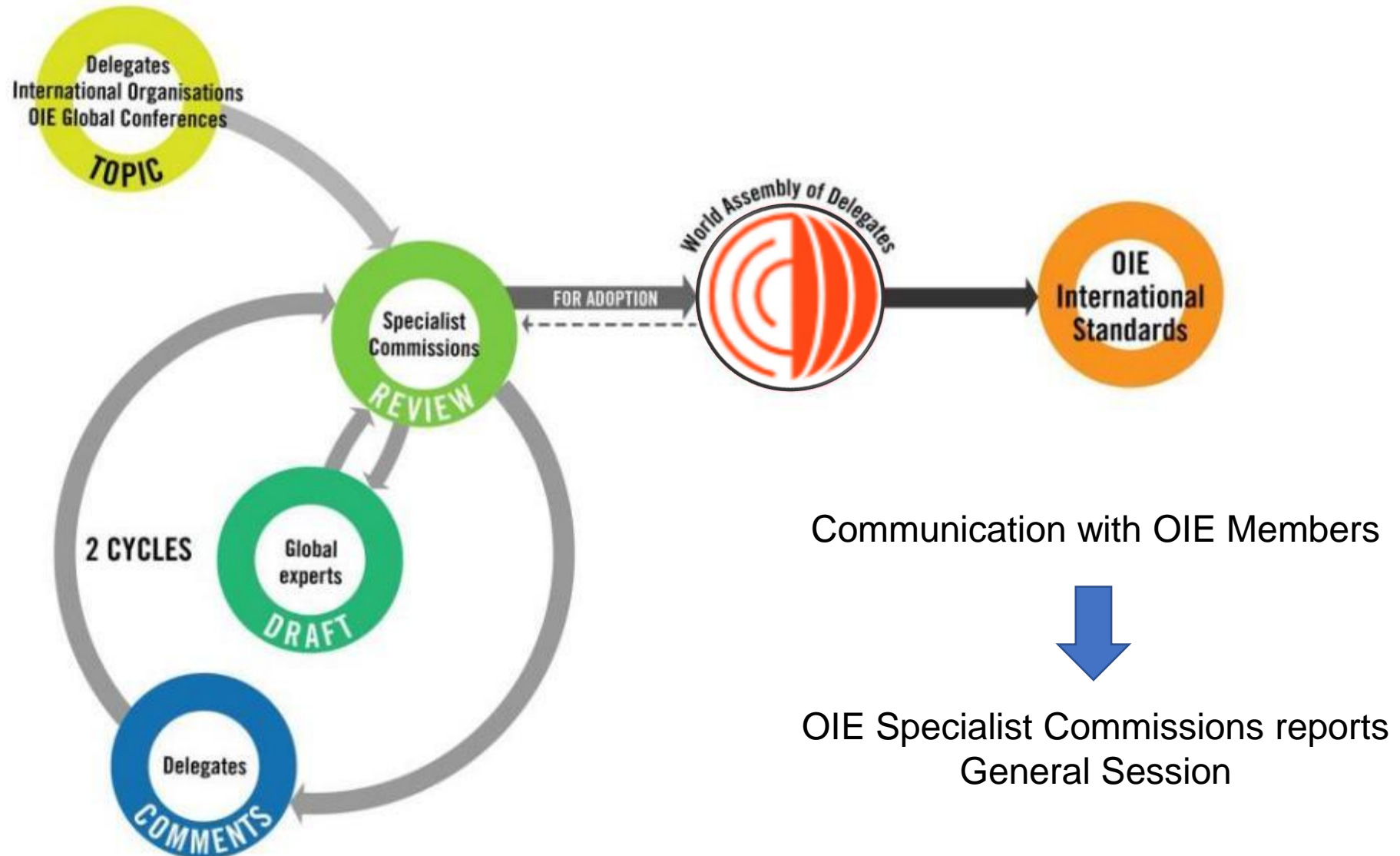




# WOAH Standards Setting



# WOAH Standards setting process





Providing input  
to WOA

Standards Setting

### New requests & proposals

Members & IOs

- express needs for new work to be undertaken, providing evidence to support it, when possible.
- discuss and provide the necessary elements to support the prioritization of work.

### Contribute to ongoing work

Members & IOs

- propose additional or alternative science-based provisions to enrich or complement the proposed texts;
- express evidence-based concerns on potential challenges for the implementation of the proposed texts under specific conditions or contexts (e.g., Members, regions, species), if possible, providing a proposal for improvement of the text;
- provide new or different evidence that supports or contradicts the proposed texts (which has not been previously addressed by Commissions or experts);
- wording issues which could compromise the understanding or the meaning of the texts (in any of the three languages);

### Adoption

Members

- Members can express support, object and request changes at the plenary sessions,
- If consensus is reached, the Assembly adopts the new or revised texts,
- If consensus is not reached, text return to the Commission for further work or, exceptionally adoption could be subject to a vote



## Contribution of partner IOs to WOA

### Standards Setting

- Identify needs and make proposals to develop or improve WOA standards
- Follow the WOA standards setting activities and:
  - o comment on ongoing work, with special focus on practical implementation aspects with regards to production practices and industry processes.
  - o promote awareness and engagement of national organisations in discussion with WOA delegates to develop Member comments.
  - o comment on ongoing work, with special focus on ensuring relevance and suitability of draft Standards for production practices and industry processes.
- Support the relevant Specialist Commission, through WOA Secretariat, by providing:
  - o information on relevant practices and industrial processes
  - o additional source of expertise from their own technical bodies/ experts' network.
  - o reference to other relevant international standards (public or private), notably with regards to industry practices
  - o particular interest in contribution to discussions around definition of processed commodities and the specific mechanisms involved in their production (key for the assessment of 'safe commodities').
- Understand WOA Standards, to:
  - o promote awareness and engagement of national organisations in the discussions with WOA delegates to promote implementation of standards at national level (very important for new or updated standards!).
  - o promote awareness on the value of standardization of national policies and programs in line with WOA standards.
  - o promote the use and benefits of WOA Standards for international trade.

Key to ensure sustained and proactive collaboration



# STRATEGIC PILLARS



**DEVELOPMENT OF  
ANIMAL WELFARE  
STANDARDS**



**CAPACITY BUILDING  
AND EDUCATION**



**IMPLEMENTATION OF  
ANIMAL WELFARE  
STANDARDS AND  
POLICIES**



**COMMUNICATION  
WITH  
GOVERNMENTS,  
ORGANISATIONS AND  
THE PUBLIC**



# PILLARS ACTIVITIES



DEVELOPMENT OF ANIMAL WELFARE STANDARDS

- Historic role of the WOAAH in protecting animal health - Animal health is a key component of animal welfare.
- Texts applicable to all WOAAH Members with diverse socio-economic, agroecological, cultural and religious contexts,
- Guiding principles and recommendations rather a piece of regulation,
- The important support to peoples' livelihoods and agriculture output,
- To date Fourteen Animal Welfare chapters have been published in the Terrestrial Animal Health Code and Four chapters in the Aquatic Animal Health Code.

<https://www.woah.org/en/what-we-do/animal-health-and-welfare/animal-welfare/development-of-animal-welfare-standards/>



CAPACITY BUILDING AND EDUCATION

- Active participation of Animal Welfare Collaborating Centers (AWCC Network)
- WOAAH Training Portal (<https://training.oie.int/>)
- National Animal Welfare Focal Point Seminars

<https://www.woah.org/en/what-we-do/animal-health-and-welfare/animal-welfare/capacity-building-and-education/>

## Regional Animal Welfare Strategies and Platforms

- Regional priorities
- Governance
- Action plan

<https://www.woah.org/en/what-we-do/animal-health-and-welfare/animal-welfare/implementation-of-animal-welfare-standards-and-policies/>



IMPLEMENTATION OF ANIMAL WELFARE STANDARDS AND POLICIES



COMMUNICATION WITH GOVERNMENTS, ORGANISATIONS AND THE PUBLIC

## WOAH ANIMAL WELFARE GLOBAL FORUM



To bring together members of the animal welfare research community, the global animal welfare movement and the global animal-source food sector to debate openly on topics relevant to animal welfare

<https://www.woah.org/en/what-we-do/animal-health-and-welfare/animal-welfare/communication-with-stakeholders/>





# UPDATE OF ASF CHAPTER : 3.9.1



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- ASF chapter was **first adopted in 1990** and the most recent edition was adopted in **2021**.
- The Manual was published every 4 years until 2012 when a number of chapters is selected per year and updated and published them online.
- So after 2012, it was next updated in 2019, with a small modification that should have been proposed in 2020, but the GS was cancelled so it moved to 2021.



## Summary

- African swine fever (ASF) is an infectious disease of domestic and wild pigs of all breeds and ages, caused by a ASF virus (ASFV). ~~that produces a range of~~ The clinical syndromes vary from peracute, acute, subacute to chronic, depending on the virulence of the virus. Acute disease is characterised by high fever, haemorrhages in the reticuloendothelial system, and a ~~moderate or high mortality rate depending of the virus isolate.~~ Soft ticks of the Ornithodoros genus, especially O. moubata and O. erraticus, have been shown to be both reservoirs and transmission vectors of ~~ASF virus (ASFV)~~. The virus is present in tick salivary glands and passed to new hosts (domestic or wild suids) when feeding. It can be transmitted sexually between ticks, transovarially to the eggs, or transtadially throughout the tick's life.



## Introduction

- The current distribution of African swine fever (ASF) extends across more than 50 countries in three continents (Africa, Asia and Europe) is extending in a similar pattern to past scenarios. Several incursions of ASF out of Africa were reported between the 1960s and 1970s. In 2007, ASF was introduced into Georgia, from where it spread to Azerbaijan and Armenia. The disease was not contained and it subsequently spread throughout the neighbouring countries including the Russian Federation. (2007), Ukraine (2012), and Belarus (2013). Despite efforts made to halt the spread of ASF, it reached From there ASF spread to eastern European countries extending westwards and reaching the European Union in 2014, affecting Estonia, Latvia, Lithuania and Poland. Between 2016 and 2018, the disease was reported for the first time in Moldova (2016), Czech Republic (2017), Romania (2017), and Hungary (2018). Further westward and southern spread in Europe has occurred since that time. In all these countries, both hosts – domestic pig and wild boar – were affected by the disease. In August 2018, the largest pig producer in the world – the People’s Republic of China – reported its first outbreak of ASF and further spread in Asia has occurred.



## Introduction

- As no vaccine is available, the presence of ASFV antibodies is indicative of previous infection and, as antibodies are produced from the first week of infection and persist for long periods, they are a good marker for the diagnosis of the disease, particularly in subacute and chronic forms. ~~The early appearance (from 7 to 10 days post-infection) and subsequent long-term persistence of antibodies make antibody detection techniques, such as ELISA, indirect FAT, indirect immunoperoxidase test (IPT) or immunoblotting or IFA test (IBT), very useful in diagnosing the subacute and chronic forms of disease.~~



## **Diagnostic techniques:**

- virus isolation
  - conventional PCR
  - Real-Time PCR
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- Have been reviewed for more precision and clarity



# Update 2019

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## Introduction

- ...Less virulent strains produce mild clinical signs – slight fever, reduced appetite and depression – which can be readily confused with many other conditions in pigs and may not lead to suspicion of ASF.  
Moderately virulent strains are recognised that induce variable disease forms, ranging from acute, subacute to chronic. Low virulence ~~virulent~~, non-haemadsorbing strains can produce subclinical non-haemorrhagic infection and seroconversion, but some animals may develop discrete lesions in the lungs or on the skin in areas over bony protrusions and other areas subject to trauma. Animals that have recovered from either acute, subacute or chronic infections may potentially become persistently infected, acting as virus carriers. The biological basis for the persistence of ASFV is still not well understood, nor it is clear what role its persistence plays in the epidemiology of the disease.



## Introduction

----both hosts – domestic pig and wild boar – were affected by the disease---

Molecular epidemiology : --To distinguish subgroups among closely related ASFV, sequence analysis of the tandem repeat sequences (TRS), located in the central variable region (CVR) within the B602L gene (Gallardo *et al.*, 2009; Lubisi *et al.*, 2005; Nix *et al.*, 2006) and in the intergenic region between the I73R and I329L genes, at the right end of the genome (Gallardo *et al.*, 2014), is undertaken---

## Diagnostic Techniques:

Molecular diagnosis : Conventional and Real-Time PCR

Serology : Elisa





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# **WOAH RL networks on ASF, PPR, rabies**



## RL Network on ASF

- Initial discussion about creation of these networks started in February 2019 (page 10 -

[https://www.woah.org/fileadmin/Home/eng/Internationala Standard Setting/docs/pdf/BSC/A\\_BSC\\_Feb2019.pdf](https://www.woah.org/fileadmin/Home/eng/Internationala%20Standard%20Setting/docs/pdf/BSC/A_BSC_Feb2019.pdf))

- followed up in September 2019 (page 11 -

[https://www.woah.org/fileadmin/Home/eng/Internationala Standard Setting/docs/pdf/BSC/A\\_BSC\\_Sept2019.pdf](https://www.woah.org/fileadmin/Home/eng/Internationala%20Standard%20Setting/docs/pdf/BSC/A_BSC_Sept2019.pdf))

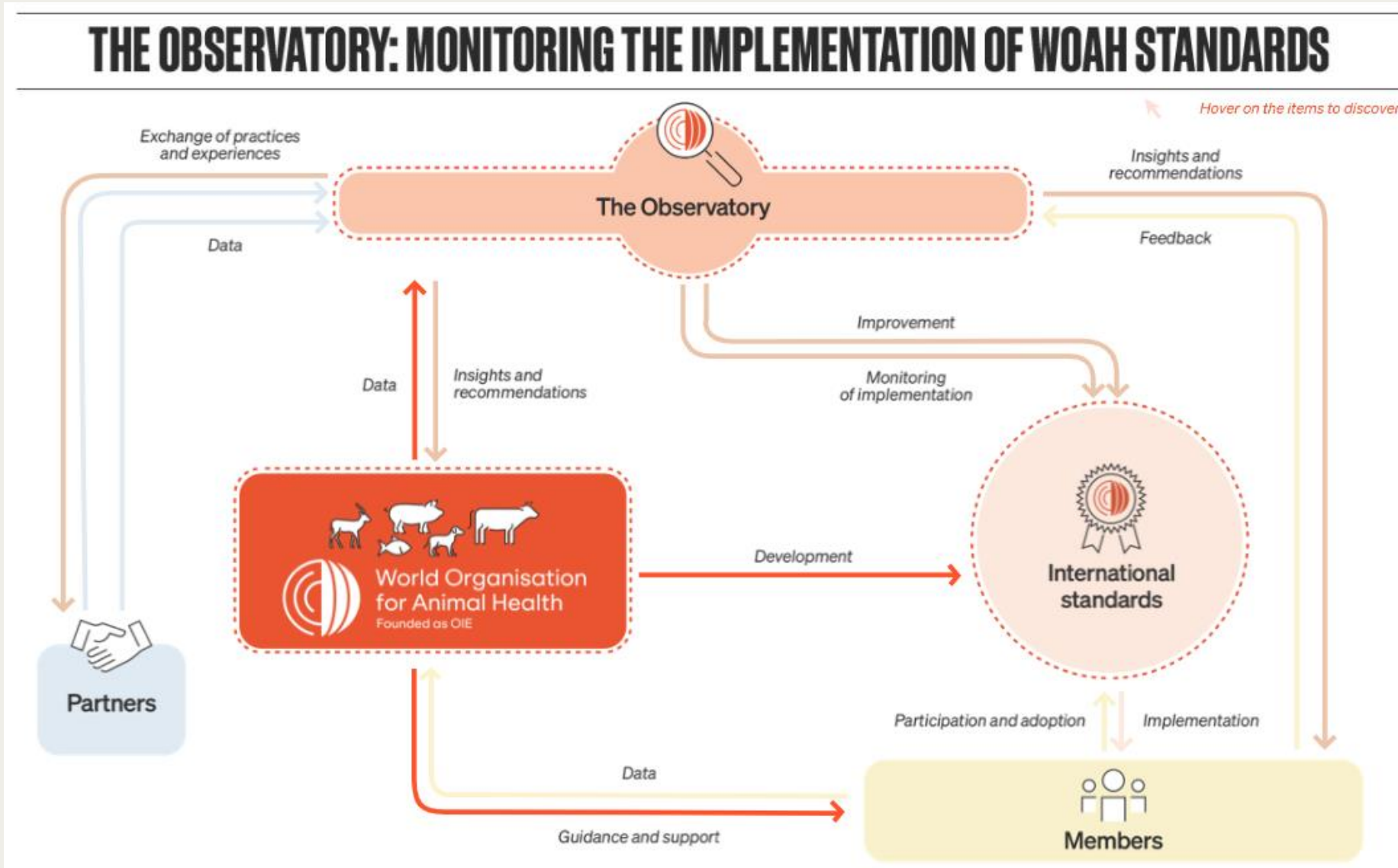
- and February 2020 (page 12 -

[https://www.woah.org/fileadmin/Home/eng/Internationala Standard Setting/docs/pdf/BSC/A\\_BSC\\_Feb2020.pdf](https://www.woah.org/fileadmin/Home/eng/Internationala%20Standard%20Setting/docs/pdf/BSC/A_BSC_Feb2020.pdf)



# WOAH Observatory







# Conclusion

- Improvement of the ASF chapter based on the scientific findings and evolution.
- Process of the Standards setting requires the involvement of any MC and International Organisations having an agreement with WOAHA.
- ASF RL Network to improve knowledge including Lab techniques for ASF diagnosis.
- Update and improvement of Requirements for Vet Vaccine production and Vet biological products.
- Creation of The WOAHA Observatory to assess and to monitor the implementation of WOAHA Standards.

# Thank you very much Merci beaucoup

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