Standing Group of Experts on African swine fever in Europe
under the GF-TADs umbrella

Twenty second meeting (SGE ASF22)
8/9 April – conference – Berlin and Mecklenburg - Western Pomerania, Germany

REPORT

List of members[1] present:

Country	**Country**
Albania	Bulgaria
Bosnia and Herzegovina	Czech Republic
Croatia	Germany
Estonia	Italy
Hungary	Kosovo[2]
Latvia	Lithuania
Moldova	Montenegro
North Macedonia	Poland
Romania	Serbia
Slovakia	Sweden
Ukraine	

List of observer countries, GF-TADs organizations, and associated organizations:

Country or organization	**Country or organization**
Armenia	Austria
Azerbaidjan	Denmark
Georgia	Finland
France	Israel
Japan	Luxemburg
The Netherlands	Norway

Switzerland	Turkmenistan
FAO Europe	European Commission, DG Santé
WOAH HQ	WOAH Europe

Summary

The twenty second meeting of the Standing Group of Experts on African Swine Fever (SGE ASF22) was organised in the Friedrich-Loeffler-Institut (German animal virology reference laboratory) and Mecklenburg-Western Pommerania, Germany, by the SGE ASF Secretariat[1] on the 8/9th of April 2024. Twenty-one SGE-ASG Member Countries from the European Region participated, for a total of over 90 participants in FLI and 75 in the field visits.

After a brief overview of regional activities from Asia Pacific and Europe, the new Member countries briefly presented their national epidemiological situation regarding ASF.

Participants, including representatives of local German Veterinary Services, gave presentations of the opportunities and challenges in the use of fencing in control of ASF in wild boar, that were illustrated by field visits on the second day.

The SGE ASF22 made a number of recommendations.

Next meeting

- The twenty third meetings of the Standing Group of Experts on African Swine Fever (SGE ASF23) in Europe under GF-TADs is planned to be held in September 2024 in Ohrid, North Macedonia.

Report

Presentations are available on the website of the SGE on ASF of the regional GF-TADs for Europe.

Introduction and objectives of the meeting

After welcome words by Drs Kuhn, Rassow and Plavsic, the President of the Regional Steering Committee of the GF TADs for Europe, Dr Van Goethem announced the four main goals of the meeting:

- First: general presentations on the ASF situation and main activities in Asia and Europe, from WOAH, FAO, and the EU.
- Second: brief overview of selected countries with evolving epidemiological situations.
- Third: presentations from Germany on the topic of strategic fencing and control of ASF in wild boar.
- Fourth: experience with control in wild boar from certain affected countries.

On the second day, participants were taken to the field, to see fencing put in practice, but also other measures for control of wild boars, such as searches with dogs, drones, and trapping of wild boars.

[1] WOAH Regional Representation for Europe in Moscow

Seventy-six participants attended the 22nd meeting of the SGE ASF for Europe organised in Berlin and Mecklenburg – Western Pomerania by the WOAH SGE Secretariat and Germany. Dr Van Goethem, congratulated participants for the quality of the work of this group.

Twenty-ne Members of the SGE ASF for Europe attended the meeting, along with several observer countries, and representatives from the European Commission, FAO, WOAH. Representatives of the Asian and African WOAH Regional Commission were also invited, the Vice President of the Regional Commission for Asia and the Pacific attended the meeting.

Updates from the Global ASF Working Group and regional activities.

Presentations were given by:

Dr Okita, Vice President of the Regional Commission for Asia and the Pacific, speaking on the activities in the WOAH Asia Pacific Region:

- As of November 2023, 19 countries officially reported ASF in Asia-Pacific. Different strategies are chosen country by country according to their epidemiological situation. Whereas some have strategies prioritizing actions on domestic pigs, others such as South Korea, have the efforts focused on the wild boars.
- At a regional level, efforts are focused in developing capacity to improve preparedness and response.
- The speaker also explained the strategy developed by Japan, country free of ASF cases. There, efforts are focused on preventing the introduction and increasing the response preparedness. In this regard, different strategies oriented to control the borders and raise awareness are being conducted. He also explained that due to the heterogeneity of the Japanese landscape with bamboo forest in 68% of its territory and areas with high altitude, fencing doesn't seem feasible and that increased biosecurity in farms such as clothing, heat treatment for recycled feed and proper carcasses disposal are the priorities. Since 2020, they organized field training with simulated ASF outbreaks.
- Furthermore, the situation in South Korea was presented with 3731 outbreaks in wild boar and only 40 outbreaks in domestic pigs since 2019. The disease is spreading south in the wild population and the actions are focused on carcass searching, disposal and enhanced surveillance and biosecurity in farms.

Dr Chang and Dr Perchet, speaking for the ASF Working Group and WOAH RR Europe:

- Dr Chng provided an overview of the 6-year Global Initiative, due for a renewal after 2025 and invited Members to reflect on their experiences in ASF prevention and control to inform the next strategy. She highlighted key challenges faced in ASF control (biosecurity in small holders, the impact of biosecurity in wildlife and an improved legal framework). The use of ASF vaccines is in the mandate of individual countries, but WOAH is working on a comprehensive surveillance strategy. New standards in the terrestrial manual were released for comments in February and it is expected they will be adopted in May 2024 during the General Session. She introduced the draft approach for the upcoming meeting of the Global Coordination Committee for ASF at the margins of the WOAH General Session. The discussion will rely on the use of scenario planning to identify fit-for-purpose priority activities taking into account the

different local/ regional contexts and actions that may feasibly be applied depending on selected scenarios (deterioration, status quo, or eradication scenarios).

- The ASF regional secretariat for Europe presented the activities developed and planned for the region, including the new e-depositary on the WOAH website The ongoing project to unify the report of events on ADIS and WAHIS for the European countries was also presented.

Dr. Forcella, representative of the European Commission presented the current ASF epidemiological situation in the European Union, highlighting that ASF cases are mainly found in wild boars, with sporadic outbreaks in domestic pigs in certain countries. She also mentioned the EU legal framework and regionalization approach in the EU Member States and several other activities that the EU has been implementing to prevent, control and eradicate ASF since the disease entered Europe. She pointed out that to date no ASF vaccine is authorised for use in the EU or in any EU Member States (EU or national marketing authorisation). Currently, no ASF vaccines can be used in the EU (whether for emergency or preventive vaccination) as no vaccination programme can be properly developed in the absence of specific detailed EU provisions for ASF vaccination.

Dr Daniel Beltran Alcrudo from FAO Regional Representation for Europe and Central Asia:

- Three main courses offered under the Virtual Learning Centers (VLCs) for Europe and Central Asia:
    - An introductory course, ASF preparedness courses (certified by Veterinarian Associations), and Stamping out courses with high attendance.
    - Moreover, the templates for control and eradication plans for ASF were translated into several languages.
- Furthermore, the speaker reported that a tool, launched in 2022 and available online to calculate the financial burden has been already implemented for ASF outbreaks simulation in several countries.
- Finally, FAO main outputs and activities in the Balkans were pointed out:
    - Improved Biosecurity in both commercial and backyard farms
    - increased awareness and knowledge of ASF in the pig sector,
    - improved capacity of first responders on control against ASF, training hunters to detect and control ASF in wild boar
    - regional coordination among veterinary services, countries and international organizations in the region.

Updates from the member countries of the SGE ASF

Dr Van Goethem then invited new Members of the SGE ASF to give presentations on their epidemiological situations and Edvins Olsevskis, one of the GF-TADs SGE on ASF experts to report on the recent ASF mission on the spot in Montenegro. **Presentations are available at this link:** 22st Standing Group of Experts on African Swine Fever in Europe (SGE-ASF22) - WOAH – Europe

- Dr Esta Papajani presented the current situation in Albania that detected the first cases in February 2024.

- Dr Mevlida Hrapovic from Montenegro highlighted the importance of the awareness campaigns funded by the European commission, considering them as essential sensibilization that allowed an early detection and notification of the first ASF cases in the country.
- Afterward, Dr Edvins Olsevskis from the expert group reported the main outcomes of the expert mission conducted in Montenegro in February 2024. The importance of increasing biosecurity before the hunting season begins, reinforcing passive surveillance in wild boars and regular audits to re-evaluate measures were highlighted as the main recommendations given by the experts during that mission.
- Dr Bossfall, from Sweden gave an update on the Swedish management of the disease and highlighted the country's strategy based on early detection, zoning, good coordination among stakeholders including hunters and the relevant national legislation.

Technical item: fencing

Dr Van Goethem invited representatives from the Federal and local levels in Germany to give a presentation on ASF control measures centered around the use of fencing:

- Dr Christina Haarman, from the Federal Ministry of agriculture explained the current situation in Germany after the introduction of the disease in 2020. She showed positive results from the ASF control program in Germany, relying on good biosecurity and legislative support. Following the detection of outbreaks, testing was amplified, along with awareness campaigns and introduction of risk traffic lights for biosecurity. Measures were facilitated by legislative support, including for the implementation of biosecurity, testing, early detection, eradication measures, database for examination results and the notification system. She emphasized the importance of public relations targeting different stakeholders, including seasonal agricultural and forestry workers, along with military personnel. The ASF protection corridor (double fenced "white zone") concept alongside the Polish-German border also prevented the further introduction of infected migrating animals. More than 160M€ was spent by the Länder on fencing (white zones around infected core areas and the ASF protection corridor), which worked very well in limiting the spread of infection through wild boars.

- Dr Carola Sauter –Louis from the FLI gave an overview regards genetics: in Germany different types of virus proof multiple introductions in different areas alongside the Polish-German border.

- Dr Holland, from the State of Brandenburg provided an overview of the ASF outbreaks in Brandenburg that started in Sep 2020 close to the border with Poland, with a demonstrable reduction in the number of ASF cases detected since the installation of fences and other measures to search and remove wild boars. Overall, over 2250km of fences mainly to create various white zones around core areas as well as to build the ASF protection corridor alongside the Polish-German border were installed, together with measures using drones, police helicopters, human search parties and search dogs to detect wild boars. A variety of traps are deployed, followed by culling and cleaning

and disinfection using purpose-built containers and facilities. A total of 15,000 wild boars were removed in the past 3 years. She reported that:

  - Helicopters allow to perform fast searches and to detect activity of animals, but they are not suitable for areas with dense vegetation.
  - Drones are very useful during an active epidemic to detect heat signatures, finding live wild boars. Depending on the drone's type of battery lifespan and the scanning area, they can search in an area as big as 200 Ha.
  - To be effective, human search has to assure a maximum of 4 meters between 2 pedestrian and it needs to be adjust according to the nature of the landscape. A chain of 10 to 15 pedestrian has proven to be successful with a maximum of 2-3 hours a day twice a day.
  - Dogs are useful and mainly used in conditions where a human search is impossible or would generate high risks of injury. Dog searches can be conducted 2-3 days per week with a maximum of 2 or 3 hours per day and needs to be adapted to environmental temperature, with a risk of encountering live wild boars. Therefore, weapons are required and these searches are usually performed by hunters. The animals need to be trained beforehand and one animal can cover 5 to 40 Ha.

- Dr Woida, from the State of Mecklenburg - Western Pomerania gave an overview of the measures taken in this Lander. In total, 160km of electric fencing and 100km permanent fencing were installed to create the white zones around the only core areas that had to be invented in MV as well as to build the ASF protection corridor alongside the Polish-German border. Drones, traps and sniffer dogs were used to detect wild boars. Steel containers were used to collect carcases and dispose animals in processing plants; the system notably has its own disinfection system so these can be moved between areas. Dr Woida highlighted that during the outbreak in domestic pigs in November 2021, double fencing had already been installed due to legal obligation for pig establishments in Germany which was augmented with additional electric fencing. Response measures included the establishment of zoning, epidemiological investigations, expansion of active monitoring of wild boars, testing of samples and a buy-up program for domestic pigs and wild boars. The presentation stressed the importance of early detection, rapid response, coordination and cooperation (with little loss of time), public communication and evaluation of measures to better prepare for potential future cases.

- Dr Lade, from the State of Mecklenburg - Western Pomerania noted that challenges associated with fencing included areas with presence of old ammunition, as well as season/ weather challenges especially at the seaside. Population analysis of wild boars was conducted using drone flights, and every dead or shot wild boar was identified for traceability. There was also an elaborate program for training of hunters, which included in-person and virtual training. Overcoming difficulties in cooperation and information exchange with hunters allowed the reduction of wild boars to almost zero in the white zone between the double fencing close to borders, hunting in accessible areas, maintenance of fences and setting up cadaver collection points.

Dr Van Goethem asked representatives from Italy and France to broaden the geographical scope on fencing:

- Dr. Franceso Plasmati, from the Italian Ministry of Health gave an overview of the epidemiological situation in Italy and presented the different strategies conducted according to each zone established.
- Dr. Franceso Feliziani, from the Italian reference laboratory, explained the use of different approaches for sequencing the virus and identify variation among the different clusters and thus, trace the introduction of the disease in the country and the subsequent changes in its genotype.
- Dr Soubeyran from France gave a presentation on the third edition of the French prevention plan for ASF, highlighting five priorities (preventing the introduction of the virus, to limit the spread in case introduction happens, permanent monitoring, collective preparation, anticipating the economic consequences in the event of the introduction of ASF in the territory.)
  She stressed the importance of transboundary cooperation and presented the cooperation and joint efforts undertaken with Belgium, Germany and Italy, the importance of the timely and transparent sharing of information and cross-border exchanges to ensure that measures may be taken to reduce the risk of ASF entry. She highlighted the importance of open communication and transparency, coordination before outbreaks at both central and local levels and the support of the EUVET missions.
- Dr Guberti presented the evolution of fencing solutions used in Europe, and the possible future role of vaccination against ASF:
  - the evolution of the fencing strategy over time and the experiences of Lithuania, Czech Republic, Belgium, Germany and Sweden.
  - he recalled the audience that it is not possible to reach eradication by vaccination alone and that a strategy that combines effective vaccines with and effective wild boar population management will be key to achieve success, when safe and effective vaccines for ASF in wild boar will be available.

FIELD VISIT (SECOND DAY)

During the second day of the event, participants were taken to the field and shown demonstrations of four activities linked to controlling wild boar populations with fencing.

Fences

On the Polish-German border, participants were shown a 2-element system (outer fence and inner fence) delimiting a 'white' area ranging from 20 meters to 1 km in width. The outer fence is 160cm high and inner fence 120-90 cm high. To avoid animals digging under the outer fence, it was constructed with a 70 cm underground prolongation. The fences require monitoring and surveillance. This is conducted by frequent patrols, and by drones twice a year. The fences have small openings to allow free circulation of unrelated wildlife species.

Planning the fence layout took a year, and the outer fence cost 1.2 million to install for 60 kms. However, before installing permanent fences Germany made use of electiric fencing to immediately slow down the movement of wild boar from the affected zones. Monitoring and

maintenance cost 6000 EUR per month. An agreement with the local community was stressed as an important point in achieving success, along with flexibility in accepting specific requests, eg doors. Communication also includes a visible telephone number on the fences to communicate possible damages, along with a QR code that provides more information about the fences and their purpose.

Drones equipped for thermal imaging

As the white zone should be empty of wild boars, a project is ongoing to detect animals, including carcasses. Thermal drones are one of the tools for this.

The search with drones is conducted in 2 phases:

- taking pictures of stationary objects (dead, resting or slow animals). Data is analyzed manually or through specific artificial intelligence.
- A 2nd manual verification phase is conducted to corroborate and to identify moving objects. If a wild boar is identified, the location is transferred to the federal agency.

Drones can detect legs or hair from an altitude of 70 meters, and in the case of live wild boar, up to 120 meters of altitude depending on the probability of finding one. The system allows the check 2-3 Ha per minute and the drone used has a fly time of 40 minutes, covering 80-100 Ha per drone. In Germany, a license is needed for equipment heavier than 1 kilogram. The search is performed assuring a 30% overlap between two drones to increase probability of success. Each drone can cover 100 meters in width and they are separated from each other by 70 meters, having 30 meters overlap. This allows to find both carcasses and live wild boar.

Trained sniffer dogs for carcass search

Dogs can be trained to search for wild boar and carcasses for walks of 30 km in a day. They have a GPS collar gps that registers where the dog has been.
Hunted dogs are preferred as races for this purpose because wild boar can be dangerous. The handler should therefore preferably be armed.
Training of the dog to identify the smell of carcasses was explained. This process is much more efficient than visual searching by humans alone, but it requires very dedicated masters and specific dogs.

Trapping

If live wild boars are present in an area, the population can be drastically reduced through trapping before culling the animals. A trap that uses nets was presented. The system has a camera installed to monitor remotely when animals are trapped, and can be installed by one or two people.
Trapping is carried out in two phases:

- Phase 1 is to meant to get the animals used to the trap, go inside and feed from the sweet corn deposited inside. During this phase, the nets are set high so the animals can get in and out freely. This phase normally lasts around two weeks. It is important to ensure there is no hunting activity close to the trapping zone.
- Phase 2 is the trapping itself. Nets are let down on the ground and when animals enter the net to get the feed, they get trapped.

- Once enough animals are inside the net (up to 50), they need to be rapidly shot from outside of the trap.

It is observed that younger animal go inside first while older individuals take longer.
Traps are installed every three kms, depending on the wild boar density in the area. There is about one trap every half square km.

These traps are a good method to significantly reduce a wild boar population without the movement associated with conventional hunting.

Presentation, discussion and adoption of the SGE ASF20 recommendations

Following the discussions, after reviewing the reports on the current epidemiological situation from the SGE Members[1][2], and after the field visit in Mecklenburg-Western Pomerania, Dr Van Goethem presented a set of draft recommendations, that were sent to participants by email after the meeting for their comments. The final version of the recommendations is available on the GF-TADs Europe website (link).

Closing Remarks

The organizers of the SGE thanked all participants and stressed the importance of collaboration and coordination, including cross-border coordination in the struggle against ASF, all while following science and experience / best practice in the development of our strategies for the eradication of ASF.

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We would like to sincerely thank Germany, the European Commission, FAO and WOAH for kindly supporting the organisation of the SGE ASF22 conference.

All presentations are available on the GF-TADs page of WOAH of the Europe website:

22st Standing Group of Experts on African Swine Fever in Europe (SGE-ASF22) - WOAH – Europe

[2] Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Estonia, Germany, Greece, Hungary, Italy, Kosovo*, Latvia, Lithuania, Moldova, Montenegro, North Macedonia, Poland, Romania, Russia, Serbia, Slovakia, Sweden, Ukraine