

Standing Group of Experts on African swine fever in the Baltic and Eastern Europe region

under the GF-TADs umbrella

First meeting (SGE1)

Report

Location:	Minsk, Belarus
Date:	1-2 December 2014
Present:	- Countries: BY, EE, LT, LV, PL, RF, UA; (<i>observer: KZ</i>)
	- Organisations: OIE; European Commission (EC); (observer: Eurasian Economic
	Commission)
	- Experts: S. Khomenko; V. Guberti
Objectives:	To learn and discuss ASF control options in wild boars
Next meeting:	February 3-4 2015, Tallinn (Estonia) – to be confirmed

- The First meeting of the **Standing Group of Experts on African swine fever in the Baltic and Eastern Europe region** (SGE1) took place in Minsk, Belarus, on 1-2 December 2014. The SGE Secretariat would like to express its deep gratitude to the Veterinary Services of Belarus for organising and hosting the meeting.
- All seven countries part of the initiative were present, represented for six of them by their OIE Delegate/CVO. Representatives of Kazakhstan, as well as the Eurasian Economic Community attended as observers, as there was a separate meeting of the Customs Union held back to back with the SGE1 in Minsk. The list of participants is available in <u>annex 1</u>.
- Following the decision made during the Initiative kick-off meeting in Bern, the SGE1 was dedicated to the ASF situation in wild boars and related prevention and control measures. The recommendations of the OIE-CIC International Meeting on early detection and prevention of ASF and other animal health issues at the wildlife-livestock-human interface (Paris, June/July 2014) served to frame the discussions, emphasising the indispensable collaboration among veterinarians, hunters and representatives of wildlife and game management organisations. Two well-renown international experts on ASF in wild boars, Dr S. Khomenko and V. Guberti, made detailed presentations on wild boar situation, ecology and population management options. The information they provided was most valuable to ensure that the discussions remained science-based. Countries were also invited to present their situation (see <u>annex 2</u>; guidelines were provided to assist and harmonise country reporting), fostering a straightforward and fruitful regional dialogue.

> Summary of the key technical points presented and discussed during the SGE1

✤ In the Eastern Europe and Baltic region, wild boars are not the main source of infection, spread or maintenance of ASF:

• Supporting facts provided by the experts:

- In the Baltic and Eastern Europe region, and in particularly in the wild boar population living in the areas under restriction, a rough 2% cumulative lethality due to ASF has been estimated;
- In the Baltic and Eastern Europe region, only ASF genotype 2 is circulating; genotype 2 is known for a high lethality, whereas, up to now, no evidence is available to suspect both chronic infection and/or long-term ASF spreaders (different from genotype 1); as a result the few wild boars surviving ASF do not spread the infection;
- Wild boars have a sedentary behaviour and do not migrate; increased movements are however observed when forced to ('emergency movements' linked to food, hunting, climatic conditions); their territoriality is therefore high and movements very limited (home range varies from 2.000 to 10.000 ha). Juvenile males however are pushed out by older males and can disperse up to 25-30 km;
- Very long dispersal movements are exceptional cases; the maximum distance recorded of about 90 km has been observed during a 25-month period leading to an average linear movement of 0,9 km/week;
- The smallholder (so called "backyard") production systems are mostly where ASF maintains, mainly due to the absence of biosecurity and due to swill feeding practices with possible ASF contaminated food;
- The genetic evolution of the virus (changes in pathogenicity) is more likely to be observed in backyards;
- In the absence of ASF cases in domestic pigs, the disease is expected to fade out spontaneously in the wild boar populations.

ASF control in wild boars needs to be based on a clear understanding of the wild boar population estimates, demography and dynamics based on census data:

- Supporting facts provided by the experts:
- Wild boar population is generally underestimated at least by 20-30%;
- The number of wild boars depends on the season of the year and usually peaks in June;
- The density of wild boars (= number of animals per unit area of suitable habitats; different from 'abundance') is in most cases heterogeneous within a country, and therefore, any national/regional wild boar population density/size estimation is an average of different local densities;
- The density of wild boars is a factor for ASF occurrence and therefore a baseline wild boar population density estimate is highly needed (density approach are already commonly used for CSF and rabies control, respectively for wild boars and foxes);
- Countries should in particular assess the wild boar threshold density at which ASF will fade out through a density dependent process, which currently is unknown;
- Wild boar density maps are indispensable for surveillance activities, identification of possible hot spots, disease spread corridors and implementation of preventive measures;
- Additional data such as the female fertility rate, number of reproductive animals, etc are also needed to properly understand the population dynamics;
- In the absence of such data, only a 'blind management' of ASF in wild boars can be made, which
 efficiency will be impossible to evaluate.

ASF control in wild boars needs to be based on country/region tailored options

• Supporting facts provided by the experts:

 In the absence of vaccines, three ASF control strategies in wild boars, clearly linked to their population management, are available: (i) hunting strategies; (ii) artificial feeding strategies; and (iii) capture and sterilization, with specific 'factors': promptness; acceptability; feasibility; side effects:

	Promptness	Acceptability	Feasibility	Side-effects
Depopulation	K	R	ĸ	- Selecting sick wild boars
(>80% elimination of		wildlife rangers /		 increasing poaching
reproductive stock =		hunters opposed		(uncontrolled hunting)
90% of the post-		to depopulation		 increasing probability of
reproductive population)				contact with infected animals
(only if the wild boar				and disease spread at the
threshold density at				hunting grounds and to
which ASF fades out is				domestic pigs
known)				 the home range increases two
				or more times
				- Chaotic pathways because of
				hunting stress caused by over-

				hunting - local extinction of wild boars - the wild boar threshold density at which ASF fades out is not known
- Selective hunting (One or more age classes/gender are overhunted in order to decrease the whole population) (only if the wild boar threshold density at which ASF fades out is known)	→	7	ע	 Selecting sick wild boars - More piglets as female are reproductive earlier + Medium term strategy - the wild boar threshold density at which ASF fades out is not known
- Hunting ban (based on age or gender)	ת	R	ת	 + Avoid disturbance + Reduced risk of virus transmission through hunting - Agriculture damage - limited sampling for active surveillance
 Artificial winter feeding 	Я	7	ת	 + Less movements; decreased winter home range + limited crop / agricultural damage + Easy hunting - Highly Increase of the total population
- Ban of winter feeding	Π	R	N	 Increased home range Crop / agricultural damage Decreased total population
- Capture and sterilisation (drugs; 2-year effect)	R	オ (conservationists) ビ (hunters)	Ы	 Need to sterilize about 70% of female to maintain the population (based on demographic parameters of the Central-south European wild boar populations) → not a management option high cost of capture food safety issues (meat consumption)

- If control strategies are combined, it is crucial to avoid contradictory options (examples: winter feeding and depopulation or selected hunting);
- Hunting ban combined with feeding ban together is probably the most efficient ASF control strategy in wild boars and - in any case – the one with less side effects;
- As the virus survives in carcasses in freezing conditions, a good waste management of carcasses should also be part of the control strategy in wild boars (to avoid environment contamination and further consumption by other susceptible individuals);
- Each country should determine its own control strategy according to its ecological, environmental and social context, which – especially in large countries - may differ in different regions of the same country;
- Overall, depopulation especially when the wild boar threshold density at which ASF fades out is not known or not achievable - has proved to increase the probability of spreading ASF and is strongly discouraged.
- Any of these have to be considered as medium to long term options and should be well coordinated in time and space in order to achieve desired effect

Specific control actions are needed at the interface between domestic pigs and wild boars

• Supporting facts provided by the experts:

- ASF transmission between domestic pigs and wild boars occurs both ways; therefore, addressing the 'interface', namely the backyard production systems, is strategic;
- Mapping of wild boars density and "backyard" production systems is key to understand the risk of interaction and spill over events;
- Effective biosecurity measures in "backyard" production systems are crucial to avoid the two-ways transmission.

Conclusions / outcomes of SGE1

- 1. Constructive discussions stimulated by the contribution of the top experts constitute a very positive output of this meeting;
- 2. Cooperation relies on trust based on full transparency;
- 3. ASF eradication in the interface between wild boars/pigs should be based on science based on evidence and not on the exceptions or on non-proved hypothesis;
- 4. Management of wild boars needs strong cooperation among hunters, environmental authorities and veterinary services;
- 5. Hunting should be conducted in a manner that avoids movement of wild boars;
- 6. Management of wild boars should be clearly defined depending on the ecological, environmental and social situation in the region. Drastic reduction of the wild boars population (so-called depopulation) could be a management option when the threshold density of wild boar unable to sustain infection is known and it is reachable and feasible;
- 7. Feeding of wild boars should in general be avoided or limited stringently;
- 8. Management of biosecurity and backyards farms is a key topic that deserves specific attention. Continuity for this SG GF-TADS is highly desirable and for next SG the topic of backyards/biosecurity could be addressed (by early February.

\rightarrow In the light of these conclusions, countries may rethink their ASF control strategy in wild boars, to make sure that it is suitably tailored to the national context (including agro-ecological data: forest, agriculture areas; etc).

A follow up of this meeting – to understand countries adjustments / progress in wild boar population management linked to ASF control - will be organised either during the SGE2 (specific follow up session on wild boar) or during another meeting of the SGE, entirely devoted to wild boars.

> Additional information / resources presented during the SGE1

- All SGE1 presentations are available on the GF-TADs Standing Group of Experts on ASF webpage: <u>http://web.oie.int/RR-Europe/eng/Regprog/en_GF_TADS%20-%20Standing%20Group%20ASF.htm</u>
- A specific GF-TADs ASF e-depository is available at: http://web.oie.int/RR-Europe/eng/Regprog/en_ASF_depository.htm
- The recommendations of the OIE CIC Joint International Meeting on early detection and prevention of ASF and other animal health issues at the wildlife-livestock-human interface (OIE, Paris 30 June -1 July 2014) are available at:

http://www.oie.int/fileadmin/Home/eng/Conferences_Events/docs/pdf/recommendations/OIE_CICASF_2 014/OIE-CIC_Recommendations.pdf

Also under development:

- A web-based application for veterinarians, hunters and other actors in ASF control is under development; it will provide dynamic maps on domestic pigs production systems and wild boar population (with the identification of epi-units) based on collaborative data submission; this experience will be soon extended to Belarus and could potentially be implemented as a regional ASF information system to assist other countries of the region;
- A mapping exercise of "backyards" production systems in Ukraine and Belarus (FAO) and results will be made available soon;
- The CIC and the OIE, with the support of the OIE Working Group on Wildlife jointly develop and publish
 a practical fact sheet on African swine fever for hunters and other persons involved in game and wildlife

management (experts indicated that a Manual to conduct disease surveillance in wild boars was highly needed);

 A training centre on wildlife diseases for hunters to be managed by CIC with scientific support on the part of the OIE is under negotiation (experts indicated that training centers for hunters were highly needed).

Next Meetings of the SGE

The next meeting (SGE2) is proposed to be organised on **3-4 February 2015 in Tallinn, Estonia** (to be confirmed). The agenda, invitation letters and logistical details will be sent in due time by the Secretariat. In line with SGE1 conclusion number 8, the SGE2 will focus on biosecurity as a key measure to prevent and control ASF, and will address it in different pig production systems, including "backyards". International experts on biosecurity will be invited to support country discussions.

Annex 1 – detailed list of participants in the SGE1

Nº	Country / organisations	First and Last names	Position
	 SGE Member 	S	
1	BY - Belarus	Vasily Pivovar	Chief Veterinary Officer of Belarus
2		Yuri Pivovarchik	Deputy CVO
3		Alexander Kutsko	Deputy-Chief Veterinary Officer in Belarus
4		Ivan Smilgin	Head of the Epizootic Department at CVO office
5		Vitaly Dubikovsky	Head of the Food and Veterinary Inspection at CVO office
6		Alexander Aksenov	Director of the Belarus State Veterinary Centre – National Reference Laboratory
7		Viktor Konovod	Head of the State Veterinary Inspection on State Border and Transport
8		Vadim Shurmuhin	Director of Belzoovetsnabprom
9		Dmitry Morozov	National Contact Point for International Collaboration at CVO office, FAO National Veterinary Expert in Belarus
10	EE - Estonia	Ago Pärtel	Director General of the Food and Veterinary Service of Estonia, Chief Veterinary Officer and OIE Delegate of Estonia
11	LT - Lithuania	Marius Masiulis	Head of the Emergency Department at the State Food and veterinary service of Lithuania
12		Egidijus Mecelis	Head of the Animal Health Department at the State Food and Veterinary Service of Lithuania
13		Gediminas Pridotkas	Director of the National Institute of Risk Assessment at Food and Veterinary Service of Lithuania
14	LV - Latvia	Maris Balodis	Director General of the Food and Veterinary Service of Latvia, Chief Veterinary Officer and OIE Delegate of Latvia
15		Edvins Olsevskis	Deputy-Director of the Food and Veterinary Service of Latvia
16		Sanita Vanaga	Deputy-Director of the Food and Veterinary Service of Latvia
17	PL - Poland	Krzysztof Jażdżewski	Deputy Chief Veterinary Officer of Poland, OIE Delegate of Poland
18		Karolina Wadecka	Director of Animal Health Office
19		Iwona Markowska	Director of the pig diseases laboratory
20	RF - Russia	Evgeny Nepoklonov	Deputy-Director of Rosselkhoznadzor, Chief Veterinary Officer and OIE Delegate of Russia
21		Svetlana Egorova	Assistant of the Chief Veterinary Officer of Russia
22		Vasily Lavrovskiy	Head of the Inspection Office in the framework of International Collaboration and WTO on veterinary issues.
23		Nikita Lebedev	Head of the Department for WTO and International Organizations at Rosselkhoznadzor
24		Konstantin Gruzdev	Expert at Russian Scientific-Research Institute of Animal Protection
25		Konstantin Savenkov	Head of the Department for veterinary control in trade operations and transport at Rosselkhoznadzor
26		Yaroslav Fedosov	Head of the Department for International Legislative Collaboration in WTO system and other International Organizations
27	UA - Ukraine	Vitali Bashinsky	Acting Chief Veterinary Officer of Ukraine
28	European Commission	Bernard Van Goethem	Chairman of GF-TADs Europe Regional Steering Committee, Director for Veterinary and International affairs at the European Commission

N⁰	Country / organisations	First and Last names	Position		
29		Francisco Riviriego- Gordejo	Head of Sector Disease Control, Animal Health Unit		
30		Moritz Klemm	Veterinary Officer, Relations with the OIE, Animal Health Unit,		
31	Experts	Vittorio Guberti	FAO/EC/FAO /OIE International Expert, ISPRA Italy		
32		Sergei Khomenko	FAO/EC/ International Expert		
33	OIE	Kazimieras Lukauskas	Head of OIE Regional Office in Moscow		
34		Nadège Leboucq	Secretariat of the GF-TADs for Europe and of the SGE Head of OIE Regional Office in Brussels		
Observers					
35	Kazakhstan	Rustem Kirmanov	Chief Veterinary Officer in Kazakhstan		
36		Kabduldanov Tursun	Head of the Risk Analysis Department		
37	Eurasian Economic	Vasily Kazakevich	Director of the Department for Agricultural Politics at Eurasian Economic Commission		
38	Commission	Oleg Arnautov	Director of the Department for Veterinary, Sanitary and Phytosanitary measures at Eurasian Economic Commission		
39		Valery Sitnikov	Director of the Division for Veterinary, Sanitary and Phytosanitary measures at Eurasian Economic Commission		
40		Dmitry Smirnov	Deputy Head of the division for monitoring and analysis of development of agricultural complexes for the States with Common Economic Space		

	Annex 2 – Summary of country presentation							
	Belarus	Estonia	Latvia	Lithuania	Poland	Russia	Ukraine	
Wild boar population distribution (numbers and the methodology used to calculate / estimate such a population).	0.6 WB / km ² (pre-reproductive)	20000 pre- reproductive WB; in spring, population is doubled; All over the country; Census using snow foot prints and hunting data	55354 WB (State Forest data) Heterogeneous density (most in Western part of Latvia) Census using observations, snow foot prints from forest rangers	Data provided by hunting clubs and State Forest Services In 2013, 282000 WB (slight increase in WB population over the past 10 years) Density average is 1.03 WB/km ² [0.49; 2,04] Direct counting method : by observers and beaters; aerial surveys; lack of tree leaves in winter; etc Indirect counting method: snow print; faeces;		WB density calculated using the function Kernel density		
Research/surveys carried out in the country to better understand the dynamics of wildlife populations.	1	1	(no information)					
Estimation of ASF prevalence in wild boars.	0	55 cases in WB in 2014 (53 dead; 2 hunted)	In the infected areas: 45% in found dead WB; 1% in hunted WB. Estimated seroprevalence = 0.75%		46 cases in WB in 2014 (44 dead; 2 hunted)			
Surveillance plan: main features (active surveillance; passive surveillance; sampling frequency; number of wild boars tested for ASF - both hunted and found dead - in 2014; etc).	All animals hunted and found dead tested	100% WB found dead are tested; In 2014, 2449 domestic pigs + 1109 WB tested	Passive (all country) + active surveillance (all hunted WB are tested) In 2014, 3402 WB tested	Surveillance on the entire territory 100% found dead and hunted WB are tested ASF + CSF (PCR-RT) – storage of carcasses until result	ASF surveillance intensified in affected regions All found dead and shot WB are tested (RT-PCR + Elisa if possible) In 2014, 13184 WB (11 789 planned)			

	Belarus	Estonia	Latvia	Lithuania	Poland	Russia	Ukraine
National diagnostic capacities for ASF in wild boars.	In all districts (RT- PCR) Confirmation in Spanish ref lab	PCR and Elisa	PCR = 180 samples / day Elisa = 800 samples /day Immunobloting: 50 samples / day Immunoperoxydase = 50 samples / day		BSL3+ (national ref lab) Diagnostic capacity = 600 sera/day; 200 organs or 10000 blood sample/day (PCR)		
Likely sources of contamination of wild boars with ASF.	Food waste from travellers		Dead WB; offal let in the forest Hunters (no biosecurity measures); Illegal WB meat movements		Most probable source: infected wild boars crossing the border (but no certitude)		
Any form of official cooperation between the Veterinary Services and national bodies and organisations responsible for hunting and wildlife management in activities related to the detection, surveillance, reporting, control and eradication of ASF (and other wildlife diseases).	'official' shooting made by hunters who are paid	Good cooperation between VS, Hunting Council, hunting association and MoE (agreement)	Official and unofficial meetings / exchanges of information between VS and State Forest Services, hunters, wildlife biologists, etc	Yes (expert group)	Yes, between VS hunting Association and State Forest, border guards, and all other actors involved in ASF control (ASF expert group)		
Awareness and training programmes directed at hunters and other persons related to game and wildlife management receive in the fields of	yes	yes	Yes (jointly made by VS and partners); leaflets, video clips, training for hunters, articles in newspapers, etc	Yes (mass media use; leaflets; posters, trainings), targeting animal keepers, vets, hunters, customs, BIPs	Training of hunters (to provide samples and respect biosecurity measures)		Joint trainings done with hunters (sampling; carcass manipulation,

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ASF (and other wildlife diseases) early detection, carcass inspection, viscera disposal, etc.							etc) Public awareness with good results
Wild boar management strategy in view of controlling ASF.	Depopulation (80000 WB shooted; 18 months) Carcasse disposal?	Hunting limitations; Protective zones (~200 km ² around each case; 8 km radius) Inspection of 100% pig holdings	Hunting limitations in restricted areas Awareness campaigns for hunters Increased passive surveillance	(buffer zone along BY border; slaughtering of domestic pigs with compensation) No WB meat can be dispatched in all LT	Carcasses of found dead and hunted WB are destroyed (not for consumption) Authorized hunting activities only (by VS) Strict biosecurity measures for hunters Restricted movement of WB meat	Needs to be tailored to the region ecosystems and economical context	
Is a complete depopulation of wild boars a possible option for ASF control strategy? If yes, is it carried out based on a comprehensive risk assessment to fully recognize any potentially negative impact?	Yes No risk assessment	no	no	no	no	No (not feasible, in particular in forest areas)	Yes in selected oblasts (east of the country)
Changes in hunting policies following the appearance of ASF.	Financial incentives for hunting	In zones II and IIII, total hunting ban, all species included since Sept 2014; in other zones, selected hunting (quotas + 60% juveniles)	Hunting is limited in restricted zones II and III and no driven hunts allowed; In zone I, no restrictions (but no increased hunting activities)	Driven hunts forbidden in restricted areas; Increased hunting in non-infected areas, to regulate WB population; Dedicated places to process hunted WB; closed pits for wastes	Selecting hunting: quotas = 50% of pre- reproductive WB (40%-60% sub- adults part of the hunting quota) Hunting sex ratio= 1/1 No hunting increase	Hunting allowed	

	Belarus	Estonia	Latvia	Lithuania	Poland	Russia	Ukraine
					in in restricted and protected areas; hunting is organized to reduce the risk of WB dispersion (only individual hunting to date)		
Feeding of wild boar (amount per hunting ground, seasonal patterns).	no	Currently under discussion with hunters	Restrictions on winter feeding (400 litres to 1000ha; construction of feeders with dosage of feed; restrictions until 2018);	WB feeding allowed; additional feeders in infected areas except buffer zone Hunters from other hunting clubs are not allowed outside infected areas	Winter feeding only when scarcity of food, except in restricted areas (feeding ban; baiting allowed = 10kg/km²/month)	Currently no feeding – but if winter becomes harsh (notably in northern parts), feeding could be a good option to reduce WB movements and contact among different families	yes
Relations with VS of neighbouring countries in order to coordinate actions.	Expected joint surveillance with LT	With LV	With VS of neighbouring countries (official and unofficial communication) Room for improvement regarding disinfection at borders and WB hunting	More coordination needed	Various meeting with VS of LT; common strategy for ASF eradication In July, meeting with BY VS (exchange of information)	More needed ; in particular joint investigation of cases; Overall, to unit effort in the region	Participation in many regional and international meetings on ASF
Main challenges with regards to ASF control in wild boar.	WB coming from neighbouring countries		Collection of dead WB in forests Destruction of carcasses		Sustainability / suppression of the current limited virus circulation;		

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How could the international community provide any support to ASF control in the region (if needed)?	Financial support for shooting and testing		Restrictions on hunting activities Restrictions on winter feeding Storage of carcasses of hunted animals Expert assistance Increased research Financial support for ASF control measures Coordination among affected countries		Effect of the coming winter prove to limit ASF spread in WB; Detailed, precise communication on the transboundary movement of wild boar; Unharmonized ASF / WB strategies adopted by VS across the region Sharing of new epidemiological data New research on: survival rate of the infected animals; probability of virus transmission by feed of plant origin (contaminated with blood/urine); changes in wild boar ecology due to climate changes and the availability of food; wild boar management (wild boar threshold of density, below which ASF will fade out in the wild boar population)	Trainings, scientific Conferences (need for common methods of sampling, agent identification, etc)	