Standing Group of Experts on African swine fever in the Baltics and Eastern Europe Region under the GF-TADs

Expert mission on African swine fever in Russia

Standing Group of Experts on ASF in the Baltic and Eastern Europe region
GF TADs – 3rd Meeting (SGE3)
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SGE Experts

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**Period of mission**

13 – 17 July 2015
Terms of Reference

- The experts should perform **on the spot visits** in order to gather data and be in a position to formulate recommendations on disease management.

- The experts should work with the Veterinary Services in order to determine the following aspects:
  - If African swine fever (ASF) is **occurring in domestic pigs** (both in commercial sector and the so called back yard sector) and extent of the areas of occurrence.
  - If ASF is **occurring in wild boar** and geographical distribution of ASF in wild boar.
  - Formulate hypothesis on the **drivers of ASF occurrence** for domestic pigs and back yards.

- **Propose measures** intended for the control and eradication of ASF under local conditions, in line with the OIE International Standards.
Modus Operandi
(a three steps working approach)

I. Understanding the national strategy for ASF control and eradication
   (discussions at central level)

II. Implementation of ASF strategy at regional level
    (visit of affected districts/regions, discussion at local veterinary service)

III. Implementation of ASF strategy at farm/hunting ground level
     (visit of commercial farm, backyard, hunting ground)

DOMESTIC PIG SECTOR
- Commercial sector
- Backyard sector

WILD BOAR SECTOR
- General management
- Specific control measures
**Places visited:**

- Central Veterinary Authority in Moscow
  *(Rosselkhoznadzor, the Central Veterinary Administration within the Ministry of Agriculture)*

- Smolensk oblast
  Smolensk oblast Veterinary Services
  Vyazma District Veterinary Service

- large pig commercial farm

- backyard farm

- hunting ground
ASF situation:

- 5 outbreaks in 2013; (45 in WB)
- 5 outbreaks in 2014 (51 in WB)
- 1 outbreak in January 2015.

All outbreaks occurred BYF with poor biosecurity and almost all outbreaks were located in villages along the main road connecting Moscow with Minsk. No commercial farms were affected by ASF.

Wild boar: 142 hunting grounds (most private)

- Before ASF was detected in Smolensk oblast (February 2013) the estimated wild boar population was **19,014 animals** and the animal densities ranged from 0.5 to 1.9 wild boar/1000 ha.
ASF epidemic situation in wild boar population in the territory of the Russian Federation 2007 - 2014

N = 272 as on 14.03.2014*

*diagnostic data provided by: FGBI 'Veterinary Center' (Moscow), SSI 'VNIIVVIM' (Pokrov) and FGBI 'ARRIAH' (Vladimir)

Vlasova et al., 2014
National control strategy

**Centre of Infection (CI)**: BYF, village, CF, place where an infected wild boar has been found. The area of a CI can have a radius up to 5 km. Within the CI all pigs are culled.

**1st Endangered Zone (1EZ)**: 5 - 20 km. All pigs will be slaughtered, no movement of pigs out or in, measures applied for 7 months. CF with high level of biosecurity are excluded.

**2nd Endangered Zone (2EZ)**: 100-150 km. No movement of pigs out or in, pork products have to be heat treated.

Similar measures are applied for ASF in wild boar, the legislation does not differentiate between outbreaks in domestic pigs or cases in wild boar.
Surveillance domestic pigs

The ASF surveillance regime for domestic pigs is set up by the federal administration (Rosselkhoznadzor).

For each year the regional administration receives the plan in which it is listed how many pigs have to be sampled and tested quarterly in each district.

The plan is based on a disease prevalence assumption of 5% with 95% confidence of detection. The samples are taken randomly and are tested in specialized laboratories by PCR.

Additionally in large commercial farms 5% of each batch of slaughter pigs going are blood samples and tested by PCR.

Backyard pigs are not included in an ASF targeted surveillance or monitoring programme and their registration and census is not under the control of the veterinary services.
Measures wild boar

The ASF Commission establishes the infected area (a small part of the hunting ground, the entire hunting ground or several bordering hunting grounds).

Sport and hobby hunting are banned and only shooting for monitoring purposes and depopulation is allowed.

The regional office is in charge of supervising and coordinating the hunting activities. The **final goal** is to reduce the wild boar density to 0.09 wild boar/1000 ha (0.009/km2).

All shot animals are tested and destroyed independently from the test results.

**Poor attention is given to carcass detection** in the field and thus active surveillance (hunting/shooting) is the sole foreseen activity for virus detection.

Control measures are lifted once the planned density is reached and no cases have been detected during the previous 6 months.

**Wild boar winter-feeding** (about 1 feeding point/500 ha) is compulsory and aimed in reducing movements/dispersal.

**Targeted shooting of adult females** is aimed since herds without leading females are more likely to remain in their natural home range.
Conclusions and recommendations

The veterinary service in Smolensk region composed of the Rosselkhoznadzor territorial office for Smolensk oblast and the regional veterinary service is well structured.

Publications on the Rosselkhoznadzor’s web-site with the evaluation of the ASF epidemiological situation was found very useful also at field level (GOOD PRACTICE)

The regional veterinary services are controlling and providing biosecurity at large commercial pig farms. The pig commercial holding visited by the team is well conducted and has a high level of biosecurity.

In case of an ASF outbreak the veterinary service reacts promptly and immediate efficient measures are taken. Furthermore the veterinary service is well linked with other state bodies involved in disease control and eradication (e.g. police, local administrations, state hunting associations, etc.).
Conclusions and recommendations

Essential **improvement is needed** in the area of surveillance and risk based prevention.

So far the monitoring and surveillance activities for ASF are following recommendations issued by the federal veterinary service (Rosselkhoznadzor) but they are **not taking into account the epidemiological particularities** and regional risks factors posed by ASF.

The surveillance activities are **not based on scientific grounds**, which take into considerations the biology of ASF. Therefore, the monitoring and surveillance data for domestic pigs and wild boar do not reflect the real epidemiological situation in the Smolensk region.

**The present approach (5/95%) is one of the weakest points** of the surveillance plan. Under such premises ASF virus may only be detected if at least half of the district in a specific trimester will be infected.
Conclusions and recommendations

An independent national expert group should be established to assist the central and local veterinary authorities. The group should consist of epidemiologists, risk assessors, laboratory experts, wild life experts.

A scientifically based ASF risk assessment following OIE guidelines should be performed focusing on: (i) possible risks of ASF virus spread, (ii) the best management options for domestic pigs and wild boar, both in infected areas and in the bordering risk areas, (iii) the suitability, effectiveness and the practical aspects of implementation of the main measures.

On the basis of the epidemiological situation and a properly conducted risk assessment following OIE guidelines, the group should define:

- the appropriate measures of surveillance/control;
- a sampling scheme;
- a testing regime for clinical and laboratory examinations.
Conclusions and recommendations

The surveillance and monitoring activities should be **based on the biological characteristics of ASF**. Surveillance in domestic pigs should be focused on ASF early detection and thus considering sick/dead animals avoiding planning in advance the number of animals to be tested.

For wild boar **passive surveillance** (dead animals) should be enhanced in both infected and risk areas while maintaining the actual level of active surveillance.

The **proportionality and effectiveness of the measures** conducted within the 1st and 2nd endangered zone should be re-evaluated taking into consideration the epidemiological particularities of ASF as well as risk patterns.

**ASF training courses** for veterinary inspectors at regional level following OIE guidelines are recommended. In particular the epidemiological aspects of the disease should be discussed and elaborated in particular focussing on early detection and prevention.