EUROPEAN COMMISSION
HEALTH AND FOOD SAFETY DIRECTORATE-GENERAL

Directorate D – Food chain stakeholder and international relations
Unit D4: Food safety programme, emergency funding

SANTE-2017/10192

REPORT OF THE

"African swine fever"
TASK FORCE SUB-GROUP

Meeting held in
Bratislava
Slovakia (12 – 15 December 2016)

REPORT OF THE MEETING OF THE AFRICAN SWINE FEVER SUB-GROUP OF THE TASK FORCE FOR MONITORING DISEASE ERADICATION HELD IN BRATISLAVA, Slovakia, 12-15 DECEMBER 2016

PARTICIPANTS: see AnnexI

AGENDA: see Annex II

LOCATION: **The State Veterinary and Food Administration of the SR**

Objectives of the EU-Task Force sub-group.

The scope of the visit is to share information and experience of the expert members with the hosting colleagues as well as to give technical support if needed or requested by the visited country. After the visit a report is issued by the experts, based on the information provided on the spot by the country and on the findings verified directly by the experts themselves during the visit.

The main goal of the Task Force is to leave at disposal of the visited country the expertise of its expert members, in the light to give a contribution, with an external independent technical assessment, in the evaluation of strength and weaknesses of strategies and measures in place for the control and eradication of the disease concerned.

Conclusions and recommendations are formulated from a general point of view and are proposed in the report with the main scope to be a basis for the Veterinary Services of the visited country to reflect on the possible improvement of different aspects of the control and eradication programme for the disease concerned. The country visited may amend the programme according to what it is suggested by the Task Force, or it may choose other approaches, also in consideration of social and economic factors that may influence the success of the measures adopted, and which are not in the remit of the Task Force.

Conclusions and Recommendations are related to the picture of the situation as resulted during the visit based on the information provided by the country visited on the spot. Further developments of the country's situation may be the subject of a following visit aimed to get updated information and new feedback from the Veterinary Services.

The reports of the TF are published on the following website: http://ec.europa.eu/dgs/health_food-safety/funding/cff/animal_health/vet_progs_en.htm

Report of the meeting of the ASF Task force held in Slovakia

The objective of the mission was to discuss with the Slovakian Veterinary Authority the early warning system implemented in the country to prevent the spread of ASF and to early detect the presence of the disease.

General Information

The Republic of Slovakia has a population of over five and a half million inhabitants and an area of about 49,000 square kilometres. The surface is divided in 40 Veterinary Districts and Food Administrations.

As regards as the domestic pig population in Slovakia there are about 475.996 pigs that are kept in 1388 farms. The pre-reproductive wild boar population is estimated to be about 45.000 individuals.

Currently, Slovakia is ASF free but considering the epidemiological situation in the neighboring countries, it is one of the countries considered at risk of ASF introduction. Therefore, a surveillance strategy for ASF has been implemented.

Definition of the risk areas

The risk area for ASF has been established taking into account the risk represented by the presence of ASF in Ukraine and in Poland (Figure 1). However, the current risk areas are much too large and the terminology used for the designation of the areas could be misleading because it does not reflect the real level of risk. Therefore, risk areas need to be re-defined, taking into account: 1) the real epidemiological situation in the neighboring countries, worth mentioning that currently ASF is not present in the south part of Poland, 2) the ASF risk pathways of transmission, and 3) the wild boar ecology.

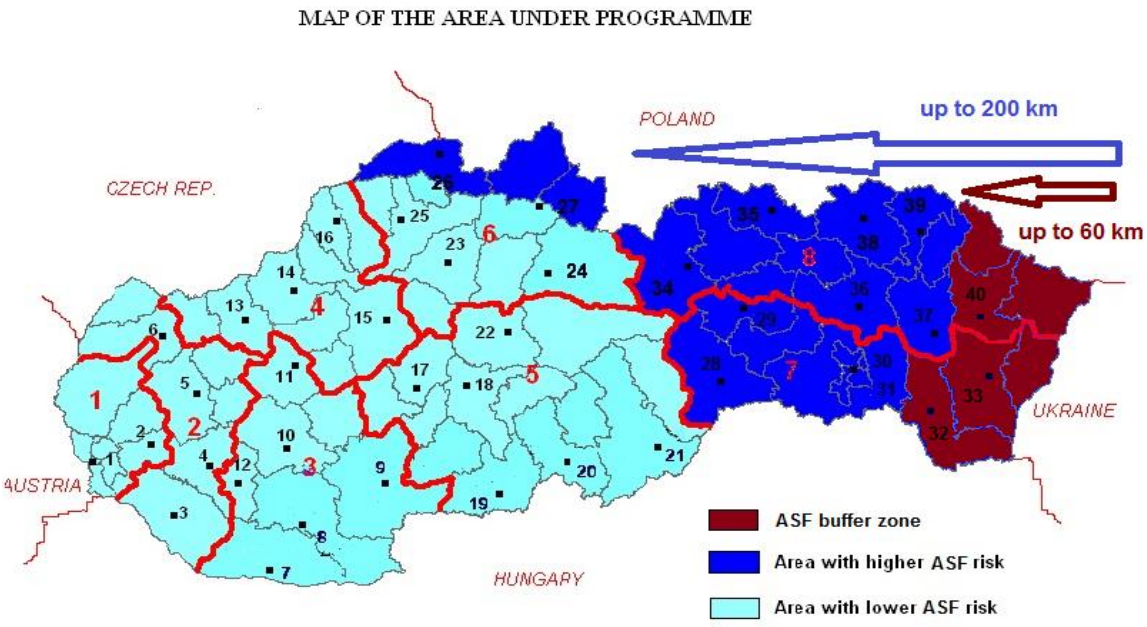

Figure 1: Republic of Slovakia – areas at risk for ASF

Risk Assessment

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

ASF surveillance strategy

On national level a clear strategy to fight and manage an ASF crisis was not so evident. The national surveillance plan implemented in Slovakia is one of the weakest points in the strategy against ASF. Indeed, it has been drafted resembling the last CSF program which was aimed at eradicating CSF, whilst the one on ASF should be focused on prevention and early detection. Furthermore, surveillance activities are not based on scientific grounds and do not take into considerations the biological aspects of ASF and the current epidemiological situation in Slovakia (ASF Free status).

Surveillance should be focused on ASF early detection and thus targeted to sick/dead animals, avoiding planning in advance the number of animals to be tested. The present level of active surveillance is so low that early detection of ASF will fail.

It would be more profitable if active surveillance could be replaced by passive surveillance triggered by the reporting of sick and dead animals.

The backyard sector represents a huge challenge (particularly in the risk areas at the border with Ukraine) and a special effort should be made to implement biosecurity and awareness to promote early detection and disease reporting.

The Working Document SANTE/7113/2015 - Rev 4 should be used for guidance by the competent authorities to refine their national strategy. Schedules should be also enforced to guide veterinarians during the clinical inspection.

Farmers in risk area should be encouraged to enhance biosecurity practices in their holdings in order to prevent the introduction of ASF, the measures should be tailored to the biological characteristics of the disease and the possible pathways of transmission. In pig holdings, the mitigation measures should be aimed at ensuring a physical isolation of the holding (with physical barriers, such as gate, fence, walls and a cleaning and disinfection post). These measures are extremely relevant, especially for commercial holdings, to prevent the introduction of the disease and they should be part of the farm biosecurity plan. A commercial holding was visited during the mission, the entrance was open and a disinfection barrier at the entrance not evident.

Minimal bio-security requirements should be established also for the backyard sector.

Expert Group

The expert group should be reinforced to support the Central vEterinary Authority and follows all the technical aspects of the ASF strategy, including the definition of the risk area, the relevant surveillance activities, risk assessment and epidemiological investigations.

Border Biosecurity

The follow biosecurity measures were implemented at the border with Ukraine:

- Checks on disinfection of means of transport in accordance with Commission Implementing Decision No 2013/426/EU
- Control of passenger luggage in accordance with Commission Regulation (EC) No206/2009, 261 seizures / 4404 kg of products of animal origin have been confiscated at entry points with Ukraine

- Workshops training for stakeholders involved in controls (BIP inspectors, customs officers)
- Cooperation with travel bureaus
- Leaflets and posters of ASF for public and transport companies.

Wild boar population and management

The pre-reproductive wild boar population of the Republic of Slovakia is estimated in about 45.000 individuals (official, approved census dated 30 April 2016). Wild boar is all year round present in 1377 hunting grounds (73%) while in 270 hunting grounds the species is seasonally recorded. The species is mainly distributed in the forest areas (44,6% of the Country surface) that are clustered in the central west, central north and eastern part of the Country. The median population density (30% of the Hunting grounds) ranges from 0,6 to 1 head/km2; in 15% of the hunting grounds the density ranges from 1,6 to 2,1/km2.

The hunting bag increased during the past years; in 2015 a total of 54.512 animals have been hunted (being 41.595 animals the pre-reproductive population) and for 2016 a hunting bag of about 55.000 is expected. However, it is worth to highlight that the hunting year does not match the calendar and so discrepancies between hunting data and wild boar health data are expected.

The wild boar hunting season varies according to age and gender categories; young animals are hunted all year round; adult animals (both males and females) are hunted from 1 July to 15 January. Wild boar population census is carried out by the end of March, using one or more unstandardized methods. Each hunting ground conducts its own census and reports to the District and National Hunting Authorities. This statistics is then used to calculate a hunting ground specific hunting bag limits. According to size and habitat characteristics of each hunting ground, an optimal number of wild boars is determined. As average the optimal density is set at 0,43 heads/km2 accounting for a whole population of about 19.000 wild boars. At present only 4 districts reached the optimal density, the latter is exceeding in all the remaining districts.

In general, the Slovak wild boar population exceeds the optimal density and shows an unbalanced gender and age structure being adult females and young animals overrepresented.

ASF early detection and surveillance

The Country is divided into two main risk areas; 22 districts are included in a high-risk area located in the eastern and northern part of the Country bordering with Poland, Ukraine and Hungary. The

high-risk area appears oversized when considering the possible wild boars movements, the observed geographical spread of ASF virus in infected countries and the actual location of infected wild boars.

ASF early detection is based on passive and active surveillance.

Passive surveillance appears rather weak since only 10 dead animals have been reported in 2014 (when reporting was not compulsory) 58 in 2015 (reporting was compulsory). In 2016 (up to September) about 100 dead animals have been reported.

Active surveillance is based on PCR testing, a 5%/95% strategy in the high-risk area and 10%/95% in low-risk area is applied. It is worth to underline that rarely (if ever) ASF virus reached 5% prevalence in both Baltic countries and Poland. 6.442 and 9.380 animals have been PCR tested respectively during 2015 and 2016; almost all of them hunted in the high-risk area.

Sampling procedures are well known by trained hunters (about 3500) since the Country faced an epidemic of Classic swine fever in wild boar; however the sampling of organs is mainly addressed to CSF diagnosis.

Samples have to be dispatched to the laboratory in 7 days maximum.

Biosecurity during hunting

Biosecurity measures during hunting are poorly implemented especially considering that samples have to be dispatched to the laboratory in 7 days time. During this period individual Wild boar are checked and traced only when the meat goes to the official market. Hunted animals can be divided among hunters and transported at home while waiting for laboratory test results. A proper traceability is not ensured as well as the minimum biosecurity measures to be adopted when dressing and transporting hunted animals.

Wild boar Feeding

Artificial wild boar feeding is authorized and largely practiced; as average, 1 feeding point for every 500 ha is present; hunting in proximity of these points is not permitted. Attractive baiting is also allowed (1/300 ha). Artificial feeding is limited during winter and aimed in reducing winter mortality and agriculture damages; overfeeding is common.

Visit at the Slovakia´s National reference laboratory (NRL) for African swine fever (ASF)

The laboratory on-site mission was carried out on **14th December 2016** at the **National Reference Laboratory (NRL) for ASF/CSF, the Veterinary Institute of Zvolen,** by Carmina Gallardo belonging to the European Reference Laboratory (EURL) for ASF (INIA-CISA). The main goal was to assess the NRL capabilities for diagnosing ASF throughout the review of the i) Infrastructure and personal resources, ii) ASF diagnostic techniques available at the NRL and iii) Quality management system with regards to ASF diagnosis. The main findings are summarized below.

1. **Infrastructure and personal resources:** The diagnosis for ASF is entirely carried out at the NRL, a biosafety level 2 laboratories, specialized in solving epizootic issues through service diagnostics, development of new diagnostic methods and procedures, drawing up eradication programs, surveillance and consultancy. Is composed by the Department of Animal Health which contains the, i) Pathological Morphology and Histology unit, ii) Bacteriology unit and iii) Virology unit, and the Department of Economics. The NRL for ASF/CSF is mainly located in the *Department of Virology* supported by the *Department of Pathology, morphology and histology*, essential on maintaining the traceability of the samples, including the sampling preparation.

2. A **good methodology for routine ASF diagnostic** purpose is implemented and molecular and serological tests are carried out in parallel in the *Virology Department*, therefore ensuring a correct workflow of the ASF diagnosis. The cooperation and coordination between the different areas involved in the ASF diagnosis is already established with defined flow charts depicting the process from arrival of the sample until diagnosis including receipt, preparation, testing and reporting results.

3. The **ASF diagnosis is performed using internationally validated techniques with appropriated standard operating procedures (SOPs)** comprising the INGENASA ELISA for antibody detection plus confirmation of positive and doubt results by the Indirect immunoperoxidase test (IPMA). The ASFV genome detection is performed by the UPL real-time PCR (Fernández-Pinero et al., 2013). The real time PCR test developed by Heines et al., 2013 it has been also implemented for differential diagnosis with CSF. Some technical recommendations were made during the mission to improve the ASF diagnostic competence at the NRL related mainly to the use of appropriate controls in the PCR assay (for both extraction and amplification steps). All these technical recommendations were positively accepted by the

NRL staff to make the laboratory work more efficient and the laboratory diagnosis of ASF more reliable.

4. **Quality management system:** The Veterinary Institute of Zvolen has a Quality Management System (QMS) covered by the ISO 17025 accreditation standard. With **regards to ASF**, the NRL has the ELISA and the PCR (real time) techniques accredited. However, **some minor deficiencies** were found due to the absence of international reference standards for internal verification procedures for achieving traceability of the reagents and material used in each ASF diagnostic technique. It was recommended to adopt routinely procedures in which all reference materials and reagents were properly labeled and to record storage requirements, date opened, prepared, or reconstituted by the laboratory, and the initials of personnel who prepared/reconstituted the reference material and reagents, and expiration date.

Final Conclusions and Recommendations

Definition of the risk areas

The definition of risk areas as it is now in the programme is not appropriate. The areas should be defined taking into account geographical risk, biological properties of the disease as well as possible pathways of disease transmission. The risk posed by the actual the epidemiological situation in neighboring countries should be better evaluated and weighted when defining the risk area.

Risk Assessment

It is strongly recommended that a scientifically based ASF risk assessment following OIE guidelines is carried . The risk assessment should be focused on: (i) possible risks of ASF virus introduction and further spread, (ii) the best management options for domestic pigs (and wild boar), both in low risk and high risk areas, (iii) the suitability, effectiveness and the practical aspects of implementation of the main measures.

Measures adopted for prevention of ASF spreading

- The measures currently reported in the programme are not targeted to the current epidemiological situation. Indeed, given the epidemiological situation in Slovakia, the measures should be focused on prevention instead of eradication. The part related to the management of the risk has not been developed in the programme.

- Legal binding minimum biosecurity requirements should be established for pig holdings and for wild boar hunting and should follow the indications reported in Working Document SANTE/7113/2015 rev 4.
- Based on the findings of the Task Force Team during the field visit, the biosecurity measures reported in the programme for the hunting grounds, apparently are not in place.

Surveillance strategy

Surveillance strategy should be re-thought and addressed to ASF prevention and early detection.

Surveillance in domestic pigs

- The concept of passive surveillance is good. Nevertheless, very few animals belonging to the suspect case definition have been tested in the framework of the programme for ASF. This represents a relevant shortcoming for the realization of the programme, especially in the current epidemiological situation.
- Clinical surveillance should follow the indications reported in Working Document SANTE/7113/2015 rev 4. Clinical visit should be also the occasion to carry out biosecurity check, a verification of the registers and farm health and production parameters.

Surveillance in wild boar

- Passive surveillance: the concept of passive surveillance is appropriate. Nevertheless, the number of dead wild boar examined is very low. This represents a relevant shortcoming for the realization of the programme, especially in the current epidemiological situation. .
- In the risk area, passive surveillance in wild boar should be enhanced. Even in the absence of the infection/disease, due to the Wild boar natural mortality, the number of found dead animals should account for about 1% of the entire alive wild boar population of the area;
- Active surveillance: the concept of active surveillance is not appropriate in the current epidemiological situation. Furthermore, the sampling scheme proposed (5%, I.C. 95%) is not adequate since rarely, if ever, ASFV in wild boar reached 5% prevalence.

Wild boar hunting and population management

- In the risk area, it is essential that hunted wild boar do not leave the hunting ground before tested ASF negative. In this framework, the timing for dispatching samples (actually 7 days) to the laboratory should be reduced.

- In the risk area, wild board hunting should take into account the minimum biosecurity measures aimed at avoiding the possible, further spread of the virus through contaminated material.

- Wild boar management should be addressed in reaching the optimal density as determined by the National Hunting Authorities; appropriate targeted hunting of adult and sub-adult females should be implemented;

- In ASF risk area winter-feeding should be forbidden and bating minimized;

Finally, the proposed measure of randomly testing meat products confiscated to people at the border with Ukraine is not relevant for the purpose of the programme. These imports should be safely rendered regardless they are tested or not.

Expert Group

The expert group should be reinforced and follows all the technical aspects of the ASF strategy, including the definition of the risk area, the relevant surveillance activities, risk assessment and epidemiological investigation.

Awareness Campaign

Training of veterinarians: training activities should reach also field operators (field veterinarians, farmers, hunters, farm-workers, etc.).

Laboratory

The NRL have the appropriate facilities, equipment, trained staff and international validated procedures to achieve a correct diagnosis for ASF.

In case of emergency, two weaknesses were identified: 1) availability of staff mainly for sampling preparation and 2) data management.

It was also recommended to include international reference standards in the quality control system.

A warm thank you is extended to the Slovakian hosts for their great hospitality and willingness to share information. The effort of arranging this meeting is greatly appreciated.

Annex I

PARTICIPANTS

Task Force African swine fever Sub-Group - members

▪ Dr. Carmina Gallardo (ASF EURL)	Spain
▪ Dr Bellini Silvia (IZSLER)	Italy
▪ Dr. Vittorio Guberti (ISPRA)	Italy
▪ Dr Klaus Depner (FLI)	Germany

European Commission

▪ Dr. Valentina PIAZZA	Deputy Head of Unit D4 "Food safety programme, emergency funding": (DG SANTE)
▪ Pedro Rosado Martín	Unit D4 "Food safety programme, emergency funding": (DG SANTE)

Slovakian competent authority

▪ Professor Jozef Bires	CVO
▪ Martin Chudy	Permanent Representation to the EU
▪ Lubomir Janiuk	SVPS SR
▪ Dalibor Polak	SVPS SR
▪ Rudolf Janto	SVPS SR
▪ Valerian Kvokacka	SVPS SR
▪ Stefan Ryba	MPRV SR
▪ Bibiana Kapustova	MPRV SR
▪ Martina Hustinova	Slovenska polovnicka komora
▪ Pavol Nunuk	Slovenska polovnicka komora
▪ Jozef Bucko	Narodne lesnicke centrum Zvolen
▪ Peter Jad'ud'	Veterinarny Ustav Zvolen
▪ Eva Stovcikova	SVPS SR
▪ Paulina Kojnok	SVPS SR

National Central Laboratory

Dr Miroslav Mojžiš,

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Annex II

TASK FORCE FOR THE MONITORING OF ANIMAL DISEASE ERADICATION: AFRICAN SWINE FEVER SUB-GROUP:

Bratislava, Slovak Republic

(12-15.12.2016)

AGENDA

№	Object	Time	
12-12.2016			
Arrival of TF experts and EU representative			
13.12.2016			
1	Welcome by the SK CA Introduction by EU representative on the role of the TF and scope of the meeting	09:00-09:30	
2	Presentation by SK (central, regional and local CA) on the ASF situation, on the measures implemented-under implementation to prevent ASF in domestic and wild populations. Presence of hunting association representatives/forestry services is recommended in order to discuss also their specific involvement.	09:30-12:00	
3	Lunch	12.00-13.00	
4	Presentation by SK (central, regional and local CA) on the ASF situation, on the measures implemented-under implementation to prevent ASF in domestic and wild populations. Presence of hunting association representatives/forestry services is recommended in order to discuss also their specific involvement (continuation).	14.00-18.00	
14.12.2016			
	Team I: Visit of the National laboratory Team II: Field visits commercial farms/hunting ground	09:00-18.00	
15.12.2016			
1	Meeting of the TF experts (only) to discuss and prepare conclusions and recommendations of the meeting to be presented to SK CA.	09:00-11.00	
2	Presentation of the main conclusions and recommendations of the meeting to the SK CA	11.00-12.00	
3	Discussion and end of the meeting.	13.00-15.00	