



EUROPEAN COMMISSION  
HEALTH AND CONSUMERS DIRECTORATE-GENERAL

Director General

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*Programmes for the eradication, control and monitoring of certain  
animal diseases and zoonoses*

## **Control and monitoring programme for Classical Swine Fever**

**Bulgaria**

**Approved\* for 2013 by Commission Decision 2012/761/EU**

\* in accordance with Council Decision 2009/470/EC

## 1. Identification of the programme

Member State: **Republic of Bulgaria**

Disease (<sup>1</sup>): **Classical Swine Fever (CSF)**

Year of implementation: **2013**

Reference of this document: **Bulgarian Food Safety Agency (BFSA)**

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## 2. Historical data on the epidemiological evolution of the disease:

Despite prophylactic overall vaccinations which have been performed in the whole country for many years, sporadic outbreaks of CSF have occurred in Bulgaria every year. After a gradual drop in the number of CSF outbreaks between 1996 and 1999 down to just one outbreak per year in 2000 and 2001, the CSF situation changed drastically in 2002.

Because of serious deficiencies in performing prophylactic vaccination (due to various reasons) and illegal trade in live pigs, 32 outbreaks of CSF were registered in 14 of the 28 administrative districts of Bulgaria in 2002.

Then, in 2003 16 CSF outbreaks in 4 districts were observed, while in 2004 the number of CSF cases was only 2 in the domestic pig population. However and for the first time since 1996, there were 48 cases of CSF identified in the wild boar (wild pigs) population of 2 districts.

In 2005, serious measures for confinement and containment of CSF were taken. Besides the continuation of regular prophylactic vaccination of all domestic pigs in the country these included the ban of animal markets under an Order issued by the Minister of Agriculture and Forestry. Furthermore, a vaccination campaign (two placing of baits within two weeks) was performed within the wild boar (wild pig) population, because 88 CSF cases found in wild boar of 7 administrative districts of the country. As a result of the measures taken, no outbreak was detected in the domestic pig population of Bulgaria in 2005.

However, during 2006 seven outbreaks of CSF were found in domestic pigs of which six happened in the administrative district of Yambol and one in the administrative district of Bourgas. On the other hand, no CSF cases in the wild boar (wild pig) population have been observed since the beginning of the last hunting season in 2006 until now. The oral

vaccination was continued in 2006 by performing two vaccination campaigns within wild boar population.

During the first 3 months of 2007, there were 3 outbreaks of CSF of which two were observed in East-Balkan pig herds in the region of Shumen and one in domestic pigs (family farm of category B) in the region of Yambol.

In 2008 CSF was detected in one category B farm – without bio security measures applied, located in the village of Trekliano, region of Kustendil, 6 km from the Serbian border. The disease was found out during clinical investigation to the farm with check list in the framework of implementation of the programme for control and eradication of CSF. All sick and contact were killed under the animal welfare requirements and buried.

Since May 2008 no cases of classical swine fever have been detected in domestic pigs on the territory of the country.

In 2009 8 CSF cases were detected in wild boar in forest are close to Danube river (State hunting area Karakuz, Tutrakan municipality, Silistra region)

No CSF cases either in domestic pigs and wild boar were detected in 2010 and 2011.

Since 2006 virus isolates from various regions of the country were generally sent for genome typing to the Community Reference Laboratory (CRL) for Classical Swine Fever at Hanover. This included also a 2004 isolate from wild boar of the Pernik district.

According to the findings of the CRL all isolates belong to the cluster of 2.3 of CSF strains. In more detail, the isolates of 2006 found in Yambol were classified as 2.3 Spante, confirmed again in 2007 by one isolate. The 2006 isolate from Bourgas was described as 2.3 Uelzen (or otherwise called Europe). The two 2007 isolates from the Shumen region were just a bit different from the other isolates and therefore named 2.3 Bulgaria. The maps show the geographical areas from which the CSF isolates originated.

For goals of the present program, the pig holdings on the territory of the country are categorised as follows:

- a) Industrial pig holdings, representing about half of the country's domestic pig population (see Annex II, map 1, table 1),
- b) Family farms, type A (farms with established bio security measures) and B (bio security still absent) (see Annex II, map 2, table 2 and 3),
- c) Backyard holdings ( allowed only for own consummation) (see Annex II, map 4, table 4),
- d) East Balkan pig herds which are bred in field conditions (see Annex II, map 5, table 5),
- e) Wild Boar population (see Annex I, map 5, table 6).

The new categorisation of Bulgaria's pig population is based on the risk analysis concerning the observed most recent introduction of CSF into Bulgaria's pig population and forms the basis of the continued strategy for proving the absence of circulating CSF field virus in domestic, East Balkan pigs and wild pigs.

According to the data available from intensive sampling and testing carried out countrywide

since 2006 when the prophylactic vaccination of the domestic pig population was banned, it seems evident that at least in the industrial pig holdings and the wild pigs on the territory of the county neither sero-conversion due to eventually circulating CSF field virus strains or clinical signs of CSF have been detected.

Furthermore, it seems appropriate to concentrate all efforts on family farms, in particular type B and backyard holdings, where there is currently a clear deficiency in biosecurity and lack of understanding of the pig farmers or keepers as regards access of their pigs to waste of animal origin (such as catering waste), thus leading to single outbreaks of CSF.

In addition, the Bulgarian specific type of holding free ranged East Balkan pigs in certain 12 municipalities of three regions (Shumen, Bourgas and Varna) needs particular attention, considering that these pigs might have direct or indirect contact with wild boar, therefore developing CSF in two herds in the administrative district of Shumen in 2007(see Annex II, map No.5, Table 5).

From 2005 to the first half of 2008 annual prophylactic vaccination in the wild boar population have been carried out on the territory of the country. It included two vaccination campaigns with two distributions of bites. In 2008 there was a change in the programme for control and eradication CSF in relation to wild pig's vaccination. The second vaccination campaign in the autumn of 2008 was carried out in 40 km north and west border zone by two distributions of bites (20 km high risk zone and 20 km buffer zone on the territory of the municipalities which are located next to the borders with FYROM, Serbia and Romania. This approach was followed until 2012 - three vaccination campaigns per year with two distributions of bites in the 40 km north and west border zone. In 2013 three vaccination campaigns per year with two distributions of bites in the north and west border municipalities of the country will be carried out only.

### **3. Description of the submitted programme:**

This programme will be applied on the whole territory of the Republic of Bulgaria throughout 2013, taking into consideration that:

- a) On the territory of the west and north border areas of Bulgaria there is still risk for introduction of CSF virus through wild pigs. Migration of young male wild pigs from neighboring countries can raise risk for introduction and spread of the CSF virus among farms with no bio security measures applied and backyards by the direct and indirect contact with domestic pigs.
- b) Biosecurity needs to be improved at family farms type B and in backyard holdings,
- c) In certain municipalities of three regions of the country East-Balkan pigs are raised in herds and held on pastures; direct or indirect contact with wild boar cannot be excluded,
- d) Results obtained from genotyping of virus isolates collected between 2004 and 2008 need further epidemiological analysis and interpretation.

Basic elements of this Programme are:

- Active clinical monitoring of pigs for CSF, including a targeted sampling and testing scheme;
- Continued enforcement of the ban of prophylactic vaccination against CSF of the domestic pig population, including East-Balkan pigs;

- Quick and effective application of the required measures for control and eradication of any outbreaks of the disease that have emerged meanwhile;
- Scientific analysis of epidemiological data concluding on present and eventual future measures for control and eradication of CSF in Bulgaria.

When implementing this programme the competent authorities will also take into consideration:

1. The different types of holding pigs in Bulgaria described under 2.) above;
2. The results from the scientific epidemiological analysis conducted for ascertaining the CSF transfer mechanism and the geographical spread of the disease;
3. The presence of wild boar population all over the territory of the country, which might have direct or indirect contact with the herds of East-Balkan pigs bred on the territory of three regions of the country.
4. The lack of big natural or artificial barriers as regards the movement of wild boar over the territory of the country;
5. Control over the registration of pig farms, the movement of pigs, their identification and the herd registers linked with the application of a corresponding electronic database;
6. Control over the oral vaccination campaign of the wild boar population, in particular concerning the process of the distribution of the baits, their uptake and effects on the CSF status of the population linked with the blood samples for antibodies and organ samples which are negative for the virus presence.

#### 4. Measures of the submitted programme

##### 4.1. Summary of measures under the programme

**Duration of the Programme:** 01.01.2013 – 31.12.2013

<input type="checkbox"/>	<b>Control</b>	<input type="checkbox"/>	<b>Eradication</b>
<input type="checkbox"/>	<b>Testing</b>	<input type="checkbox"/>	<b>Testing</b>
<input type="checkbox"/>	<b>Killing and rendering of positive animals</b>	<input type="checkbox"/>	<b>Killing and rendering of positive animals</b>
<input type="checkbox"/>	<b>Slaughtering of contact animals and HT</b>	<input type="checkbox"/>	<b>Slaughtering of contact animals and HT</b>
<input type="checkbox"/>	<b>Vaccination of wild pigs</b>	<input type="checkbox"/>	<b>Monitoring</b>
<input type="checkbox"/>	<b>Monitoring</b>	<input type="checkbox"/>	<b>Disposal of products</b>
<input type="checkbox"/>	<b>Disposal of products</b>	<input type="checkbox"/>	

**Monitoring or surveillance**

**Note:**  - Yes

- No

##### 4.2. Designation of the central authority charged with supervising and co-ordinating the departments responsible for implementing the programme :

1. The Bulgarian Food Safety Agency (BFSA) at the Ministry of Agriculture and Food:

- Central Competent Authority for the control of infectious notifiable diseases, interacts with the institutions involved in the programme at national level, implements the 2013 CSF programme and reports to the EC and the other MS.
2. The ‘Animal Health and Welfare’ Directorate at the BFSA headquarters:
    - Elaborates the CSF control strategy and implements the 2013 CSF programme,
    - Coordinates actions of all authorities involved in the programme,
    - Collects information and prepares reports on the outcome of the programme.
  3. Directors and Head of Unit “Animals health” at the Regional Food Safety Departments (RFSD) of the BFSA:
    - Enforce the programme on both, the domestic and wild boar population at regional level, monitor the actions of all authorities involved at local level and report to the BFSA HQ
    - Supervise the two rendering plants at Varna and Shoumen and take samples from dead pigs suspicious of CSF or killed for reasons of CSF eradication.
  4. The public health officials at the RFSD of the BFSA in charge of meat inspection:
    - Carry out ante and post mortem inspection in accordance with the rules laid down by Council Regulation (EC) 854/2004, Article 5 and Annex I, in addition carry out the documentary and identity checks in accordance with Commission Decision 2008/855/EC,
    - Ensure health marking of the meat in accordance with Commission Decision 2008/855/EC, Article 5 on pig meat of Bulgarian origin,
    - Carry sampling of pigs for CSF according to the sampling scheme 2013, and ensure the traceability of the samples back to the farm of origin,
    - Notify the BFSA in case of suspicion of CSF and forward corresponding samples to the NRL Sofia,
    - In case of CSF declare meat of pigs unfit for human consumption in accordance with Council Regulation (EC) 854/2004, Annex I, Section II, chapter V, 1 e) and seizure the meat accordingly and send for destruction to rendering plant,
    - Check the cleaning and disinfection of means of pig transports in accordance with the provisions laid down by Commission Decision 2008/855/EC.
  5. The animal health officials at the Municipal Veterinary Services (MVSs) of the BFSA:
    - Enforce the programme at local level; carry out clinical surveillance (according to the clinical surveillance scheme 2013) and sampling of the domestic pig population (according to the sampling scheme 2013) in cooperation with the registered veterinary practitioners involved in the programme and approved according to the rules laid down by Directive 64/432/EEC, Articles 2, 2m) and 14 (3) B),
    - In case of any suspicion of CSF tacking samples in accordance with the rules laid down by Commission Decision 2002/106/EC
    - in addition carry out the documentary and identity checks in accordance with Commission Decision 2008/855/EC in the context of movement of pigs inside Bulgaria,
    - Ensure the traceability of the samples back to the farm of origin,

- Control the results of clinical surveillance in BG's Traceability database system submitted by the registered vets.
  - Monitor the improvement and enforcement of biosecurity measures at the farms, including cleaning and disinfection procedures based on the principles laid down in Council Directive 2001/89/EC, Article 12 and Annex II,
  - Control the implementation of the rules on holding registration, identification of the pigs and the control of their movements, including closing of holdings and seizure of pigs in case of breach or violation of rules in accordance with the rules laid down by Article 139a of The Law of Veterinary Activity and Council Regulation (EC) 882/2004,
  - Supervise, monitor and control the distribution of baits for oral vaccination of the wild boar population on the areas near to the borders of the country in cooperation with the institutions listed under 3,5,6 and 7),
  - Record the results of surveillance measures including sampling of the wild boar population in the wild boar database.
6. National Forestry Agency by the Council of Ministers
- Cooperates with the institution listed under 2) on the planning for the oral vaccination of wild boar population and its surveillance for 2013,
  - Implements its parts of the 2013 programme as regards the surveillance of wild boar.
7. Regional Forestry Directorates at National Forestry Agency:
- Coordinates the distribution of the baits and the surveillance measures concerning wild boar at regional level in the areas near to the borders of the country together with the institution listed under 3), and carry out the baiting on the spot in areas of their direct competence,
  - In the other regions of the country provides carcasses or material of wild boar (shot at hunting, fallen stock or crashed in car accidents) for inspection and sampling to the institution listed under 5).
8. National Union of Hunters and Anglers
- Carries out the baiting on the spot and performs surveillance of the oral vaccination campaign in this context,
  - Reports to the institution listed under 5) and 7),
  - Provides carcasses or material of wild boar (shot at hunting, fallen stock or crashed in car accidents) for inspection and sampling to the institution listed under 5).
9. The National Reference Laboratory (NRL) for CSF Sofia:
- Processes samples collected from both, domestic pigs and wild boar for CSF virus isolation and serology testing, records test results in the Traceability database system and reports to the BFSA,
  - Tests and methods used are presented in chapter 10 below (Table),
  - Undertakes confirmation tests on samples with doubtful test results send by the Regional Laboratories,
  - Monitors the procedures at the Regional Laboratories and organises ring-tests with them
  - Forwards virus isolates to the CRL for CSF, Hanover and takes part in ring-tests.

10. The Regional CSF Laboratories at the Institute in Sofia , Stara Zagora and Veliko Turnovo

- Perform CSF serology testing on samples from domestic pigs collected according to the sampling plans presented in tables(Chapter 7 below) record test results in the Traceability database system and report to the BFSA,
- Tests and methods used are presented in chapter 10 below, tests limited to ELISA antibody testing,
- Forward all samples with doubtful and positive test results for confirmation or rejection of the diagnosis to the NRL Sofia;
- Inform for the results the BFSA and the respective RFSD which sends the samples for testing.

11. The CRL for CSF at Hanover

- Undertakes genotyping of virus isolates forward by the NRL, Sofia,
- Provides the NRL with test materials on request from the Bulgarian side,
- Organises ring tests in which the NRL Sofia will participate.

12. The Veterinary Faculties at Sofia and Stara Zagora

- Involved in the scientific and epidemiological analysis of the CSF control programme for 2013,

14. The registered vets:

- perform clinical investigation of pig holdings in the periods defined in the present programme for the relevant types of farms and submit the results to the BFSA information system.
- record in the BFSA information system all the test results of the samples of domestic pigs sent by them in the framework of implementation of the present programme.

15. The Ministry of Internal Affairs:

- Assists in the administrative and security measures in case of suspicion or confirmation of CSF.

16. The Farmers' Union and the Pig Breeders' Associations

- Inform their members about the CSF control programme and support the BFSA to perform active clinical surveillance scheme and the sampling and testing schemes where necessary.
- The association veterinarians take part in the active surveillance and clinical observations of the piggery farms.

### **4.3. Description and delimitation of the geographical and administrative areas in which the programme is to be implemented**

The programme will be enforced on the whole territory of Bulgaria, involving all of its 28 districts in accordance with Commission Decision 2008/855/EC, Annex III.

### **4.4. Measures implemented under the programme**

4.4.1 Measures and terms of legislation as regards the notification of the disease:



Classical Swine Fever is subject to mandatory notification in accordance with Art 50 of the Law on Veterinary Activities.

Ordinance No 4 of the 17.02.2007 on prophylactics, containment and eradication of CSF transposes Council Directive 2001/89/EC into Bulgarian legislation. It stipulates that CSF is a notifiable disease and that CSF outbreaks have to be reported to the European Commission and to the Member States.

The report shall contain the following information:

- a) the outbreaks of CSF, which have been confirmed in holdings;
- b) the outbreaks of CSF, which have been confirmed in slaughterhouse or in transport means when transporting pigs;
- c) the primary cases of CSF confirmed in wild pigs;
- d) the secondary cases of CSF in wild pigs in affected areas;
- e) the results of the epizootic enquiry carried out.

The reports provide further details as laid down by Council Directive 2001/89/EC Annex I.

According to Bulgarian legislation (Law of Veterinary Activities Article 132 (1) point 8) the notification has to be made by the owner or keeper of the pigs immediately to the holding veterinarian or the municipal veterinary service in case of suspicion of a disease or change of the health status of his animals.

#### 4.4.2 Targets animals and animal population:

<b>Type of pig holdings</b>	<b>Total number of herds</b>	<b>Total number of herds under the programme</b>	<b>Total number of animals (°)</b>	<b>Number of animals (°) under the programme</b>
Industrial	61	61	454 317	454 317
Family farms type A	90	90	27 430	27 430
Family farms type B	1 727	1 727	33 060	33 060
Backyards	53 858	53 858	88 655	88 655
East-Balkan pigs	96	96	9 684	9 684
<b>Total</b>	<b>55 832</b>	<b>55 832</b>	<b>613 146</b>	<b>613 146</b>

#### 4.4.3 Measures and terms of legislation as regards the registration of holdings and identification of animals:

In Art.51 of the Law on Veterinary Activities it is stipulated that animals are subject to identification and the holdings are subject to registration. BFSA is the official competent authority responsible for the identification of the animals. A computerized information system supports the recording and processing of the data concerning the identified animals and their movements as well as the registered holdings and electronic herd register. The BFSA information system is use for the necessary traceability of the sampling and testing process and the recording of the active clinical surveillance of the domestic pig population.

Ordinance No 61 transposes Council Directive 92/102/EEC into Bulgarian legislation. Art 3 sets out the details concerning the identification of Animals and the registration of holdings: The registration of the holdings (including the pig-keeping ones) is carried out by the authorities of the BFSA or by veterinary specialists - private practitioners duly authorized by the BFSA.

All animal holdings, where large ruminants, small ruminants or pigs are kept are subject to mandatory registering in:

- The registry on animal movement control that is kept by the owner;
- The BFSA information system.

The code (serial) registration number of the holding is provided once and stays the same no matter of the species and types of animals kept in that holding. All data shall be kept at least three years after the cessation of the activity of certain animal holding or after sale, slaughter, death etc. of the last animal kept in that holding.

The new categorisation of pig holdings in the context of the eradication of CSF described under 2) above has no effect on the obligation of pig farmers or keepers as regards holding/herd registration, the identification of animals and their movements.

Ordinance No 61 also lays down the terms and procedures to be complied with concerning the identification of the animals.

Pigs are identified by individual ear-tag ( bearing either unique serial number or, in case of fattening pigs intended for direct slaughter, the registry number of the pig holding of fattening). Any such ear-tags must be and are delivered and distributed by the BFSA. Displacing or reuse of ear-tags placed on an animal is not permitted. The identification of the animals has to be carried within 20 days after birth or when leaving the holding at least. Only in case of pigs for fattening in industrial farms the identification can be carried out at the latest before they leave for slaughter with green ear-tags indicating the number of the holding.

According to the Law on Veterinary Activities (LVA), owners of farm animals are obliged to:

- ensure availability of their animals to be identified /ear-tagged/, for vaccinations and for diagnostic test purposes;
- ensure access to animal holding and the animals therein for the state veterinarian inspecting them;
- comply with and meet the requirements related moving and transportation of animals.

There is a ban imposed on any movement of unidentified animals to markets, slaughterhouses, fairs, exhibitions, competitions or other holdings or settlements.

4.4.4 Measures and terms of legislation as regards the different qualifications of animals and herds:

The decision of the state veterinarian to recognise a pig holding “as CSF suspected” has to be based on the criteria set out in Commission Decision 2002/106 /EC Annex, chapter III a-c).

4.4.5. Control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas concerned:

The Bulgarian Traceability database will be used for control of pig's movement in the context of the CSF programme. The respective obligations of pig holders as regards the registration of holdings, the identification of the pigs and their movement control are described above.

The key obligations of the pig holders in the context above are listed in the table below, also showing the possible violations of the obligations, the administrative measures taken in case of violations and possible punitive actions in those cases.

**Key requirements for the enforcement requirements concerning animal identification, holding registration, movement control and notification of diseases**

Legal requirements	Kind of violation of the rule	Kind of administrative action in case of violation	Kind of punitive action in case of violation of the rule
<p><b>Legislation as regards the registration of holdings</b></p> <p>1. According to article 137, paragraph 1 of the Law on the Veterinary Activity (LVA) the owners of animal-holdings shall submit an application for registration, conforming to a specimen to the director of RFSD.</p> <p>2. According to article 26 paragraph 1 of ORDINANCE № 61 on the measures and procedures for identification of animals, registration of animal holdings and the availability to access the data base for identified animals and registered animal holdings (SG 47/09.06.2006) the owners of animal holdings, where swine are held, keep register on animals which includes updated information on all animal movement, their origin, the place of destination, the number of the individual means of identification and the date of the movement.</p>	<p>1. Absence of notification to the competent authority</p> <p>2. The holding operates before being registered by the competent authority</p>	<p>1. Written prescription to the applicant with a term for elimination of the shortcomings. Measure taken can include closure of holding and confiscation of animals, if necessary</p> <p>2. Punitive act for administrative infringement.</p>	<p>1. Punitive measure according to article 417 of LVA - The owners of farm animals, who have not fulfilled their obligation, shall be fined with the amount of 20 BGN up to 50 BGN, and in the case of a repeated violation - with a fine to the amount of 50 BGN up to 100 BGN.</p> <p>Where the violation has been committed by a legal person or by a sole proprietor, property sanctions shall be imposed from 100 BGN up to 300 BGN, and in the case of a repeated violation – property sanctions to the amount of 300 BGN up to 600 BGN.</p> <p>2. According to article 138, paragraph 2 of LVA the registration is deleted in case of serious or regular breaches of veterinary medical requirements</p>

<p><b>Legislation as regards the identification of animals</b></p> <p>1. According to article 139, paragraph 1, point 2 of LVA the removal of the individual ear tags is prohibited.</p> <p>2. According to article 27, paragraph 1 of ORDINANCE № 61 the identification of pigs is carried out by individual means of identification-ear-tags.</p>	<p>1. Animals are not identified with ear tags by the competent authority.</p> <p>2. Displace of ear tags after placing.</p>	<p>1. Written prescription of the applicant with a term for elimination of the shortcomings.</p> <p>2. Punitive act for administrative infringement according to article 139 of LVA.</p>	<p>Punitive measure according to article 417 of LVA - The owners of farm animals, who have not fulfilled their obligation, shall be fined with the amount of 20 BGN up to 50 BGN, and in the case of a repeated violation - with a fine to the amount of 50 BGN up to 100 BGN.</p> <p>Where the violation has been committed by a legal person or by a sole proprietor, property sanctions shall be imposed from 100 BGN up to 300 BGN, and in the case of a repeated violation – property sanctions to the amount of 300 BGN up to 600 BGN.</p>
<p><b>Legislation as regards notification of the disease</b></p> <p>According to article 132, paragraph 1, point 8 of LVA the owners of farm animals shall notify immediately the veterinarian, who is servicing the animal holding for changes in the health status of the animals, of urgent slaughter carried out or of dead animals</p>	<p>1. The registered veterinarian or the competent veterinary services are not notified concerning an outbreak of a disease</p> <p>2. Competent authorities have no access to the holding.</p>	<p>Punitive act for administrative infringement according to article 132 of LVA</p>	<p>Punitive measures according to article 420 of LVA the owner of animals, violating the notification obligations/ breaching the ban shall be fined with the amount of 50 BGN up to 300 BGN, and in the case of a repeated violation – with a fine to the amount of 100 BGN up to 500 BGN.</p>
<p><b>Legislation as regards the measures in case of positive result</b></p> <p>According to article 132, paragraph 1, point 13 of LVA the owners of farm animals shall observe the prescriptions of the veterinarians, relevant to the application of the measures concerning prophylactics, containing and eradication of animal diseases.</p>	<p>1. The enforced restrictive measures are not respected.</p> <p>2. The prescriptions of the veterinarians, relevant to the application of the measures for limitation and eradication of CSF are not respected.</p>	<p>Punitive act for administrative infringement according to article 132 of LVA.</p>	<p>Punitive measures according article 415 of LVA on a person not applying a measure, imposed by the Bulgarian Food Safety Agency for the prophylactics, limitation and eradication of a contagious disease on the animals, shall be fined from 50 BGN up to 200 BGN, and in the case of a repeated violation - with a fine to the amount of 300 BGN up to 500 BGN.</p> <p>Where as a result of the non-implementation of the measure have led to</p>

			considerable material damages or a hazard to the health of a large number of people or animals, and in case the act is not a subject to a greater punishment, a fine from 1000 BGN up to 2000 BGN shall be charged, and in the case of a repeated violation – with a fine to the amount of 2000 BGN up to 4000 BGN
<p><b>Legislation as regards movement control</b></p> <p>According to article 139, paragraph 1, point 3 of the LVA transportation of animals without a veterinary medical certificate shall be prohibited.</p>	Movement of pigs without a veterinary medical certificate.	Punitive act for administrative infringement according to article 139, paragraph 1, point 3 of LVA	Punitive measures according to article 420 of LVA where the violation has been committed by a legal person or by a sole proprietor, property sanctions shall be imposed from 300 BGN up to 500 BGN, and in the case of a repeated violation – property sanctions to the amount of 500 BGN up to 1000 BGN.
<p><b>Legislation as regards control of the disease</b></p> <p>According to article 132, paragraph 1, point 9 and 13 of LVA the owners of farm animals shall provide an access to the animal-breeding holding and the animals of the veterinarian, who is servicing them and shall observe the prescriptions of the veterinarians, relevant to the application of the measures for prophylactics, containing and eradication of animal diseases</p>	No access to the holding for performing clinical examination or sampling.	<ol style="list-style-type: none"> <li>1. Prescription</li> <li>2. Imposing of a ban</li> <li>3. Punitive act for administrative infringement according to article 132 of LVA</li> </ol>	<p>Punitive measures according to article 415 of LVA who does not apply a measure, imposed by the Bulgarian Food Safety Agency for the prophylactics, containing and eradication of a contagious disease on the animals, shall be fined from 50 BGN up to 200 BGN, and in the case of a repeated violation - with a fine to the amount of 300 BGN up to 500 BGN.</p> <p>Where as a result of the non-implementation of the measure has led to considerable material damages or a hazard to the health of a large number of people or animals, and in case the act is not a subject to a greater punishment, a fine from 1000 BGN up to 2000 BGN shall be charged, and in the case of a repeated violation – with a fine to the amount</p>

			of 2000 BGN up to 4000 BGN.
<p><b>Legislation as regards control of disease in the slaughterhouse</b></p> <p>According to article 248, point 12 of LVA the persons, carrying out production, transportation, trade and placing on the market of raw materials and foods of animal origin in the establishments under Article 7, paragraph 2, p.5 and the establishments under Article 229, paragraph 1 shall inform the veterinarians for an arising danger for the health of people and the animals.</p>	<p>Absence of notification of the veterinary authorities for sick or dead animals during the ante mortem inspection and during their stay at the slaughterhouse.</p>	<p>Punitive act for administrative infringement according to article 248 of LVA.</p>	<p>Punitive measures according to article 439 of the LVA the persons, carrying out production, trade or placing on the market of raw materials or foods of animal origin, animal by-products and products, received from those, who do not fulfil an obligation shall be punished with a fine to the amount of 100 BGN up to 300 BGN, and in the case of a repeated violation – with a fine to the amount of 300 BGN up to 500 BGN.</p> <p>Where the violation has been committed by a legal person or by a sole proprietor, property sanctions shall be imposed to the amount of 500 BGN up to 1000 BGN, and at a repeated violation – property sanctions to the amount of 1000 BGN up to 3000 BGN.</p>

As regards the regular inspection and clinical surveillance the state veterinarian or the registered veterinarian has to follow the criteria and procedures set out in Commission Decision 2002/106/EC Annex, chapter IV, A (2) including taking the body temperature and samples according to the sampling schemes (presented under chapter 7.1.1.2 below) for the different categories of pig holdings described under chapter 2) above.

4.4.6. Measures and terms of legislation as regards the control (clinical surveillance, testing, vaccination,) of the disease:

#### 4.4.6.1. Control Procedures and Taking of Samples

##### 4.4.6.1.1 Clinical inspection and sampling on pigs in suspected holdings

In case of CSF suspected holdings the criteria and procedures set out in Commission Decision 2002/106/EC, Annex, chapter IV, A, 1-7) have to be applied, in particular the sampling schemes for serological testing. In case of primary suspicion the same sampling key has to be applied for virological testing using the cell culture virus isolation technique or RT PCR.

#### 4.4.6.1.2. Sampling of killed pigs following the confirmation of a CSF Outbreak

The criteria and procedures set out in Commission Decision 2002/106/EC, Annex, chapter IV, B, 1-3) have to be applied, in particular the sampling schemes for serological testing. In a primary outbreak the same sampling key has to be applied for virological testing using the cell culture virus isolation technique or RT PCR.

#### 4.4.6.1.3. Sampling in case of culling pigs of a suspected holding as a preventive measure

The criteria and procedures set out in Commission Decision 2002/106/EC, Annex, chapter IV, C, 1-2) have to be applied, in particular the sampling schemes for serological testing. In case of a primary suspicion the same key has to be applied for virological testing using the cell culture virus isolation technique or RT PCR.

#### 4.4.6.1.4. Control Procedures and sampling for authorisation of pig movements from holdings in protection or surveillance zones for slaughter or killing

The criteria and procedures set out in Commission Decision 2002/106/EC, Annex, chapter IV, D, 1-5) have to be applied, in particular the sampling schemes for serological testing. In a primary outbreak the same sampling key has to be applied for virological testing using the cell culture virus isolation technique or RT PCR.

#### 4.4.6.1.5. Control Procedures and sampling in a holding in relation to repopulation

The criteria and procedures set out in Commission Decision 2002/106/EC, Annex, chapter IV, E, 1-2) have to be applied, in particular the sampling schemes for serological testing.

#### 4.4.6.1.6 Sampling in holdings in protection zones and surveillance zones respectively before lifting the restrictions

The criteria and procedures set out in Commission Decision 2002/106/EC, Annex, chapter IV, F and G respectively have to be applied, in particular the sampling schemes for serological testing.

#### 4.4.6.1.7 Serological monitoring and sampling in areas, where CSF is suspected to occur or has been confirmed in wild boar

The criteria and procedures set out in Commission Decision 2002/106/EC, Annex, chapter IV, H have to be applied, in particular the sampling schemes for serological testing. However, in the context of the 2008 CSF control programme the RT –PCR is also applied. The table in chapter 7.1.1.2 presents the number of samples expected per hunting district. In Annex III the model report template is shown, which will also form the basis for feeding the database on wild boar.

#### 4.4.6.2. Collection and transport of samples

The general criteria and procedures set out in Commission Decision 2002/106/EC, Annex, chapter V, A, 1 – 4) have to be applied.

The criteria and procedures for the collection of samples for virological tests set out in Commission Decision 2002/106/EC, Annex, chapter V, B, 1 – 3) have to be applied.

As regards the transport of samples the general criteria and procedures set out in Commission Decision 2002/106/EC, Annex, chapter V, C, 1 – 4) have to be applied.

#### 4.4.6.3 Laboratory testing

##### 4.4.6.3.1 Laboratory test for the detection of CSF antibodies - overview

For serology currently the commercially available ELISA test kits Bommeli E2 – sero and Bommeli ERNS-

Marker R are used according to the instructions of the manufacturer. These tests will be performed at the Regional CSF laboratories in Stara Zagora and Veliko Turnovo as well as at the NRL Sofia.

The virus neutralization test according to chapter 3) of the CSF draft Manual (2002) of the CRL Hanover has been installed at the NRL Sofia.

#### 4.4.6.3.2 Laboratory tests for the detection of CSF virus, viral antigen and genome - overview

Virus isolation using the PK15 cell culture technique as well as the Immune Labelling for the detection of CSF virus in cell cultures and the differential diagnosis of virus isolates have been established at the NRL Sofia. The test is performed in accordance with the CSF draft Manual (2002) of the CRL Hanover.

Imunofluourescent antibody test on thin cryostat sections of organs (tonsilles, ileum, spleen, kidney and retropharyngeal lymphnodes) is the current standard procedure. A commercially available conjugate (**Cedi** Diagnostics BV, **Lelystad**) is used for diagnostic purposes as well as the CSF antigen ELISA produced by Bommeli and a diagnostic PCR as described in the draft Manual (2002) of the CRL Hanover are in use at the NRL Sofia

The genome typing of Bulgarian CSF virus isolates are sent to the CRL in Hanover.

The overview on the targets relating to testing methods and target groups is provided in chapter the table in chapter 7.1.1.1).

#### 4.4.6.3.3 Details on the laboratory tests performed in Bulgaria

##### ***Serology - Basic Principles and Diagnostic Value:***

In pigs infected with the CSF virus antibodies can be found in the blood serum two-three weeks after the infection. In pigs that have got healthy again protective and neutralising antibodies can be found for years, even till the end of the pig's life. In ill animals in the end phase sometimes antibodies can be found too. In chronically ill pigs antibodies can be detected for several days at the end of the first month after the infection. The infected foetus in the womb of the sow is immune-tolerant to the virus and does not produce any specific antibodies. During the first days after they are born their mother's antibodies might be detected in them, which are evidenced in the healthy piglets without viraemia for about two weeks. If antibodies are detected in piglets more than three months old, there is little possibility that they originate from the mother.

The detection of antibodies against the CSF virus in serum or plasma samples allows to be confirmed the diagnosis of CSF in facilities under suspicion, to be determined the period from the beginning of the outbreak of the infection and to be taken measures for surveillance and supervision control. The serological tests serve most of all for detection of CSF in recently infected stockbreeding facilities.

A small number of affected pigs with low titre of antibodies serve as an evidence for a recent infection (two-three weeks). A great number of affected pigs with high titre of antibodies mean that the virus has penetrated the stockbreeding facilities for a month at least. The location of the sero-positive pigs in the facilities may offer useful information about the way the CSF virus has penetrated into the facilities.

In spite of this, it is necessary precise evaluation and interpretation of the results from the serological tests to be made taking into account all clinical, virological and epidemiological data within the investigation, which is done in case of suspicion or confirmation of CSF.



The virus neutralisation test reaction (VNR) and ELISA are most suitable for serological diagnostics of CSF. The quality and effectiveness of the serological diagnostics done by the national laboratory are under constant control by means of intra-laboratory comparative test organised periodically by the Community Reference Laboratory, Hanover.

The VNR is based on defining the neutralising action of the antibodies in a serum sample on the virus, expressed as a neutralisation degree of 50%.

A certain quantity of the CSF virus is incubated at 37°C in serum with different degree of diluting. The serum is diluted solution is prepared with a solution to proportion of 1 to 10, 1 to 5 or 1 to 2. When full titration is required, serum solution is prepared in proportions 1 to 2 and 1 to 5. To each of the serum dilutions solutions prepared in this way it is mixed added with an equal volume of suspension of the virus containing 100 infection doses (TCID 50).

After the incubation with them the mixture is used the cell cultures to be infected and their incubation takes 3 to 5 days. After this incubation period the cultures are fixed and each reproduction of the virus is detected by immune marking (immune-peroxydase or immune-fluorescent reaction).

The results from the VNR are expressed with the reciprocal value of the initial diluting of the serum, whereas half of the infected cell cultures (final titre 50%) do not show any reproduction of the virus (there is no specific marking colouring or beaming). Evaluation of the titre between two dilutions is done. The final dilution is an effective dilution of the serum during the neutralisation reaction after adding the virus, but without adding any cell suspension.

VNR is the most sensitive and the most reliable method for the detection of antibodies of the CSF virus. It is recommended a serological testing to be done both of individual animals and of herds. The testing allows also the detection of antibodies with crossed neutralisation.

The application of VNR for detection of antibodies against the virus of the mucous disease – viral diarrhoea /MD – VD/ in beef cattle and the Border disease in sheep is based on the same principles and is used for differential diagnostics of CSF.

The strains of the virus, which are used in the virus neutralisation reaction, shall be in compliance with the recommendations of the Reference Laboratory of the European Union.

Different variants of ELISA have been developed by making use of specific monoclonal antibodies - a competitive (blocking) method and a non-competitive ELISA.

The competitive (blocking) method is usually based on the usage of monoclonal antibodies. If the serum sample contains antibodies against the CSF virus, the binding conjugation of the monoclonal body, in combination with peroxydase, with the antigen of the virus leads to a reduction of the colour extinction.

The NRL Sofia works with two types of the aforementioned ELISA: For detection of anti E2 antibodies and for detection of anti E ms antibodies against the CSF virus which are produced by BOMMELI, Switzerland. The manufacturer's prescriptions are followed when they are used.

In the non-competitive ELISA the binding of the serum antibodies with the antigen is directly compared with the help of antibodies in combination with peroxydase.

The NRL Sofia together with the National Institute for the control veterinary medicinal products regularly exercises control on the sensitivity and the specificity of all lots of ELISA by making use of a kit of reference

sera provided by the Reference Laboratory of the European Union. This kit includes:

- Sera from pigs in an initial phase of infection with the CSF virus (up to 21 days after the infection);
- Sera from pigs that are getting well (after the 21<sup>st</sup> day of the infection);
- Sera from pigs infected by viruses of ruminants.

The ELISA tests for serological diagnostics of CSF should recognise all reference sera of pigs that are getting well. All the results obtained are reproduced. It is recommended further tests to identify all the positive sera in the initial phase and to represent minimum cross-reactions with sera from pigs infected with viruses of ruminants.

The results obtained from reference sera of pigs in an initial phase of the infection provide indications about the sensitivity of the ELISA tests

The sensitivity of the ELISA tests is considered to be lower than that of VNR and is recommended for use for detection of the disease in herds. In spite of that, the ELISA tests require less specialised equipment and they are done much quicker than VNR due to the automated equipment.

The ELISA tests make it possible to be discovered all infections of CSF in the phase of recovery from the illness and should be freed to a maximum degree from cross-reactions with antibodies against viruses typical for the ruminant animals.

The interpretation of the results from the serological tests and differential diagnosis for the infections caused by viruses typical for the ruminant animals (mucous disease - viral diarrhoea in beef cattle and Border disease in sheep):

In case of detection of a titre of neutralisation of the CSF virus equal or greater than 10 ND<sub>50</sub>, in serum samples of one or more pigs or in case of a positive result by ELISA in serum samples of a group of pigs, BFSa immediately introduces the measures envisaged in the Regulation on the Prophylactics, Restriction and Annihilation of the Classical Swine Fever.

The already taken samples from the facilities are subject to a second VNR (comparative final titration of virus – neutralising antibodies against CSF and the viruses typical for the ruminant animals).

If as a result of the comparative tests antibodies against the viruses typical for the ruminant animals are discovered and titres of the antibodies against CSF are missing or they are in a smaller quantity (less than one third), the suspicion for CSF is rejected, except in case there are any other reasons, which justify the application of the measures envisaged in the Ordinance /Regulation/ on the Prophylactics, Containment /Restriction/ and Eradication /Annihilation/ of CSF.

If as a result of the comparative tests titre of neutralisation of the virus equal or greater than 10 ND<sub>50</sub> is detected in more pigs and this titre is equal to or higher than the titres related to other plague viruses, the BFSa shall take immediately the required measures for confirmation of the presence of CSF, under the condition that in the respective facilities epizootic occurrence of the disease has been evidenced.

Without violating the provisions of the Regulation on the Prophylactics, Restriction and Annihilation of the Classical Swine Fever, if not a single epizootic occurrence of the disease has been evidenced and the results from previous tests are insufficient, the BFSa shall take immediate measures in the respective stockbreeding facilities, as follows:

- to be continued the action of the measures under the Regulation on the Prophylactics, Restriction and Annihilation of the Classical Swine Fever;
- Further additional tests to be made as soon as possible to be confirmed or rejected the presence of the

CSF virus.

When the additional control measures and tests mentioned above in item 4 do not allow the presence of CSF to be rejected, it shall be necessary to take new blood samples for serological tests from the respective holding minimum two weeks after the previous controls.

In the context of this measure new samples are taken from the same pigs for a comparative serological study against the previous samples, allowing a sera conversion of the CSF virus or of the Pest virus typical for the ruminant animals to be detected, as the case may be.

If during the repeated tests the presence of the CSF virus is not confirmed, the imposed measures shall be terminated.

### ***Virology***

Detection of virus antigen by direct immune-fluorescent method and ELISA

The principle of this method is detection of antigens of the virus in cryo-sections of organs of pigs, which are under suspicion for an infection with the CSF virus. The intra-cellular antigens are detected with the help of an antibody, conjugated with fluorescein isothiocyanate (FITC). The National Reference Laboratory uses FITC – conjugated antibody “Cedicon”, made in the Netherlands. Each positive result should be confirmed by repeating the reaction with the help of a specific monoclonal antibody.

The most suitable organs are the tonsils, the kidneys, the spleen, the lymph nodes and the distal parts of colon, of which the National Reference Laboratory prepares cryo-sections. For wild pigs medulla smear may be used, when the abovementioned organs are not available or are decayed. The method for colouring of the cryo-cuts of internal organs fixed by acetone is presented by the producer.

The test is done within one day. As the samples are taken only from dead animals, their use for detection of the disease is limited. The certainty of the results from the tests may be reduced due to questionable fluorescence, especially when the specialist doing the test is not experienced enough with this method or when the tested organs are decayed.

Different ELISA techniques make it also possible to detect the antigen of the virus. The antigen ELISA should be sensitive enough to allow the achievement of positive results for animals with clinical symptoms for the presence of CSF. The National Reference Laboratory works with ELISA, produced by BOMMELI, Switzerland.

The use of ELISA is recommended for detection of the antigen in samples of animals with clinical symptoms or with pathological changes of the disease. They are not appropriate for individual testing. The NRL Sofia works with blood serum or most suitable are the samples of leucocytes, blood serum, non-clotted blood, as well as suspension of the organs described above and taken from pigs, which are suspected to have an infection of the CSF virus.

ELISA can be done within one day with the help of automated equipment. The main advantage is the possibility to process a great number of samples in a short period of time. All batches of the ELISA kits are subject of intra-laboratory control and are used after satisfactory results are obtained using reference material. All ELISA on sale at the moment are less sensitive compared with the method of isolation of the virus in cell culture or RT PCR.

### ***Isolation of the virus, virus genome and genome typing and interpretation of results***

The isolation of the virus is based on inoculation of a sensitive cell cultures from pigs with the sample material. If the CSF virus is present in the sample, it gemmates in the cells in quantities, which can be detected by colour reaction of the infected cells with loaded antibodies. It is necessary to have specific antibodies against CSF available to be able to make a differential diagnosis with regard to other viruses.

Most suitable for the isolation of the virus of CSF are the leucocytes; blood plasma and whole blood samples, non-clotted blood or samples of the organs described above.

The method based on isolation of the virus is more suitable for the analysis of samples from a small number of animals, than for mass control. It needs great efforts and the results are obtained in three days as earliest. It might prove necessary two passages of cell cultures to be made in case of the detection of a weak presence of the virus in the sample. Thus the period needed to obtain the end results from the test may be extended to ten days. The decayed samples may prove to be cytotoxic for the culture and thus restrict the use of the method.

Isolation of the virus is recommended, when the presence of the CSF virus has already been confirmed by other methods. It is used as a reference method to confirm the positive results obtained with the ELISA method for the detection of antigen, a polymerase chain reaction (PCR), an immuno-fluorescent method or an indirect immuno-peroxydase method.

The CSF virus isolates obtained in this way are genetically characterized and typified. The genetic typing of virus isolates is used for the purposes of the molecular epizootic studies.

All isolates of the Classical Swine Fever Virus taken from primary outbreaks of the disease, from primary cases of infection of wild pigs or by cases of infection with the disease in a slaughterhouse or a means of transportation are forwarded to the CRL Hanover for the identification the genetic type.

The polymerase chain reaction (PCR) serves for detection of the genome of the virus in the samples of blood, tissues and organs. Small fragments of Ribonucleic acid (RNA) of the virus are transcribed in fragments of the Desoxyribonucleic acid (DNA) and are amplified by PCR to determine the quantities. As this test allows only a segment of the genome, PCR may give a positive result even in case of absence of the CSF virus (for instance, in decayed tissues or samples of pigs getting well after an illness).

PCR is used for a restricted number of selected samples of animals under suspicion or material from aborted fetus. It may be the ideal method for carcasses of wild boar, if the material has decayed and the isolation of the virus is impossible due to cytotoxicity.

The most suitable material for PCR diagnostics includes the samples taken from the organs enumerated in the item for isolation of the virus or non-clotted blood.

The polymerase chain reaction (PCR) needs 48 hours to be completed. It requires suitable laboratory equipment, separate premises and qualified staff. One of the advantages of the method is that the segments infected with the virus are not subject to reproduction under laboratory conditions. This method is very sensitive, but the possibility for easy pollution may lead to false positive results. Therefore it is necessary procedures for quality control to be applied. Some methods are specific for all viruses and require additional tests for verification, such as segmentation of the product of the polymerase chain reaction (PCR). All received organs samples from the wild pig taken for the virus diagnostic in the NRL are tested with PCR .

The virological tests are necessary to confirm the presence of CSF. The isolation of the virus is a referent

method. It is used for a confirmation too. It is recommended in case with the positive results of the immunofluorescent method, ELISA or PCR have not been detected any clinical symptoms or changes characteristic for the disease, and in any other case causing doubts.

In spite of that, to confirm the primary outbreak of CSF the presence of the clinical symptoms or changes characteristic for the disease in the respective pigs is enough, when it is combined with positive results from at least two of the methods for detection of the antigen or the genome of the virus.

A further (secondary) outbreak of CSF is confirmed, when besides an epizootic connection with the already confirmed outbreak or case there are detected clinical symptoms or changes characteristic for the disease in the pigs under surveillance and when a method for the detection of the antigen or the genome of the virus has given positive results.

A primary outbreak of CSF among wild pigs is confirmed after the virus has been isolated or at least two of the methods for detection of the antigen or the genome of the virus have given a positive result. Other cases of CSF in wild pigs can be confirmed if epizootic connection with confirmed cases has been found and when at least one method for the detection of the antigen or the genome of the virus has given a positive result.

To give a positive result, the method for detection of the antigen or the genome of CSF is executed with specific antibodies or primers against the CSF virus. If the method is not specific for the CSF virus, but only for the *Pestivirus* genus, the test is repeated by using the specific reactive for the CSF virus.

As regards distinguishing tests in case of emergency vaccination by live vaccine there is no appropriate test that would enable pigs vaccinated by live vaccine to be distinguished from those naturally infected by the CSF disease. For Bulgaria this scenario has to be taken into consideration only in the context of the oral vaccination of the wild boar and for elderly domestic pigs which were vaccinated before ceasing the vaccination of the domestic pig population on the 10.01.2006.

#### 4.4.7 Vaccine used for the oral vaccination of the wild boar population

For the oral vaccination of wild boar population the commercially available RIEMSER Schweinepestoralvakzine (REIMSER Arzneimittel AG) will be used according to the instructions of the manufacturer.

As regards the monitoring of the oral vaccination of the wild boar population it is the intention to combine the sampling procedure for the legally required testing on *Trichinella* with the control of the CSF status of the wild boar.

In the 2005 CSF in wild pigs was detected in 7 districts Of Bulgaria. In May 2005 a training of veterinary specialists of the BFSa, representatives of the NFD and the National Association “Union of the Hunters and Fishermen in Bulgaria” on the use of oral vaccination of the wild pigs was organised with the help of TAIEX experts.

To restrict and eradicate the outbreaks of CSF in wild pigs two vaccination campaigns with per oral vaccine made in the Federal Republic of Germany in 2005 were conducted and 60,000 doses of this vaccine were distributed on a total area of 5,234 sq. km.

During 2006 and 2007 for restriction and eradication of CSF in wild pigs two vaccination campaigns with two distributions of bites within 14 days were carried out with 100.000 bites – each.

An oral vaccination of the wild boars consisting of 200.000 doses oral vaccines in two vaccination campaigns are carried out in the year 2008 on the whole territory of Bulgaria.

In the second half of 2008, based on results in the implementation of approved programs for surveillance and eradication of classical swine fever, BFSA second vaccination campaign asked two bids to be carried out only in the territory of the municipalities entering the zone 40 km / 20 kilometers. high-risk and 20 km buffer zone / on the border with Romania, the Republic of Serbia and the Former Yugoslav Republic of Macedonia. Vaccination is performed by trained hunters and hunting instruction approved by officers to perform oral vaccination of feral pigs. Setting of vaccine baits is performed twice in 14 days, the same is under the supervision of official veterinarians municipalities. For the present vaccination and monitoring of performance and draw up appropriate protocols, which are reported in the Head quarters of BFSA. This approach was followed until 2012 - three vaccination campaigns per year with two distributions of bites in the 40 km north and west border zone. In 2013 three vaccination campaigns per year with two distributions of bites in the north and west border municipalities of the country will be carried out only.

Number of samples will be taken from wild boar found dead or shot on the territory of Bulgaria after oral vaccinations against CSF as indicated in Table 7.1.2.3.

***The oral vaccination of the wild boar in 2013 - three vaccination campaigns with two distributions of bites - will be carried out only in the municipalities near to the borders with Serbia, Macedonia and Romania.*** ( Table 6.6.3).

The further strategy shall depend on the results from the mandatory Monitoring Program for the wild pigs shot in hunting or found dead. Instructions have been given to take samples from any wild pigs shot or found dead. With view to the vaccination this testing will involve serological and virological tests as indicated in Table 7.1.1.2.7).

#### **4.4.8 Information and assessment on bio-security measures management and infrastructure)in place in the holdings involved:**

During the active surveillance for the emergence and spread of the disease, classical swine fever, through clinical examinations of holdings a special check-list is drafted for checking the biosecurity measures introduced in the holdings. On the basis of biosecurity measures introduced for the purposes of this Schedule, the holdings are divided into: Industrial farms / farms with biosecurity measures and closed cycle of rearing pigs, Family farms, type "A" - these are the farms open cycle of rearing pigs with biosecurity measures, Family farms, type "B" - farms with uninitiated or partially implemented biosecurity measures, "back yards" - private farms, which rear to 5 pigs for personal consumption, "East Balkan pigs" - population, which is rear only in the territory of 12 municipalities in 3 regions of the country, under certain conditions that ensure the biosecurity of pigs. In the gaps in the biosecurity measures introduced in carrying out clinical examination, the official veterinarian give a prescription for a period to correct deficiencies of the owner of the holding.

4.4.9 Measures and terms of legislation in case of a positive result: In case of the positive results should be implemented the measures in Commission Directive 2001/89/ EC.

##### 4.4.9.1 Measures in case of suspicion of CSF in domestic pigs

Ordinance No 4 transposes the provisions of Directive EC 2001/89 Art 4: The following measures shall be taken, in particular when the active clinical surveillance and serology monitoring of the CSF control programme 2013 give a doubtful result for a particular holding:

1. Where a holding contains one or more pigs suspected of being infected with Classical Swine Fever virus, the responsible registered veterinarian shall prohibit the access to the farm and shall immediately notify the respective official veterinarian for measures to be taken for the diagnosis to be confirmed or the suspicion rejected.
2. The official veterinarian shall visit the farm without delay, shall make a check on the spot of the register and the identification marks of the pigs raised on the farm, shall prohibit the access to the farm and shall give instructions, as follows:
  - a) all the pigs in the various categories on the pig-breeding farm are to be counted and a list compiled of the pigs already dead, sick or likely to be infected (the contact animals) in each category; the list shall be updated every day to take account of: the pig births, the pigs that have got sick and the deaths during the period of confirmation of the diagnosis or rejection of the suspicion. This list is submitted daily for a check to the responsible state veterinarian.
  - b) The movement of all the pigs on the farm shall be forbidden, and the movement of pigs outside the farm, including for slaughter purposes, shall be forbidden too;
  - c) no sows or pigs may enter or leave the farm and may, if necessary, extend the ban to cover other species of animals, in case there are any raised on the farm;
  - d) no pig carcasses may leave the farm;
  - e) no meat, pig products, semen, ova and embryos of pigs, animal feed, instruments and equipment (utensils), materials or wastes likely to transmit Classical Swine Fever may leave the farm;
  - f) access shall be denied for any unauthorised persons, that are not engaged in the production;
  - g) the movement of the workers to or from the farm shall be done only through a “filter”, and the movement of the vehicles to or from the farm shall be done only through a disinfecting installation;
  - h) appropriate means of disinfecting shall be used at the entrances and exits of the buildings housing pigs and of the farm itself; any person entering or leaving a pig farm shall fulfil appropriate hygienic measures necessary to reduce the risk of spread of the Classical Swine Fever Virus. Furthermore, all means of transportation shall be carefully disinfected before leaving the farm. Cleaning and disinfection measures follow the principles as laid down by Council Directive 2001/89/EC Annex II.
3. The official veterinarian shall take and send samples for laboratory tests for confirmation of the CSF diagnosis or rejection of the suspicion as described under chapter 4.4.7.1.1) below. An epizootic inquiry shall be made.
4. When the pig-breeding farm subject to suspicion concerning the presence of Classical Swine Fever is situated in an area with high density of the population of pigs, the state veterinarian may give instruction for a ban on the movement in the remaining farms too until there is confirmation of the diagnosis or a rejection of the suspicion.
5. In areas with a high density of pigs the competent authority may apply Directive 2001/89/EC Art 4 (3) if the epidemiological situation justifies this measure and the conditions laid down by the Directive are fulfilled.

6. The official veterinarian shall have the right to impose a control zone both within the pig-breeding farms and at the borders and can introduce measures identical with those imposed on the farm subject to suspicion of CSF infection.
7. The official veterinarian shall have no right to lift the measures imposed until the results from the laboratory tests officially rejecting the suspicions for the presence of CSF infection have not been received.

#### 4.4.9.2. Measures in case of confirmation of CSF in domestic pigs:

In case of CSF confirmation the measures listed in Council Directive 2001/89/EC Art 5 (1 a – i) – transposed by Ordinance No 4 are:-

1. All pigs in the holding have to be killed without delay in such a way as to avoid the risk of spread of the Classical Swine Fever Virus during their transport or killing;
2. A sufficient number of samples have to be taken, in accordance with the diagnostic manual, from the pigs killed in order that the manner of introduction of the Classical Swine Fever Virus into the farm and the length of time during which it may have existed on the farm to be established;
3. The carcasses of pigs which have died or have been killed have to be destroyed under official supervision;
4. The meat of pigs, raw materials thereof and products of pigs slaughtered during the period between the probable introduction of the disease to the pig holding and the taking of official measures have to be traced and processed under official supervision;
5. Semen, ova and embryos of pigs collected from the holding during the period between the probable introduction of the disease and the taking of measures have to be traced and the destroyed under official supervision in such a way as to avoid the risk of spread of the CSF Virus;
6. All substances and waste likely to be contaminated, such as feeding stuff, have to be subjected to a treatment ensuring the destruction of the CSF Virus;
7. All single-use materials, which may be contaminated with the CSF virus, have to be destroyed in accordance with the instructions of the state veterinarian;
8. After the pigs have been disposed of, mechanical cleaning and disinfecting of the buildings for housing the pigs and premises used, the vehicles used for transporting them and their carcasses, the equipment, bedding, manure and excrements has to be performed;
9. In case of a primary outbreak of the disease, the CSF Virus isolate has to be sent to the EU Reference Laboratory in Hanover (Germany) to identify the genetic type.
10. An epizootic inquiry has to be organised.

#### 4.4.9.3. Measures in case of suspicion and confirmation of CSF in wild boar:

In accordance with Council Directive 2001/89/EC Art 15 and Commission Decision 2008/855/EC the following measures have to be applied on the whole territory of Bulgaria, in particular when the surveillance and virology testing of the wild boar population under the 2013 CSF control programme give a positive result:

##### 4.4.9.3.1. Measures on the hunting field in case of outbreak of the CSF disease in wild boar:

1. BFSAs immediately carries out epidemiological investigation on the situation and



establishes the zones in the infected area as laid down by Directive 2001/89/EC

2. BFSA immediately orders reduction of the wild pig population in the 3km protection and 10 km surveillance zones to 2 wild pigs with their newborns on the 1km<sup>2</sup> during the hunting season. Out of the hunting season for reduction of the wild pig population it is ordered hunting only of newborn and young wild pigs up to one year of age. Trapping will be used as appropriate method for reduction of wild boar population. During the hunt it is important to avoid passing of the wild pig herds to other territories out of the zones. In the hunting season is important and we must to be careful with the wild boar – must not have access to any material that may subsequently come in contact with the pigs on the holding.

Samples are taken and send to the NRL in Sofia for testing for the presence of CSF virus from all shot wild pigs. The carcasses are identified and kept till the notification of the results. In case of positive result the carcass and the internal organs are send for rendering. In case of negative result the carcasses and the internal organs may be taken by the hunters for own use.

3. BFSA immediately organises “oral” vaccination of the wild pigs in the affected area. The vaccine is distributed at least on 2 plains on 1 km<sup>2</sup> (with an option for two more plains on the 1km<sup>2</sup>). Two vaccination campaigns with two distributions of bites are carried out within a period of 30 days.

4. BFSA forbids opening the carcasses of all shot and found dead wild pigs on the field. Opening of the carcasses is carried out only in defined for the purpose places. In case of CSF positives BFSA pays compensation to the hunting organisation. Strict documentation is kept for every shot in the 3km and 10 km zones wild pig, including sampling and testing procedure. In this documentation information is kept for: identification of the animals, place of shooting, age, sex, weight and laboratory result.

5. BFSA establishes 40km zone out of 3km and 10km zones where orders 100% sampling of all shot pigs. National borders and wildlife habitats are always taken into account while establishing the zones.

#### **4.4.9.3.2. Measures in domestic pigs in case of CSF in wild boar:**

1. BFSA immediately notifies for the situation all owners of domestic pigs and hunters in the 3km and 10km zones area.

2. BFSA carries out audits to verify the effectiveness of the measures adopted to eradicate CSF from the infected area;

- all pig holdings in the defined area have to be placed under official surveillance and a census has to be carried out; the census has to be kept up to date by the owner. The information in the census has to be produced on request and is checked at each inspection.
- with regard to open pig farming all East Balkan pigs must to be closed immediately in the holdings (no movement outside is allowed), and census of the East Balkan pigs hers in the 3km and 10km zones must be performed.
- all pigs on the holding have to be kept in their living boxes or some other place, where they can be isolated from the wild boar. Wild boar must not have access to any material that may subsequently come in contact with the pigs on the holding;
- no pigs enter or leave the holding without permission of the state veterinarian, who will take into consideration the epidemiological situation;
- appropriate means of disinfecting have to be placed at the entrances and exits of the buildings housing domestic pigs and of the holding as a whole;
- appropriate hygienic measures have to be applied by all persons coming in contact

with wild boar, to reduce the risk of spread of the CSF virus. The measures can include a temporary ban to enter the pig holdings on persons having been in contact with wild boar such as hunters, hunter- and forest supervisors;

- all dead or sick pigs with a CSF symptoms on the holding have to be tested for the presence of CSF virus
- no meat or any part of wild boar, whether shot or found dead, as well as any material or equipment, which could be contaminated with the CSF virus has to be brought into the pig holding;
- pigs, their semen, embryos or ova shall not be moved from the infected area for the purpose of trade;
- for collaboration in the establishment of control measures the neighbouring Member States or a third country will be duly notified, when the infected area is near the border
- pigs may be sent for immediate slaughter to slaughterhouse located in the same administrative region, only after the clinical investigation of the pig holding have been carried out. Check lists of the clinical investigation accompanies the batch.
- Breeding pigs may leave holding located in the 3km or 10km zones, only after receiving the negative result of the PCR laboratory tests of blood samples taken 7 days before the pigs transportation.

#### **4.4.10 Measures and terms of legislation as regards the compensation for owners of slaughtered and killed animals:**

Article 108 of the Law of Veterinary Activities lays down that the owners of dead, compulsory killed and destroyed animals shall be reimbursed and compensated by funds extended under the State Budget. The terms and procedures of compensations are provided for in Ordinance of the Council of Ministers of Republic of Bulgaria published by term of Article 109 of the LVA.

#### **4.4.11 Control on the implementation of the programme and reporting:**

BFSA and the 28 RFSD are the competent authorities for control of CSF.

The current programme is reported in accordance with Commission Decision 2008/940/EC. Two reports are performed: intermediate in July and final for the whole year.

#### **5. General description of the costs and benefits:**

The financing of the 2013 CSF control programme shall be financed through the budget of the BFSA. The necessary funds for compensation of the owners of the dead or killed in the context of the execution of this programme as well as the necessary financing for control and eradication measures in case of CSF outbreaks are provided by the state budget. The order and the conditions for providing the compensations are specified in Ordinance of the Council of Ministers of Republic of Bulgaria published by term of Art.109 of the LVA..

Financing in the context of the execution of the programme is required for:

- Killing, slaughter, transportation of the animals upon the decision of the BFSA;
- Temporary or permanent closing of facilities, slaughterhouses, processing enterprises for products of animal origin, animal markets, butcher's shops upon the decision of the BFSA applying the measures stipulated in the programs for control of the disease;

- Control of the means of transportation for live animals along the public roads in order to detect eventual illegal movements of pigs;
- Collection, transport and destruction of killed or dead animals and the wastes of animal origin as well as cleaning and disinfection;
- Compensations of pig owners for killed or dead animals in case of destruction and for other losses in the context of the execution of the programme;
- Performance of clinical investigation of the domestic pig population and for its sampling and testing for CSF;
- Execution of an oral vaccination campaign of the wild boar population and its surveillance including costs for the collection of sampling materials for CSF testing;
- Recording of results of active clinical surveillance and testing of the pig population in the Information system by BFSA.
- Scientific analysis of the results of the programme in the context of CSF epidemiology in Bulgaria

An estimate of cost details and summary of costs for the performance of the CSF control programme 2013 is given in chapter 8 below.

The benefits of the programme:

- Reducing the risk of spreading CSF within the European Union;
- Creating access for Bulgarian pig holders to the EU market and third countries;
- Opportunity of Bulgarian pig meat and meat products producers in the internal market and trade with third countries;
- Protection of wild boar population in the North and West border regions from introduction of CSF virus from neighbouring countries by oral vaccination campaigns
- Detection of new introduction of CSF in wild boar population from neighbouring countries.

6. Data on the epidemiological evolution

6.1. Evolution of the disease

6.6.1 Data on herds (a)

Disease – CSF

Species: domestic and East- Balkan pigs

Year: 2004

Situation on date – 31.12.2004

Disease – CSF

Species: domestic pigs and East Balkan pigs

Holding Type H Region Bulgaria	Total number of herds (<)	Total number of herds under the programme	Number of herds checked	Number of positive herds for 2004	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8=(7/5) x100	9=(4/3) x100	10=(5/4) x100	11=(6/4) x100
Industrial farms	76	76	76					100.00		
Small farms	410	390	340	1	1	1	100.00	87.17	0.291	0.291
Backyards holdings in settlements with more than 500 pigs	5467	5120	3500					68.35		
Backyards holdings in settlements with less than 500 pigs	127900	98677	46787					47.41		
East Balkan pigs	380	380	230	1	1	1		60.52	0.434	0.434
<b>Total</b>	<b>134 233</b>	<b>134 233</b>	<b>134 083</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>100.00</b>	<b>99.88</b>		

Year: 2005  
Disease – CSF

Situation on date – 31.12.2005  
Species: domestic pigs and East Balkan pigs

Holding Type H Region Bulgaria	Total number of herds (<)	Total number of herds under the programme	Number of herds checked	Number of positive herds for 2005	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8=(7/5) x 100	9=(4/3) x 100	10=(5/4) x 100	11=(6/4) x 100
Industrial farms	72	72	72	0				100.00		
Small farms	298	298	298	0				100000		
Backyards holdings in settlements with more than 500 pigs	4570	4570	4570					100.00		
Backyards holdings in settlements with less than 500 pigs	110600	110600	110600	0				100.00		
East Balkan pigs	330	330	250	0				75,75		
<b>Total</b>	<b>115 870</b>	<b>115 870</b>	<b>115 790</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>99.93</b>		

Year 2006  
Disease – CSF

Situation on date – 31.12.2006  
Species: domestic pigs and East Balkan pigs

Holding Type H Region Bulgaria	Total number of herds (<)	Total number of herds under the programme	Number of herds checked	Number of positive herds for 2006	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8=(7/5)x100	9=(4/3)x100	10=(5/4)x100	11=(6/4)100
Industrial farms	83	83	83	0		0		100,00	0,00	0,00
Small farms	373	373	373	2		2	100,00	100,00	0,54	0,00
Backyards holdings in settlements with more than 500 pigs	4981	4981	4981	0		0	0	100,00	0,00	0,00
Backyards holdings in settlements with less than 500 pigs	105279	105279	105279	5		5	100,00	100,00	0,004	0,00
East Balkan pigs	313	313	313	0			100,00	100,00		
<b>Total</b>	<b>111 029</b>	<b>111 029</b>	<b>111 029</b>	<b>7</b>		<b>7</b>	<b>100,00</b>	<b>100,00</b>	<b>0,006</b>	<b>0,00</b>

Year 2007  
Disease – CSF

Situation on date – 31.12.2007  
Species: domestic pigs and East Balkan pigs

Holding Type H Region Bulgaria	Total number of herds (<)	Total number of herds under the programme	Number of herds checked	Number of positive herds for 2007	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8=(7/5)x100	9=(4/3)x100	10=(5/4)x100	11=(6/4)100
Industrial farms	83	83	83	0		0		100,00	0,00	0,00
Small farms	373	373	373	1	1	1	100,00	100,00		
Backyards holdings in settlements with more than 500 pigs	4981	4981	4981	0		0	0	100,00	0,00	0,00
Backyards holdings in settlements with less than 500 pigs	105279	105279	105279	0		0	100,00	100,00	0,00	0,00
East Balkan pigs	313	313	313	2	2	2	100,00	100,00		
<b>Total</b>	<b>111 029</b>	<b>111 029</b>	<b>111 029</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>100,00</b>	<b>100,00</b>	<b>0,003</b>	<b>0,003</b>

Year: 2008  
Disease – CSF

Situation on – 31.12.2008  
Species : domestic and East Balkan pigs

Holding Type H Region Bulgaria	Total number of herds (<)	Total number of herds under the programme	Number of herds checked	Number of positive herds for 2008	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8=(7/5)x100	9=(4/3)x100	10=(5/4)x100	11=(6/4)100
Industrial farms	76	76	76	0		0	0,00	100,00	0,00	0,00
Family farms Type A	74	74	74	0		0	0,00	100,00	0,00	0,00
Family farms Type B	2546	2546	2546	1		1	100 %	100,00	0,0004	0,00
Pigs raised in “back yard” holdings	72 402	72 402	72 402	0		0	0,00	100,00	0,00	0,00
East Balkan pigs	152	152	152	0		0	0,00	100,00	0,00	0,00
<b>Total</b>	<b>75 250</b>	<b>75 250</b>	<b>75 250</b>	<b>1</b>		<b>1</b>	<b>0,00</b>	<b>100,00</b>	<b>0,00</b>	<b>0,00</b>



**Year 2009**  
**Disease – CSF**

**Situation on date – 31.12.2009**  
**Species: domestic pigs and East Balkan pigs**

Holding Type H Region Bulgaria	Total number of herds (<)	Total number of herds under the programme	Number of herds checked	Number of positive herds for 2009	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8=(7/5)x100	9=(4/3)x100	10=(5/4)x100	11=(6/4)100
Industrial farms	72	72	72	0	0	0	0,00	100,00	0,00	0,00
Family farms Type A	74	74	74	0	0	0	0,00	100,00	0,00	0,00
Family farms Type B	2509	2509	2509	0	0	0	0,00	100,00	0,00	0,00
Pigs raised in “back yard” holdings	75058	75058	44704	0	0	0	0,00	59,56	0,00	0,00
East Balkan pigs	152	152	152	0	0	0	0,00	100,00	0,00	0,00
<b>Total</b>	<b>77865</b>	<b>77865</b>	<b>47511</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,00</b>	<b>61,02</b>	<b>0,00</b>	<b>0,00</b>

**Year 2010**  
**Disease – CSF**

**Situation on date – 31.12.2010**  
**Species: domestic pigs and East Balkan pigs**

Holding Type Region Bulgaria	Total number of herds (<)	Total number of herds under the programme	Number of herds checked	Number of positive herds for 2010	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8=(7/5)x100	9=(4/3)x100	10=(5/4)x100	11=(6/4)100
Industrial farms	62	62	62	0	0	0	0,00	100,00	0,00	0,00
Family farms Type A	79	79	79	0	0	0	0,00	100,00	0,00	0,00
Family farms Type B	2 509	2 509	2 509	0	0	0	0,00	100,00	0,00	0,00
Pigs raised in "back yard" holdings	50 787	50 787	35 164	0	0	0	0,00	69,24	0,00	0,00
East Balkan pigs	107	107	107	0	0	0	0,00	100,00	0,00	0,00
<b>Total</b>	<b>53 544</b>	<b>53 544</b>	<b>37 921</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,00</b>	<b>70,82</b>	<b>0,00</b>	<b>0,00</b>

Year 2011  
Disease – CSF

Situation on date – 20.04.2011  
Species: domestic pigs and East Balkan pigs

Holding Type Region Bulgaria	Total number of herds (<)	Total number of herds under the programme	Number of herds checked	Number of positive herds for 2010	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8=(7/5)x100	9=(4/3)x100	10=(5/4)x100	11=(6/4)100
Industrial farms	61	61	61	0	0	0	0,00	100,00	0,00	0,00
Family farms Type A	90	90	90	0	0	0	0,00	100,00	0,00	0,00
Family farms Type B	1 727	1 727	230	0	0	0	0,00	13,32	0,00	0,00
Pigs raised in "back yard" holdings	53 858	53 858	703	0	0	0	0,00	1,31	0,00	0,00
East Balkan pigs	96	96	96	0	0	0	0,00	100,00	0,00	0,00
<b>Total</b>	<b>55 832</b>	<b>55 832</b>	<b>1 180</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,00</b>	<b>2,11</b>	<b>0,00</b>	<b>0,00</b>

Year 2012  
Disease – CSF

Situation on date – 20.04.2012  
Species: domestic pigs and East Balkan pigs

Holding Type H Region Bulgaria	Total number of herds (<)	Total number of herds under the programme	Number of herds checked	Number of positive herds for 2010	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8=(7/5)x100	9=(4/3)x100	10=(5/4)x100	11=(6/4)100
Industrial farms	61	61	61	0	0	0	0,00	100,00	0,00	0,00
Family farms Type A	90	90	90	0	0	0	0,00	100,00	0,00	0,00
Family farms Type B	1 727	1 727	230	0	0	0	0,00	13,32	0,00	0,00
Pigs raised in "back yard" holdings	53 858	53 858	703	0	0	0	0,00	1,31	0,00	0,00
East Balkan pigs	96	96	96	0	0	0	0,00	100,00	0,00	0,00
<b>Total</b>	<b>55 832</b>	<b>55 832</b>	<b>1 180</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,00</b>	<b>2,11</b>	<b>0,00</b>	<b>0,00</b>

### 6.1.2 Data on animals

Year 2004 Animal species - pigs

Disease – CSF

Region	Total number of animals (c)	Number of animals (d) to be tested under the programme	Number of animals (G) tested	Number of animals tested individually (c)	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (')	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9 = (4/3)x100	10=(6/4)x100
Bulgaria	1279084	7672	6720	6720	125	118	31	87,59	1,86

Year 2005 Animal species - pigs

Disease – CSF

Region	Total number of animals (c)	Number of animals (d) to be tested under the programme	Number of animals (G) tested	Number of animals tested individually (c)	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (')	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9 = (4/3)x100	10=(6/4)x100
Bulgaria	1080519	8349	9047	9047	19	18	19	108,36	0,21

Year 2006 Animal species - pigs

Disease – CSF

Region	Total number of animals (c)	Number of animals	Number of animals (G) tested	Number of animals tested	Number of positive animals	Slaughtering	Indicators
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		(d)to be tested under the programme	tested	individually (c)		Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (')	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9 = (4/3)x100	10=(6/4)x100
<b>Bulgaria</b>	1014933	105573	105309	105309	627	511	525	99,74	0,59

**Year 2007 Animal species - pigs  
Disease – CSF**

Region	Total number of animals (c)	Number of animals (d)to be tested under the programme	Number of animals (G) tested	Number of animals tested individually (c)	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (')	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9 = (4/3)x100	10=(6/4)x100
<b>Bulgaria</b>	951 216	86847	23010	23010	245	245	608	26,49	1,06

**Year 2008 Animal species - pigs  
Disease – CSF**

Region	Total number of animals (c)	Number of animals	Number of animals (G)	Number of animals tested	Number of positive animals	Slaughtering	Indicators
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		(d)to be tested under the programme	tested	individually (c)		Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (')	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9 = (4/3)x100	10=(6/4)x100
<b>Bulgaria</b>	870 962	870 962	25 784	25 784	31	5	78	2.96	0.12

**Year 2009 Animal species - pigs  
Disease – CSF**

Region	Total number of animals (c)	Number of animals (d)to be tested under the programme	Number of animals (G) tested	Number of animals tested individually (c)	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (')	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9 = (4/3)x100	10=(6/4)x100
<b>Bulgaria</b>	729 893	729 893	46 063	46 063	0	0	0	6,31	0,00

**Year 2010 Animal species - pigs  
Disease – CSF**

Region	Total number of animals (c)	Number of animals	Number of animals (G)	Number of animals tested	Number of positive animals	Slaughtering	Indicators
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		(d)to be tested under the programme	tested	individually (c)		Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (')	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9 = (4/3)x100	10=(6/4)x100
<b>Bulgaria</b>	648 669	648 669	17 312	17 312	0	0	0	2,67	0,00

**Year 2011 Animal species – domestic pigs  
Disease – CSF**

Region	Total number of animals (c)	Number of animals (d)to be tested under the programme	Number of animals (G) tested	Number of animals tested individually (c)	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (')	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9 = (4/3)x100	10=(6/4)x100
<b>Bulgaria</b>	613 146	613 146	14 288	14 288	0	0	0	0,27	0,00

**Year 2012 up to 20. 04.2012 Animal species - pigs  
Disease – CSF**

Region	Total number of animals (c)	Number of animals	Number of animals (G)	Number of animals tested	Number of positive animals	Slaughtering	Indicators
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		(d)to be tested under the programme	tested	individually (c)		Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (')	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9 = (4/3)x100	10=(6/4)x100
<b>Bulgaria</b>	613 146	613 146	1 703	1 703	0	0	0	0,27	0,00

## 6.2. Stratified data on surveillance and laboratory tests

### Year 2003 Animal species - pigs

Disease – CSF

Description of the serological and virological test used:

Serological tests: Ab ELISA,

Virological tests: Ag ELISA, RT PCR, FAT

Region	Serological tests		Virological tests		Other tests	
	No of samples tested	No of positive samples	No of samples tested	No of positive samples	No of samples tested	No of positive samples
Republic of Bulgaria	5405	292	652	42		

### Year 2004 Animal species - pigs

Disease – CSF

Description of the serological and virological test used:

Serological tests: Ab ELISA,

Virological tests: Ag ELISA, RT PCR, FAT

Region	Serological tests		Virological tests		Other tests	
	No of samples tested	No of positive samples	No of samples tested	No of positive samples	No of samples tested	No of positive samples
Republic of Bulgaria	6720	125	1289	44		

### Year 2005 Animal species - pigs

Disease – CSF

Description of the serological and virological test used:

Serological tests: Ab ELISA,

Virological tests: Ag ELISA, RT PCR, FAT

Region	Serological tests		Virological tests		Other tests	
	No of samples tested	No of positive samples	No of samples tested	No of positive samples	No of samples tested	No of positive samples
Republic of Bulgaria	13107	130	2509	39		

### Year 2006 Animal species - pigs

Disease – CSF

Situation on date – 20.04.2009

Description of the serological and virological test used:

Serological tests: Ab ELISA,

Virological tests: Ag ELISA, RT PCR, FAT

Region	Serological tests	Virological tests	Other tests

	No of samples tested	No of positive samples	No of samples tested	No of positive samples	No of samples tested	No of positive samples
Republic of Bulgaria	96265	554	9044	73		

**Year 2007 Animal species - pigs**

**Disease – CSF**

**Description of the serological and virological test used:**

**Serological tests: Ab ELISA,**

**Virological tests: Ag ELISA, RT PCR, FAT**

Region	Serological tests		Virological tests		Other tests	
	No of samples tested	No of positive samples	No of samples tested	No of positive samples	No of samples tested	No of positive samples
Republic of Bulgaria	64998	275	6627	87		

**Year 2008 Animal species - pigs**

**Disease – CSF**

**Description of the serological and virological test used:**

**Serological tests: Ab ELISA,**

**Virological tests: Ag ELISA, RT PCR, FAT**

Region	Serological tests		Virological tests		Other tests	
	No of samples tested	No of positive samples	No of samples tested	No of positive samples	No of samples tested	No of positive samples
Republic of Bulgaria	25784	48	1148	5	3826	0

**Year 2009 Animal species - pigs**

**Disease – CSF**

**Description of the serological and virological test used:**

**Serological tests: Ab ELISA,**

**Virological tests: Ag ELISA, RT PCR, FAT**

Region	Serological tests		Virological tests		Other tests	
	No of samples tested	No of positive samples	No of samples tested	No of positive samples	No of samples tested	No of positive samples
Republic of Bulgaria	46 063	0	1 606	0	0	0

**Year 2010****Animal species - pigs****Disease – CSF****Description of the serological and virological test used:****Serological tests: Ab ELISA,****Virological tests: Ag ELISA, RT PCR, FAT**

Region	Serological tests		Virological tests		Other tests	
	No of samples tested	No of positive samples	No of samples tested	No of positive samples	No of samples tested	No of positive samples
Republic of Bulgaria	17 312	0	641	0	0	0

**Year 2011****Animal species - pigs****Disease – CSF****Description of the serological and virological test used:****Serological tests: Ab ELISA,****Virological tests: Ag ELISA, RT PCR, FAT**

Region	Serological tests		Virological tests		Other tests	
	No of samples tested	No of positive samples	No of samples tested	No of positive samples	No of samples tested	No of positive samples
Republic of Bulgaria	14 288	0	66	0	0	0

**Year 2012 Situation on date – 20.04.2012****Animal species - pigs****Disease – CSF****Description of the serological and virological test used:****Serological tests: Ab ELISA,****Virological tests: Ag ELISA, RT PCR, FAT**

Region	Serological tests		Virological tests		Other tests	
	No of samples tested	No of positive samples	No of samples tested	No of positive samples	No of samples tested	No of positive samples
Republic of Bulgaria	1 703	0	2	0	0	0

**Data on infection (one table per year and per disease/species)**

**Year-2003 Animal species – pigs**

**Disease – CSF**

Bulgaria	Number of herds infected (°)	Number of animals infected
Industrial farms		
Trade farms	5	34
Backyards	4	5
East-Balkan pigs	2	24
Wild pigs		
<b>Total</b>	<b>11</b>	<b>63</b>

**Year-2004 Animal species – pigs**

**Disease – CSF**

Bulgaria	Number of herds infected (°)	Number of animals infected
Industrial farms		
Trade farms	1	3
Backyards		
East-Balkan pigs	1	19
Wild pigs		9
<b>Total</b>	<b>2</b>	<b>31</b>

**Year-2005 Animal species - pigs**

**Disease – CSF**

Bulgaria	Number of herds infected (°)	Number of animals infected
Industrial farms		
Trade farms		
Backyards		

East-Balkan pigs		
Wild pigs		
Total		

**Year-2006 Animal species – pigs**

**Disease – CSF**

Bulgaria	Number of herds infected (°)	Number of animals infected
Industrial farms		
Trade farms	3	68
Backyards	4	5
East-Balkan pigs		
Wild pigs		
Total	7	73

**Year-2007 Animal species – pigs**

**Disease – CSF**

Bulgaria	Number of herds infected (°)	Number of animals infected
Industrial farms		
Trade farms	1	41
Backyards		
East-Balkan pigs	2	46
Wild pigs		
total	3	87

**Year-2008 Animal species – pigs**

**Disease – CSF**

Bulgaria	Number of herds infected (°)	Number of animals infected
Industrial farms	0	0
Trade farms type “B”	1	5
Backyards	0	0

East-Balkan pigs	0	0
Wild pigs	0	0
<b>Total</b>	<b>1</b>	<b>5</b>

**Year-2009 Animal species – pigs**

**Disease – CSF**

Bulgaria	Number of herds infected (°)	Number of animals infected
Industrial farms	0	0
Trade farms	0	0
Backyards	0	0
East-Balkan pigs	0	0
Wild pigs	0	8
<b>Total</b>	<b>0</b>	<b>8</b>

**Year: 2010 Animal species - pigs: domestic, wild and East-Balkan**

**Disease : CSF**

Bulgaria	Number of herds infected (°)	Number of animals infected
Industrial farms	0	0
Trade farms	0	0
Backyards	0	0
East-Balkan pigs	0	0
Wild pigs	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**Year: 2011 Animal species - pigs: domestic, wild and East-Balkan**

**Disease : CSF**

Bulgaria	Number of herds infected (°)	Number of animals infected
Industrial farms	0	0

<b>Trade farms</b>	0	0
<b>Backyards</b>	0	0
<b>East-Balkan pigs</b>	0	0
<b>Wild pigs</b>	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**Year: 2012 – 20.04.2012.**  
**Disease : CSF**

**Animal species - pigs: domestic, wild and East-Balkan**

<b>Bulgaria</b>	<b>Number of herds infected (°)</b>	<b>Number of animals infected</b>
<b>Industrial farms</b>	0	0
<b>Trade farms</b>	0	0
<b>Backyards</b>	0	0
<b>East-Balkan pigs</b>	0	0
<b>Wild pigs</b>	0	0
<b>Total</b>	<b>0</b>	<b>0</b>



6.4 N.A

6.5. Data on vaccination or treatment programmes

Vaccinations against CSF

Pursuant to Article 49 , paragraph. 1 on the Law of Veterinary Activities the prophylactic vaccination of pigs on the territory of Bulgaria is forbidden. Since 01.01.2006 no vaccination against CSF on domestic pigs is performed.

Year 2011

Disease: CSF

Animal species: wild boars

Region (b)	Total number of herds (c)	Total number of animals	Information on young animals vaccination programme				Information on mass vaccination programme				
			Number of herds in vaccination programme	Number of herds vaccinated	Number of animals vaccinated	Number of doses of vaccine administered	Number of herds in vaccination programme	Number of herds vaccinated	Number of adults (d) vaccinated	Number of young (d) animals vaccinated	Number of doses of vaccine administered
1	2	3	4	5	6	7	8	9	10	11	12
Blagoevgrad	715	4 684					290	290	788	2 364	6 000
Bourgas	741	3 708									
Varna	105	2 933									
V. Tarnovo	631	4 422					60	60	216	712	2 200
Vidin	40	1 150					40	40	497	653	6 000
Vratsa	99	1 034					18	18	179	538	1 540
Gabrovo	382	2 621									
Dobrich	198	1 390					172	172	509	696	4 400
Kardzjali	64	2 499									
Kyustendil	259	1 810					220	220	505	1 033	5 910
Lovech	392	3 406									
Montana	56	1 420					55	55	355	941	6 400

Pazardzhik	150	3 100									
Pernik	97	1 621					234	234	701	936	4 200
Pleven	15	550					163	163	224	890	4 440
Plovdiv	449	3 148									
Razgrad	23	453					23	23	243	210	2 160
Rouse	195	949					195	195	334	615	8 400
Silistra	160	1 230					160	160	492	738	16 000
Sliven	331	3 415									
Smolyan	127	4 197									
Sofia- city	26	988									
Sofia- district	50	1 350					74	74	480	1 410	8 000
Stara Zagora	121	2 000									
Targovishte	97	1 070									
Haskovo	50	2 528									
Shoumen	72	4 124									
Yambol	44	200									
<b>Total</b>	<b>5 689</b>	<b>62 000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1 704</b>	<b>1 704</b>	<b>5 523</b>	<b>11 736</b>	<b>75 650</b>

## 6.6. Data on wildlife

### 6.6.1. Estimation of wildlife population

The table below shows the total wild boar population of Bulgaria, a) broken down by the 16 regional state hunting areas according to the Regional Forestry Directorates, b) the 7 National parks, in which hunting is forbidden and c) Hunting areas provided for hunting to units of the National Union of Hunters and Anglers.

	Region	No of wild pigs in state hunting areas	No of wild pigs in areas provided for hunting to the National Union of Hunters and Anglers	Total
Hunting Areas according to the Regional Forestry Directorates	Berkovitsa	609	3200	3809
	Burgas	2847	2964	5811
	Blagoevgrad	1692	3175	4867
	Varna	1393	2063	3456
	Veliko Tarnovo	1995	3895	5890
	Kardzhali	785	4535	5320
	Kyustendil	795	2958	3753
	Lovech	1755	4023	5778
	Pazardzhik	1330	1632	2962
	Plovdiv	1323	2356	3679
	Ruse	807	1353	2160
	Sliven	1225	3324	4549
	Smolyan	712	3485	4197
	Sofia	1509	6303	7812
	Stara Zagora	767	2382	3149
	Shumen	1713	1771	3484
	<b>Total</b>	<b>21257</b>	<b>49419</b>	<b>70676</b>
National parks				
	UOGS- Petrohan	28		
	UOGS- – Jundola	48		
	NSO-Krichim	0		
	MS – Voden	218		
	MS – Iskar	210		
	MNO	20		
	<b>Total</b>	<b>524</b>		
<b>Total Year: 2011</b>			<b>71 200</b>	

### 6.6.2 Monitoring of wildlife

The table below shows the number of samples for serological and virological tests per hunting areas and parks of Bulgaria for 2011

Region	Virological tests		Serological tests		Other tests	
	Number of tested samples	Number of positive samples	Number of tested samples	Number of positive samples	Number of tested samples	Number of positive samples
Blagoevgrad	314	0	279	65	0	0
Burgas	361	0	361		0	0
Varna	69	0	69		0	0
Veliko Tarnovo	195	0	181	12	0	0
Vidin	83	0	83	29	0	0
Vratca	45	0	21		0	0
Gabrovo	814	0			0	0
Dobrich	70	0	60	12	0	0
Kardzali	254	0	242		0	0
Kustendil	100	0	98	24	0	0
Lovech	423	0	272	3	0	0
Montana	81	0	68	24	0	0
Pazardzik	382	0	356		0	0
Pernik	87	0	87	25	0	0
Pleven	130	0	130	38	0	0
Plovdiv	578	0	577		0	0
Razgrad	47	0	79	13	0	0
Ruse	118	0	93	28	0	0
Silistra	311	0	312	153	0	0
Sliven	38	0	31		0	0
Smoljn	286	0	286		0	0
Sofia-city	41	0	40		0	0
Sofia-region	136	0	153		0	0
Stara Zagora	63	0	63		0	0
Targovichte	151	0	151		0	0
Haskovo	104	0	104		0	0
Shumen	262	0	258		0	0
Yambol	216	0	216		0	0
<b>Total</b>	<b>5 759</b>	<b>0</b>	<b>4 670</b>	<b>426</b>	<b>0</b>	<b>0</b>

Samples are taken from wild boar shot, found dead or crashed in car accidents – mainly taken during the second part of the hunting season - reference period 1.10.11 to 10.01.2012.

Test method used: Commercially available antibody ELISA tests on blood samples. Totally 426 samples from hunted and shot wild boar are serological positive, tested by ELISA Ab for control of the performed wild boar vaccination.

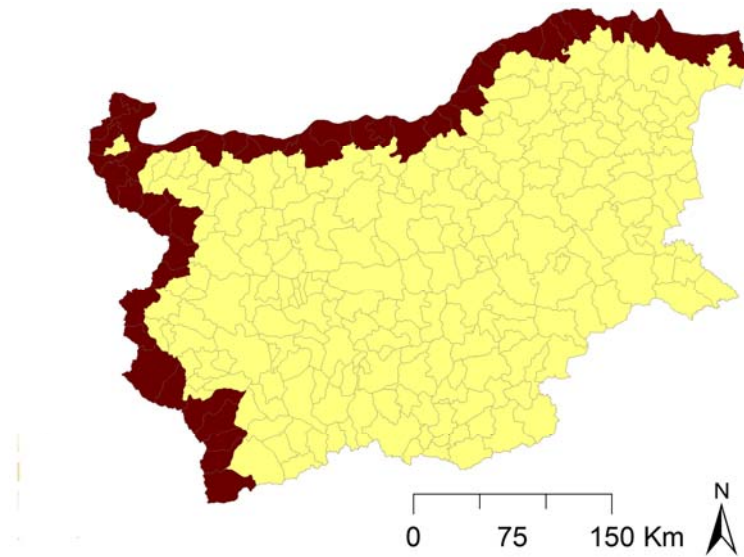
Test method used: RT-PCR for organ samples.

### 6.6.3. Description of the used vaccination, therapeutic or other scheme:

The table below indicates the scheme for the distribution of baits for the oral vaccination of the wild boar population per hunting areas in the border municipalities in Northern and Western borders in the Republic of Bulgaria for the year 2013.

Region	Border Municipalities in Northern and Western border of Bulgaria	Total number of animals (estimated)	Size of hunting area or park in ha	Number of baits per ha	Total number of baits distributed in 2013	Total number of bites per regions
Blagoevgrad	Petrich	138	51 542	0,0027	1 656	12 312
	Strumiani	255	26 000	0,0098	3 060	
	Kresna	131	20 361	0,0064	1 572	
	Simitli	256	38 560	0,0066	3 072	
	Blagoevgrad	246	47 310	0,0052	2 952	
Kustendil	Nevestino	305	78 054	0,0039	3 660	10 932
	Kjustendil	434	76 889	0,0056	5 208	
	Trekliano	172	36 302	0,0047	2 064	
Pernik	Tran	458	56 269	0,0081	5 496	5 496
Sofia district	Dragoman	345	31 120	0,0111	4 140	7 728
	Godech	299	39 177	0,0076	3 588	
Montana	Berkovitsa	138	45 600	0,0030	1 656	6 972
	Gorno Damianovo	94	29 800	0,0032	1 128	
	Chiprovtsi	132	28 650	0,0046	1 584	
	Lom	89	32 390	0,0027	1 068	
	Valche dram	128	42 900	0,0030	1 536	
Vidin	Makresh	38	22 900	0,0017	456	3 432
	Kula	29	28 000	0,0010	348	
	Boynitsa	18	16 500	0,0011	216	
	Bregovo	26	18 000	0,0014	312	
	Novo selo	29	11 100	0,0026	348	
	Vidin	42	50 130	0,0008	504	
	Dimovo	23	40 230	0,0006	276	
	Chuprene	37	32 730	0,0011	444	
	Belogradchik	44	41 060	0,0011	528	
Vratsa	Kozlodui	40	16 982	0,0024	480	1 104
	Mizia	22	18 778	0,0012	264	
	Oriahovo	30	11 398	0,0026	360	
Pleven	Dolna Mitropolia	66	32 705	0,0020	792	3 936
	Guliantsi	87	46 870	0,0019	1 044	
	Nikopol	116	35 499	0,0033	1 392	
	Belene	59	11 386	0,0052	708	
V. Tarnovo	Svishtov	235	59 036	0,0040	2 820	2 820
Ruse	Tsenovo	28	24 970	0,0011	336	1 968
	Borovo	32	24 500	0,0013	384	
	Ivanovo	43	48 060	0,0009	516	
	Ruse	37	46 920	0,0008	444	
	Slivo pole	24	24 700	0,0010	288	
Silistra	Tutrankan	87	44 000	0,0020	1 044	3 492
	Glavinitsa	65	50 710	0,0013	780	
	Sitovo	39	27 100	0,0014	468	
	Silistra	52	6 100	0,0085	624	
	Kaynardzha	48	31 600	0,0015	576	
Dobrich	Krushari	85	41 700	0,0020	1 020	2 880
	General Toshevo	66	98 600	0,0007	792	
	Shabla	89	32 500	0,0027	1 068	
<b>TOTAL</b>		<b>5 256</b>	<b>1 675 688</b>		<b>63 072</b>	<b>63 072</b>

Note: The number of vaccine baits to be distributed is calculated as follows: for each bait distribution 2 baits are foreseen per wild boar, respectively 4 baits per boar for vaccination campaign or 12 baits per boar for all the 3 vaccination campaigns during the year.



**Figure:** Border municipalities where vaccination is planned to be carried out.

**7. Targets**  
**7.1. Targets related to testing**  
**7.1.1. Targets on diagnostic tests**

Disease (a): CSF, Animal species – domestic pigs, East-Balkan pigs and wild boar

**Targeting the tests under this Program**

The epidemiological aspects of CSF have been taken into account to define the subject of the tests – herds and animals. From an epidemiological point of view there are five different categories of pigs as described under chapter 2) above.

The table below shows the targets related to testing and to all of the five different categories of pigs as regards the Bulgarian CSF control **plan for 2013**.

Region	Type of test	Target population	Type of sample	Objective	Number of tests planned
Bulgaria	AB - Elisa	all categories	blood	monitoring, sero-conversion, control of vaccination in case of wild boar	30 720
	VNT	all categories	blood	monitoring, differentiation tests	1 000
	FAT	all categories	tissues	confirmation	500
	Virus Isolation	all categories	blood or other	confirmation of CSF	500
	RT PCR	all categories	blood or other	confirmation of CSF	500

### 7.1.2. Targets on testing herds and animals

#### 7.1.2.1. Targets on the testing of herds

Disease – CSF,

Animal species- domestic pigs and East Balkan pigs

Region: Republic of Bulgaria

Type of pig holdings	Total number of herds	Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Target indicators		
								Expected % herd coverage	% positive herds Expected period prevalence	% new positive herds Expected herd incidence
1	2	3	4	5	6	7	8	9	10	11
Industrial	51	51	51	0	0	0	0	100	0	0
Family farms type A	107	107	107	0	0	0	0	100	0	0
Family farms type B	969	969	969	0	0	0	0	100	0	0
Backyards	36 822	36 822	36 822	0	0	0	0	100	0	0
East-Balkan pigs	84	84	84	0	0	0	0	100	0	0
<b>Total</b>	<b>38 033</b>	<b>38 033</b>	<b>38 033</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>

#### 7.1.2.2. Targets on the testing of animals - 2013

Disease – CSF,

Animal species- domestic pigs and East Balkan pigs

Region: Republic of Bulgaria

Type of pig holdings	Total number of animals <sup>(c)</sup>	Number of animals <sup>(b)</sup> under the programme	Number of animals <sup>(b)</sup> expected to be tested	Number of animals to be tested individually <sup>(-)</sup>	Number of expected positive animals	Slaughtering		Target indicators	
						Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered <sup>(1)</sup>	Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered <sup>(1)</sup>



1	2	3	4	5	6	7	8	9=(4/3)x100	10=(6/4)x100
Industrial farms	413 298	413 298	2 956	2 956	0	0	400 000	0,71	0
Family farms type A	35 531	35 531	5 692	5 692	0	0	20 000	16,02	0
Family farms type B	15 454	15 454	17 216	17 216	0	0	10 000	111,40	0
Backyards	62 183	62 183			0	0	62 000	0	0
East-Balkan pigs	6 240	6 240	3 984	3 984	0	0	6 000	63,85	0
<b>Total</b>	<b>532 706</b>	<b>532 706</b>	<b>29 848</b>	<b>29 848</b>	<b>0</b>	<b>0</b>	<b>498 000</b>	<b>5,60</b>	<b>0</b>

### 7.1.2.3. Targets on the testing of animals - 2013

Disease – CSF,

Animal species- wild boar

Region: Republic of Bulgaria

Region	Estimated number of herds under the program	Estimated number of wild boar	Number of animals (d) expected to be tested	Number of animals to be tested individually	Number of expected sero-positive animals
Blagoevgrad	799	4 800	300	300	50
Burgas	741	3 708	350	350	
Varna	44	1 007	100	100	
Veliko Tarnovo	530	3 700	200	200	50
Vidin	40	1 322	100	100	20
Vratsa	85	1 247	50	50	20
Gabrovo	390	2 780	800	800	
Dobrich	210	1 471	150	150	50
Kardjali	64	2 499	250	250	
Kjustendil	259	1 810	150	150	50
Lovech	311	4 417	400	400	50
Montana	57	1 648	100	100	20
Pazardjik	142	3 085	400	400	

Pernik	91	1 543	100	100	50
Pleven	163	1 050	150	150	50
Plovdiv	218	2 839	550	550	
Razgrad	23	531	100	100	30
Russe	207	1 037	150	150	50
Silistra	160	1 400	300	300	150
Sliven	331	3 415	50	50	
Smolyan	572	3 999	250	250	
Sofia city	44	936	50	50	
Sofia district	74	1 600	150	150	50
Stara Zagora	340	3 466	50	50	
Targovishte	97	1 071	150	150	
Haskovo	50	0	100	100	
Shumen	88	4 124	300	300	
Yambol	60	1 110	200	200	
<b>Total</b>	<b>6 190</b>	<b>61 615</b>	<b>6 000</b>	<b>6 000</b>	<b>690</b>

## 7.2 Targets on testing herds and animals

Disease – CSF, Animal species- domestic pigs including East-Balkan pigs

Region: Republic of Bulgaria

Type of holdings	Total number of herds and animals under the programme		Targets on the status of herds and animals under the programme											
			expected unknown		Expected not free or not officially free from disease				Expected not free or not officially free from disease status suspended	Expected free from disease		Expected officially free from disease		
					Last check positive		Last check negative							
	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
Industrial	61	454 317	0	0	0	0	0	0	0	0	61	454 317	0	0
Family farms	90	27 430	0	0	0	0	0	0	0	0	90	27 430	0	0

type A														
Family farms type B	1 727	33 060	0	0	0	0	0	0	0	0	1 727	33 060	0	0
Backyards	53 858	88 655	0	0	0	0	0	0	0	0	53 858	88 655	0	0
East-Balkan pigs	96	9 684	0	0	0	0	0	0	0	0	96	9 684	0	0
<b>Total</b>	<b>55 832</b>	<b>613 146</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>55 832</b>	<b>613 146</b>	<b>0</b>	<b>0</b>

### 7.3 Targets on vaccination or treatment

#### 7.3.1 No vaccination in domestic pigs

#### 7.3.2. Targets on vaccination or treatment of wild boars

Disease – CSF, Animal species- wild boars

Region	Size of the hunting region or park ( in ha)	Targets on the vaccination or treatment programme		
		Number of doses of vaccine or treatments expected to be administrated in the campaign	Expected number of campaigns	Total number of doses of vaccine or treatments expected to be administrated
Blagoevgrad	183 773	4 000	3	12 000
Kustendil	191 245	3 500	3	10 500
Pernik	56 269	1 800	3	5 400
Sofia-region	70 297	2 600	3	7 800
Montana	179 340	2 300	3	6 900
Vidin	260 650	1 200	3	3 600
Vratca	47 158	500	3	1 500
Pleven	126 460	1 300	3	3 900
Veliko Tarnovo	59 036	1 000	3	3 000
Ruse	169 150	700	3	2 100
Silistra	159 510	1 200	3	3 600
Dobrich	172 800	1 000	3	3 000
	<b>1 675 688</b>	<b>21 100</b>		<b>63 300</b>

Note: The number of vaccine baits to be distributed is calculated as follows: for each bait distribution 2 baits are foreseen per wild boar, respectively 4 baits per boar for vaccination campaign or 12 baits per boar for all the 3 vaccination campaigns during the year.

## 8. Detailed analysis of the cost of the programme

Costs related to	Specification	Number of units for 2013	Unitary cost in euro for 2013	Total amount in euro for 2013	Community funding requested (yes/no)
<b>1. Testing</b>					
1.1. Cost of the analysis of domestic pigs	Test: ELISA antibodies	30 720	1,50	46 080,00	Yes
	Virus Neutralisation Reaction Test (VNR)	1 000	6,50	6 500,00	Yes
	FAT	500	4,20	2 100,00	Yes
	PCR	500	10,00	5 000,00	Yes
	Virus isolation	500	10,00	5 000,00	Yes
1.2. Cost of the analysis of wild boar	Test: ELISA antibodies	6 000	1,50	9 000,00	Yes
	FAT	500	4,20	2 100,00	Yes
	PCR	2 000	10,00	20 000,00	Yes
1.3. Cost of sampling	Domestic	30 000	0,50	15 000,00	Yes
	Wild	6 000	5,00	30 000,00	Yes
	Vacumtainers	35 000	0,30	10 500,00	Yes
	Organ sample tubes	6 000	0,40	2 400,00	Yes
1.3. Other costs- collection and transport of samples to the laboratory				10 000,00	Yes
<b>2. Vaccination of wild pigs</b>					
2.1. Purchase of vaccine/treatment	Oral vaccination	63 300	1,50	94 950,00	Yes
2.2. Distribution costs					
2.3. Administering costs					
2.4. Control costs				15 000,00	Yes
<b>3. Clinical examination</b>		87 300	1,50	130 950,00	Yes
<b>Total:</b>				<b>404 580,00</b>	<b>Yes</b>

Name and signature of operational Director: .....

**/Dr.Yordan Voynov, Executive Director of BFSA/**

## Categories of pig holdings on the territory of Bulgaria and surveillance schemes

Table 1: Industrial pig farms

Region	Number of farms	Number of pigs	Clinical examinations			Number of samples for laboratory testing		
			Private vet	Official vet	total	I 6months	II 6months	Total
Blagoevgrad	0	0	0	0	0	0	0	0
Burgas	3	28 800	12	6	18	87	87	174
Varna	2	19 783	8	4	12	58	58	116
V. Tarnovo	3	19 000	12	6	18	87	87	174
Vidin	1	2 000	4	2	6	29	29	58
Vratza	0	0	0	0	0	0	0	0
Gabrovo	1	2 201	4	2	6	29	29	58
Dobrich	1	1 000	4	2	6	29	29	58
Kardjali	0	0	0	0	0	0	0	0
Kustendil	0	0	0	0	0	0	0	0
Lovech	1	1 226	4	2	6	29	29	58
Montana	1	6 143	4	2	6	29	29	58
Pazardjik	3	18 033	12	6	18	87	87	174
Pernik	0	0	0	0	0	0	0	0
Pleven	1	364	4	2	6	28	28	56
Plovdiv	1	1 482	4	2	6	29	29	58
Razgrad	1	33 203	4	2	6	29	29	58
Russe	6	84 698	24	12	36	174	174	348
Silistra	4	9 650	16	8	24	116	116	232
Sliven	2	4 404	8	4	12	58	58	116
Smolyan	0	0	0	0	0	0	0	0
Sofia - city	0	0	0	0	0	0	0	0
Sifia - region	2	4 734	8	4	12	58	58	116
Stara Zagora	5	85 007	20	10	30	145	145	290
Targovishte	3	12 914	12	6	18	87	87	174
Haskovo	1	1 300	4	2	6	29	29	58
Shoumen	6	53 836	24	12	36	174	174	348
Yambol	3	23 520	12	6	18	87	87	174
<b>Total</b>	<b>51</b>	<b>413 298</b>	<b>204</b>	<b>102</b>	<b>306</b>	<b>1 478</b>	<b>1 478</b>	<b>2 956</b>

**Note:**

1. Blood samples will be taken at the farm by register veterinarians – once on 6 months to detect 10 % prevalence with 95 % confidence

2. The registered veterinarians will carry out clinical examination of all categories of pigs in the industrial farms every third months and of each batch of pigs departing for slaughtering. Check-list accompanies the pigs to the slaughterhouse.

3. The official veterinarian of the relevant municipality will carry out clinical examination of all categories of pigs in the industrial farms every six months.

**Table 2: Family farms type A**

Region	Number of farms	Number of pigs	Clinical examinations			Number of samples for laboratory testing		
			Private vet	Official vet	total	I 6months	II 6months	Total
Blagoevgrad	3	808	12	6	18	84	84	168
Burgas	1	30	4	2	6	19	19	38
Varna	0	0	0	0	0	0	0	0
V.Tarnovo	17	9 170	68	34	102	476	476	952
Vidin	1	52	4	2	6	22	22	44
Vratza	1	19	4	2	6	10	10	20
Gabrovo	3	261	12	6	18	72	72	144
Dobrich	2	1 347	8	4	12	56	56	112
Kardjali	0	0	0	0	0	0	0	0
Kustendil	2	122	8	4	12	46	46	92
Lovech	6	2 907	24	12	36	168	168	336
Montana	5	413	20	10	30	120	120	240
Pazardjik	5	1 390	20	10	30	135	135	270
Pernik	0	0	0	0	0	0	0	0
Pleven	1	66	4	2	6	23	23	46
Plovdiv	7	1 946	28	14	42	189	189	378
Razgrad	6	3 640	24	12	36	168	168	336
Russe	6	1 779	24	12	36	168	168	336
Silistra	1	34	4	2	6	19	19	38
Sliven	4	2 464	16	8	24	112	112	224
Smolyan	0	0	0	0	0	0	0	0
Sofia - city	3	486	12	6	18	81	81	162
Sifia - region	2	1 476	8	4	12	56	56	112
Stara Zagora	8	685	32	16	48	192	192	384
Targovishte	5	1 209	20	10	30	135	135	270
Haskovo	4	1 250	16	8	24	112	112	224
Shoumen	9	1 889	36	18	54	243	243	486
Yambol	5	2 088	20	10	30	140	140	280
<b>Total</b>	<b>107</b>	<b>35 531</b>	<b>428</b>	<b>214</b>	<b>642</b>	<b>2 846</b>	<b>2 846</b>	<b>5 692</b>

**Note:**

1. Blood samples will be taken at the farm by register veterinarians – once on 6 months to detect 10 % prevalence with 95 % confidence.

2. The registered veterinarians will carry out clinical examination of all categories of pigs in the farms every third months and of each batch of pigs departing for slaughtering. Check-list accompanies the pigs to the slaughterhouse.

3. The official veterinarian of the relevant municipality will carry out clinical examinations of all categories of pigs in the industrial farms every six months.

**Table 3: Family farms type B**

Region	Number of farms	Number of pigs	Clinical examinations			Number of samples for laboratory testing		
			Private vet	Official vet	total	I 6months	II 6months	Total
Blagoevgrad	35	857	140	35	175	560	560	1 120
Burgas	87	3 905	348	87	435	1 653	1 653	3 306
Varna	5	101	20	5	25	80	80	160
V.Tarnovo	6	700	24	6	30	150	150	300
Vidin	68	405	272	68	340	272	272	544
Vratza	10	295	40	10	50	190	190	380
Gabrovo	45	245	180	45	225	180	180	360
Dobrich	18	104	72	18	90	72	72	144
Kardjali	6	372	24	6	30	138	138	276
Kustendil	25	225	100	25	125	175	175	350
Lovech	19	826	76	19	95	399	399	798
Montana	28	382	112	28	140	280	280	560
Pazardjik	0	0	0	0	0	0	0	0
Pernik	4	33	16	4	20	20	20	40
Pleven	122	705	488	122	610	488	488	976
Plovdiv	29	676	116	29	145	464	464	928
Razgrad	3	235	12	3	15	72	72	144
Russe	13	156	52	13	65	117	117	234
Silistra	12	148	48	12	60	108	108	216
Sliven	33	819	132	33	165	528	528	1 056
Smolyan	13	128	52	13	65	91	91	182
Sofia - city	21	211	84	21	105	168	168	336
Sifia - region	4	149	16	4	20	76	76	152
Stara Zagora	76	778	304	76	380	532	532	1 064
Targovishte	49	680	196	49	245	490	490	980
Haskovo	19	720	76	19	95	361	361	722
Shoumen	4	172	16	4	20	84	84	168
Yambol	215	1 427	860	215	1 075	860	860	1 720
<b>Total</b>	<b>969</b>	<b>15 454</b>	<b>3 876</b>	<b>969</b>	<b>4 845</b>	<b>8 608</b>	<b>8 608</b>	<b>17 216</b>

**Note:**

1. Blood samples will be taken in farm by private veterinarians once on every six months to detect 10 % prevalence with 95 % confidence
2. The registered veterinarians will carry out clinical examination in the farms every 3 months
3. The official veterinarian of the relevant municipality will carry out clinical examinations of 50% of the farms on six months, as during the second six months the clinical examinations shall be carried out in the rest non inspected farms.

**Table 4: Backyard holdings**

Region	Number of farms	Number of pigs	Clinical examinations		
			Private vet	Official vet	total
Blagoevgrad	3 062	5 552	6 124	612	6 736
Burgas	722	1 582	1 444	144	1 588
Varna	336	634	672	67	739
V.Tarnovo	1 817	2 550	3 634	363	3 997
Vidin	3 831	4 270	7 662	766	8 428
Vratza	2 790	4 008	5 580	558	6 138
Gabrovo	679	989	1 358	136	1 494
Dobrich	970	3 189	1 940	194	2 134
Kardjali	5	6	10	1	11
Kustendil	2 987	4 828	5 974	597	6 571
Lovech	592	846	1 184	118	1 302
Montana	1 650	2 097	3 300	330	3 630
Pazardjik	152	456	304	30	334
Pernik	907	1 407	1 814	181	1 995
Pleven	1 226	1 704	2 452	245	2 697
Plovdiv	559	1 020	1 118	112	1 230
Razgrad	26	39	52	5	57
Russe	6	11	12	1	13
Silistra	835	2 500	1 670	167	1 837
Sliven	1 752	4 781	3 504	350	3 854
Smolyan	3	3	6	1	7
Sofia - city	119	377	238	24	262
Sifia - region	2 102	4 343	4 204	420	4 624
Stara Zagora	3 524	6 383	7 048	705	7 753
Targovishte	178	178	356	36	392
Haskovo	2 731	3 550	5 462	546	6 008
Shoumen	727	1 490	1 454	145	1 599
Yambol	2 534	3 390	5 068	507	5 575
<b>Total</b>	<b>36 822</b>	<b>62 183</b>	<b>73 644</b>	<b>7 364</b>	<b>81 008</b>

**Note:**

1. The registered veterinarians will carry out clinical examination in all backyards every 6 months.
2. The official veterinarian will carry out clinical examination in 10% of the “backyards” holdings every 6 months.
3. Samples for laboratory investigation will be taken in case of change of the normal health status of the pigs.



**Table 5: East-Balkan pigs**

Region	Number of herds	Number of pigs	Clinical examinations			Number of samples for laboratory testing		
			Private vet	Official vet	total	I 6minths	II 6minths	Total
Burgas	22	1 813	88	44	132	528	528	1 056
Varna	38	2 867	152	76	228	912	912	1 824
Shumen	24	1 560	96	48	144	552	552	1 104
<b>Total for the country</b>	<b>84</b>	<b>6 240</b>	<b>336</b>	<b>168</b>	<b>504</b>	<b>1 992</b>	<b>1 992</b>	<b>3 984</b>

**Note:**

1. Blood samples will be taken in farm by private veterinarians once on every six months to detect 10 % prevalence under 95% confidence.

2. Virological samples for PCR test - blood sample shall be taken from all animals intended for slaughtering in slaughterhouses, 7 days before slaughtering.

2. The registered veterinarians will carry out clinical examination of the herds every 3 months

3. The official veterinarian of the relevant municipality will carry out clinical examinations of the herds on 6 months.

**Explanation concerning the key for CSF surveillance and testing**  
**Key for the collection of blood samples from pigs for testing of CSF**

Number of pigs per unit or holding	CSF - Prevalence		
	20%	10%	5%
	Number of pigs to be sampled(n)		
10	8	10	10
20	10	16	19
30	11	19	26
40	12	21	31
50	12	22	35
60	12	23	38
70	13	24	40
80	13	24	42
90	13	25	43
100	13	25	45
120	13	26	47
140	13	26	48
160	13	27	49
180	13	27	50
200	13	27	51
250	14	27	53
300	14	28	54
350	14	28	54
400	14	28	55
450	14	28	55
500	14	28	56
600	14	28	56
700	14	28	57
800	14	28	57
900	14	28	57
1.000	14	29	57
1.200	14	29	57
1.400	14	29	58
1.600	14	29	58
1.800	14	29	58
2.000	14	29	58
3.000	14	29	58
4.000	14	29	58
5.000	14	29	59
6.000	14	29	59
7.000	14	29	59
8.000	14	29	59
9.000	14	29	59
10.000	14	29	59
> 10.000	14	29	59

The table gives the key for sampling the number of individual pigs per holding if a confidence of 95% is applied in order to detect at least one infected pig and the percentage of infected pigs is either at 5%, 10% or 20 % level.

### Annex III

#### Legal base to be applied on the Control of CSF – key measures only – (Complete list see FVO inspection report 2007-7483 –MR final chapter 10)

EU acquis	Corresponding Bulgarian legal measures
Council Directive 80/1095/EEC (Country clearance from CSF in MSs)	- ORDINANCE 04/ 15.02.2007 on prophylaxis, restraint and eradication of classical swine fever (SG 21/ 09.03.2007)
Council Directive 82/894/EEC (Community notification of disease)	ORDINANCE 23 laid down the turn procedure for notification and registration contagious animal diseases
Council Directive 2001/89/EC (CSF Control Directive)	ORDINANCE 04/ 15.02.2007 on prophylaxis, restraint and eradication of classical swine fever (SG 21/ 09.03.2007)
Commission Decision 2002/106/EC (CSF Diagnostic manual)	Directly applicable
Commission Decision 2006/805/EC (CSF control measures in certain MSs)	Order RD )(- 175/ 21.12.2006
Commission Decision 2006/800/EC (CSF control plan BG – vaccination of wild boar)	Directly applicable and in force
Commission Decision 2006/876/EC (CSF control plan for BG in 2007)	Directly applicable and in force
Commission Decision 2007/19/EC (EC approval of BG contingency plan for CSF)	Directly applicable and in force; BFSA notification via RFSD to Local VS and in parallel to all stakeholders
Council Decision 90/638/EEC (Community criteria for disease control programmes)	ORDINANCE 04/ 15.02.2007 on prophylaxis, restraint and eradication of classical swine fever (SG 21/ 09.03.2007)
Council Directive 2002/99/EC (AH rules governing products of animal origin for HC)	ORDINANCE 37/31.03.2006 on health requirements toward animals from which raw materials and foodstuffs for human consumption are produced
Council Directive 64/432/EEC Art. 14 (Herd health surveillance and database)	ORDINANCE 48/ 20.04.2006 on health requirements for bovine animals and swine in their movement between the Republic of Bulgaria and the Member States of the European Union and for definition of the health status of regions and units of their origin and the supplementary guarantees to be met ( <i>Published in SG No 48/ 13.06.2006</i> )
Council Directive 92/102/EEC (Animal Identification)	ORDINANCE № 61/9.05.2006 on the measures and procedures for identification of animals, registration of animal holdings and the availability to access the data base for identified animals and registered animal holdings ( <i>Published in SG 47/09.06.2006</i> )
Commission Decision 2000/678/EC (Holding registration – pig database)	ORDINANCE 48/ 20.04.2006 on health requirements for bovine animals and swine in their movement between the Republic of Bulgaria and the Member States of the European Union and for definition of the health status of regions and units of their origin and the supplementary guarantees to be met ( <i>Published in SG No 48/ 13.06.2006</i> )
Council Directive 89/662/EEC (Veterinary checks on products in intra-community trade)	ORDINANCE 13/03.02.2006 laying down the conditions and order for carrying out border veterinary control during import, export and transit of animals ( <i>Published in SG 17/ 24.02.2006</i> )
Council Directive 90/425/EEC (Veterinary checks on live animals in intra-community trade)	ORDINANCE №26/28.02.2006 on the Standards for Protection and Humane Handling of Animals during their Transportation
Council Regulation (EC) 853/2004 (Hygiene of food of animal origin)	Directly applicable and in force
Council Regulation (EC) 854/2004	Directly applicable and in force

(Veterinary controls on food of animal origin)	
Council Directive 96/93/EEC (Veterinary certification)	ORDINANCE 04/ 15.02.2007 on prophylaxis, restraint and eradication of classical swine fever (SG 21/ 09.03.2007)
Commission Regulation (EC) 599/2004 (Template certificate for Intra-communty trade)	Directly applicable and in force
Council Regulation (EC) 882/2004 (Veterinary controls and enforcement in the EU on verification of compliance with the veterinary acquis)	Directly applicable