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Unit 04 - Veterinary Control Programmes

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

## **Eradication programme of Classical Swine Fever**

**Approved\* for 2010 by Commission Decision 2009/883/EC**

**Bulgaria**

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



**REPUBLIC OF BULGARIA**  
**MINISTRY OF AGRICULTURE AND FOOD**

**PROGRAMME**  
**for the**  
**Control and Eradication Classical Swine Fever in Republic of Bulgaria**  
**2010**

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## **1. Identification of the programme**

Member State: **Republic of Bulgaria**

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

Year of implementation: **2010**

Reference of this document: **National Veterinary Service (NVS) of Bulgaria**

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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 on the territory of the country.

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.

However, the review on genome typing carried out by the CRL on the 30 of August 2007 needs further interpretation. The isolate so far classified as 2.3 Uelzen seems to be identical with 2.3 Spante. In addition, 2.3 Spante was also found in the wild boar population in 2004 at Pernik (on the border with Serbia). This very recent review has not been reproduced in the maps above.

Till now there is not enough epidemiological data available concerning the identification of the route of entry of CSF into Bulgaria's pig population. In addition, more information is needed as regards the spreading of the virus and transfers between different holdings, regions or various pig populations.

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. The taken and tested 3901 blood samples during hunting season 2008/2009 show 80% manifest immunity as a result of the vaccination. No circulation of the CSF virus was detected in the 5965 tested visceral samples of wild pigs.

Overall it is important to note that there are still some elderly domestic pigs, in particular in the East Balkan pig population, born before the ban of vaccination showing sero-conversion when tested.

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

This programme will be applied on the whole territory of the Republic of Bulgaria throughout 2010, 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:** 01.01.2010 - 31.12.2010

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

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 National Veterinary Service (NVS) 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 2010 CSF programme and reports to the EC and the other MS.
2. The 'Animal Health' Directorate at the NVS headquarters:
  - Elaborates the CSF control strategy and implements the 2010 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 Department "Animals health" at the Regional Veterinary Services (RVS) of the NVS:
  - 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 NVS. HQ registered
  - 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 Regional Veterinary Services (RVSs) of the NVS 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 origine,
  - Carry sampling of pigs for CSF according to the sampling scheme 2010, and ensure the traceability of the samples back to the farm of origin,
  - Notify the NVS 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 NVS:
  - Enforce the programme at local level; carry out clinical surveillance (according to the clinical surveillance scheme 2010) and sampling of the domestic pig population (according to the sampling scheme 2010) in cooperation with the registered veterinary practioners 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 Traccability 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 2010,
  - Implements its parts of the 2010 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 NVS,
  - 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 Traccability database system and report to the NVS.
- 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 NVS and the respective RVS 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 Public Health Laboratories in Bulgaria

- Forward samples from wild boar -received in the context of trichinella examination- to the NRL for CSF, ensure the traceability of the sample and include all the data necessary for the monitoring of CSF in wild boar (see monitoring database above).

13. The Veterinary Faculties at Sofia and Stara Zagora

- Involved in the scientific and epidemiological analysis of the CSF control programme for 2009,

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 NVS information system.
- record in the NVS information system all the test results of the samples of domestic pigs sent by them in the framework of implementation of the present programme.

Criteria for demonstrating the absence of circulating field virus strains of Classical Swine Fever virus in Bulgaria's domestic pig population and the oral vaccination of wild boar in some regions in Bulgaria:

1. The active and passive monitoring and surveillance of industrial pig herds
2. The specific situation concerning monitoring and surveillance of family farms of different type and pigs kept at backyards

3. The specific situation concerning monitoring and surveillance of the East Balkan pig herds
4. The oral vaccination of the wild boar population in the regions near to the borders and control of its immune status
5. Diagnostic methods applied and the interpretation of laboratory results.

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 NVS 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:

Type of pig holdings	Total number of herds	Total number of herds under the programme	Total number of animals (*)	Number of animals (*) under the programme
Industrial	61	61	425 260	425 260
Family farms type A	79	79	24 331	24 331
Family farms type B	1 341	1 341	38 697	38 697
Backyards	50 787	50 787	97 535	97 535
East-Balkan pigs	107	107	8 584	8 584
<b>Total</b>	<b>52 375</b>	<b>52 375</b>	<b>594 407</b>	<b>594 407</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. NVS 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 NVS 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 National Veterinary Service (NVS) or by veterinary specialists - private practitioners duly authorized by the NVS.

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

- 1.The registry on animal movement control that is kept by the owner;
- 2.The NVS 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 NVS. 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 Tracability 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
<b>Legislation as regards the registration of holdings</b>  1. According to article 137, paragraph 1 of the	1. Absence of notification to the competent authority  2. The holding operates before being	1. Written prescription to the applicant with a term for elimination of the shortcomings. Measure taken can include closure of holding and	1. Punitive measure according to article 417 of LVA - The owners of farm animals, who have not fulfilled their obligation, shall be fined

<p>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 RVS.</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>registered by the competent authority</p>	<p>confiscation of animals, if necessary</p> <p>2 Punitive act for administrative infringement.</p>	<p>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</b></p>	<p>1. The registered veterinarian or the</p>	<p>Punitive act for administrative</p>	<p>Punitive measures according to article 420</p>

<p><b>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>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>infringement according to article 132 of LVA</p>	<p>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 National Veterinary Service 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 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>
<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>	<p>Movement of pigs without a veterinary medical certificate.</p>	<p>Punitive act for administrative infringement according to article 139, paragraph 1, point 3 of LVA</p>	<p>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</p>

			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.	<p>1. Prescription</p> <p>2. Imposing of a ban</p> <p>3. Punitive act for administrative infringement according to article 132 of LVA</p>	<p>Punitive measures according to article 415 of LVA who does not apply a measure, imposed by the National Veterinary Service 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 of 2000 BGN up to 4000 BGN.</p>
<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>	Absence of notification of the veterinary authorities for sick or dead animals during the ante mortem inspection and during their stay at the slaughterhouse.	Punitive act for administrative infringement according to article 248 of LVA.	<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</p>

			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.
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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, F1 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 Boumeli E2 – sero and Boumeli 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 NRI, Sofia.

The virus neutralization test according to chapter 3) of the CSF draft Manual (2002) of the CRL Hanover has been installed at the NRI, 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 NRI, Sofia. The test is performed in accordance with the CSF draft Manual (2002) of the CRL Hanover.

Immunofluorescent 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 Boumeli and a diagnostic PCR as described in the draft Manual (2002) of the CRL Hanover are in use at the NRI, 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<sub>50</sub>).

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 peroxidase, 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 peroxidase.

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, NVS 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 NVS 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 NVS shall take immediate measures in the respective stockbreeding facilities, as follows:

- to be confirmed 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 immuno-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 “Codicon”, 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 BOMMELL, 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 sensible 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 germinates 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 typed. 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 REIMSER 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. With this approach the targeted monitoring on the whole territory of Bulgaria will be achieved and 30 % of the whole wild boar population could be reached for checking circulating field virus or sero-conversion. (see Annex I, map 5).

In the 2005 CSF in wild pigs was detected in 7 districts Of Bulgaria. In May 2005 a training of veterinary specialists of the NVS, 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 TAIX 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, NVS 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 NVS.

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 7.1.1.2.

*The oral vaccination will be carried out only in the municipalities near to the borders with Serbia, Macedonia and Romania.* ( Table 6.6.3).

The oral vaccination of the wild pigs in 2010 will be carried out only on the territory of *the municipalities near to the borders with Serbia, Macedonia and Romania.* In 2010 three vaccination campaigns with two distributions of bites each will be carried out.

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 2009 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 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 2010 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. NVS 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. NVS 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. 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 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. NVS immediately organises “oral” vaccination of the wild pigs in the affected area. The vaccine is distributed at least on 2 plains on 1km<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. NVS 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 NVS 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. NVS establishes 40km zone out of 3km and 10km zones where orders 100% sampling of all shot pigs.

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

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

National Veterinary Service and the 28 Regional Veterinary services 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 2009 CSF control programme shall be financed through the budget of the NVS. 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 NVS;
- Temporary or permanent closing of facilities, slaughterhouses, processing enterprises for products of animal origin, animal markets, butcher's shops upon the decision of the NVS 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 NVS.
- 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 2010 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;
- Eradication of CSF from the wild boar population most probably being a main reservoir for CSF virus in Bulgaria and thus lowering the risk of CSF transmitted to the East-Balkan pigs.

6. Data on the epidemiological evolution

6.1. Evolution of the disease

6.6.1 Data on herds (\*)

Disease – CSF

Year: 2004

Disease – CSF

Species: domestic and East- Balkan pigs

Situation on date 31.12.2004

Species: domestic pigs and East Balkan pigs

Holding Type II Region Bulgaria	Total number of herds (<)	Total number of herds under the programme	Number of herds of checked	Number of positive herds for 2004	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herd coverage	Indicators		
									% 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	% herd coverage	Indicators	
									% positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	$8=(7/5) \times 100$	$9=(4/3) \times 100$	$10=(5/4) \times 100$	$11=(6/4) \times 100$
Industrial farms	72	72	72	0				100.00		
Small farms	298	298	298	0				100.00		
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		
Total	115 870	115 870	115 790	0	0	0		99,93		

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	% herd coverage	Indicators		
									% positive herds prevalence	% new positive herds incidence	% positive herds prevalence
1	2	3	4	5	6	7	$8 = (7/5) \times 100$	$9 = (4/3) \times 100$	$10 = (5/4) \times 100$	$11 = (6/4) \times 100$	
Industrial farms	83	83	83	0	0	0	0,00	100,00	0,00	0,00	
Small farms	373	373	373	2	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	0	100,00	0,00	0,00	
Backyards holdings in settlements with less than 500 pigs	105279	105279	105279	5	5	5	100,00	100,00	0,004	0,00	
East Balkan pigs	313	313	313	0	0	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>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 II 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	% herd coverage	Indicators		
									% positive herds Period herd prevalence	% new positive herds Herd incidence	
I	2	3	4	5	6	7	8=(7/5)x100	9=(4/3)x100	10=(5/4)x100	11=(6/4)x100	
Industrial farms	83	83	83	0	0	0		100,00	0,00	0,00	0,00
Small farms	373	373	373	2	2	2	100,00	100,00	0,54	0,00	0,00
Backyards holdings in settlements with more than 500 pigs	4981	4981	4981	0	0	0		100,00	0,00	0,00	0,00
Backyards holdings in settlements with less than 500 pigs	105279	105279	105279	5	5	5	100,00	100,00	0,004	0,00	0,00
East Balkan pigs	313	313	313	0	0	0		100,00			
<b>Total</b>	<b>111 029</b>	<b>111 029</b>	<b>111 029</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>100,00</b>	<b>100,00</b>	<b>0,006</b>		<b>0,00</b>

Holding Type II Region Bulgaria	Total number of herds (<	Total number of herds under the program	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	$8=(7/5) \times 100$	$9=(4/3) \times 100$	$10=(5/4) \times 100$	$11=(6/4) \times 100$
Industrial farms	76	76	76	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	2546	2546	2546	1	1	1	100 %	100,00	0,00004	0,00
Pigs raised in "back yard" holdings	72 402	72 402	72 402	0	0	0	0,00	100,00	0,00	0,00
East Balkan pigs	152	152	152	0	0	0	0,00	100,00	0,00	0,00
Total	75 250	75 250	75 250	1	1	1	0,00	100,00	0,00	0,00

Year 2009

Disease – CSF

Situation on date – 20.04.2009

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 2008	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herd coverage	Indicators		
									% positive herds Period herd prevalence	% new positive herds Herd incidence	
1	2	3	4	5	6	7	$8=(7/5) \times 100$	$9=(4/3) \times 100$	$10=(5/4) \times 100$	$11=(6/4) \times 100$	0,00
Industrial farms	61	61	61	0	0	0	0				0,00
Family farms Type A	79	79	79	0	0	0	0				0,00
Family farms Type B	1 341	1 341	230	0	0	0	0				0,00
Pigs raised in "back yard" holdings	50 787	50 787	703	0	0	0	0				0,00
East Balkan pigs	107	107	107	0	0	0	0				0,00
Total	52 375	52 375	1 180	0	0	0	0				0,00

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	$9 = (4/3) \times 100$	$10 = (6/4) \times 100$
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	$9 = (4/3) \times 100$	$10 = (6/4) \times 100$
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 (d) to be tested under the program	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 (c)	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	$9 = (4/3) \times 100$	$10 - (6/4) \times 100$
<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 program	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 (c)	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	$9 = (4/3) \times 100$	$10 - (6/4) \times 100$
<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 (d) to be tested under the program	Number of animals tested	Number of animals tested individually (e)	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (f)	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	$9 = (4/3) \times 100$	$10 = (6/4) \times 100$
<b>BULGARIA</b>	870 962	870 962	25 784	25 784	31	5	78	2.96	0.12

Year 2009 up to 20. 04.2009 Animal species - pigs  
Disease – CSF

Region	Total number of animals (c)	Number of animals (d) to be tested under the program	Number of animals tested	Number of animals tested individually (e)	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered (f)	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	$9 = (4/3) \times 100$	$10 = (6/4) \times 100$
<b>BULGARIA</b>	594 407	45 820	3 850	3 850	0	0	0	0	0

**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 Situation on date – 20.04.2009

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	3 850	0	0	0	0	0

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

Year-2003	Animal species – pigs	Number of herds infected (°)	Disease – CSF
	<b>Bulgaria</b>		<b>Number of animals infected</b>
	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	Number of herds infected (°)	Disease – CSF
	<b>Bulgaria</b>		<b>Number of animals infected</b>
	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	Number of herds infected (°)	Disease – CSF
	<b>Bulgaria</b>		<b>Number of animals infected</b>
	Industrial farms		
	Trade farms		
	Backyards		
	East-Balkan pigs		
	Wild pigs		

<b>Total</b>		
--------------	--	--

**Year-2006 Animal species – pigs**

**Disease – CSF**

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

**Year-2007 Animal species – pigs**

**Disease – CSF**

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

**Year-2008 Animal species – pigs**

**Disease – CSF**

Bulgaria	Number of herds infected (°)	Number of animals infected
<b>Industrial farms</b>		
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>
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**Year: 2009 – 20.04.2009.**

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

**Disease : CSF**

<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 2008 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	628	4399					628	628	1759	2640	14050	
Burgas	485	3931					485	485	787	3144	4800	
Varna	100	1340					100	100	469	871	3995	
V. Tarnovo	457	3189					457	457	1371	1818	7300	
Vidin	43	1322					43	43	465	857	4300	
Vratsa	50	1094					50	50	365	729	2120	
Gabrovo	382	2621					382	382	1131	1490	5600	
Dobrich	178	1250					178	178	534	716	5250	
Kardzhali	64	2526					64	64	698	1628	2400	
Kyustendil	220	1538					220	220	658	880	7350	
Lovech	392	3406					392	392	1035	2371	6400	
Montana	59	1235					59	59	308	927	6800	

Pazardzjik	65	2472			65	65	742	1730	6438
Pernik	234	1637			234	234	701	936	3400
Pleven	102	715			102	102	306	409	5300
Plovdiv	449	3148			449	449	1347	1801	3200
Razgrad	25	771			25	25	298	473	2971
Rousse	131	918			131	131	393	525	5321
Silistra	239	1673			239	239	717	956	2990
Sliven	331	3384			331	331	1284	2100	4000
Stavlyan	473	3308			473	473	1417	1891	4000
Sofia- city	44	1070			44	44	270	800	800
Sofia- district	185	5 450			185	185	777	4673	12230
Stara Zagora	121	2000			121	121	600	1400	4000
Targovishte	132	1492			132	132	1063	429	3630
Blaskovo	50	2 528			50	50	758	1770	4 800
Shumen	69	1964			69	69	590	1374	4206
Yambol	44	341			44	44	66	275	650
<b>Total</b>	<b>5752</b>	<b>60522</b>	<b>0</b>	<b>0</b>	<b>5752</b>	<b>5752</b>	<b>20909</b>	<b>39613</b>	<b>140301</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. The distribution of the wild boar population on the territory of Bulgaria is also shown in Annex I, map No 5.

There are no data about the total wild boars population of Bulgaria till 20-th of April 2009.

	Region	No of wild pigs in state hunting areas	No of wild pigs in areas provided for hunting to the	Total

			National Union of Hunters and Anglers	
	Berkovitsa	550	2 719	3 269
	Burgas	2 126	1 957	4 083
	Blagoevgrad	1 545	2 853	4 398
	Varna	1 157	2 108	3 265
	Veliko Tarnovo	1 499	3 543	5 042
	Kardzhali	643	3 992	4 635
	Kyustendil	759	2 667	3 426
	Lovечb	1 448	3 406	4 854
	Pazardzhik	1 511	1 170	2 681
	Plovdiv	1 191	1 957	3 148
	Ruse	918	1 710	2 628
	Silven	1 200	3 126	4 326
	Smolyan	557	2 758	3 315
	Sofia	1 468	5 497	6 965
	Stara Zagora	659	1 787	2 446
	Shumen	1 110	1 909	3 019
	<b>total</b>	<b>18 341</b>	<b>43 159</b>	<b>61 500</b>
	Rila National Park (NP)	498		
	Pirin National Park	404		
	Central Balkans NP	940		
	UOGS	115		
	Voden Hunting area	291		
	MNO	25		
	Iskar Hunting area	190		
	<b>total</b>	<b>2 463</b>		
	<b>Total Year 2008</b>		<b>63 963</b>	
Hunting Areas according to the Regional Forestry Directorates				
National parks				



### 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 2008

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	560	0	107	92	0	0
Burgas	254	0	245	134	0	0
Varna	176	0	176	97	0	0
Veliko Tarnovo	826	0	480	396	0	0
Vidin	103	0	79	46	0	0
Vratsa	38	0	28	15	0	0
Gabrovo	347	0	285	249	0	0
Dobrich	42	0	42	14	0	0
Kardzali	233	0	172	168	0	0
Kustendil	406	0	274	167	0	0
Lovech	1 213	0	8	8	0	0
Montana	143	0	102	62	0	0
Pazardzik	551	0	110	110	0	0
Pernik	301	0	60	52	0	0
Pleven	17	0	12	12	0	0
Plovdiv	418	0	415	317	0	0
Razgrad	139	0	117	82	0	0
Ruse	163	0	171	80	0	0
Silistra	212	0	212	152	0	0
Sliven	137	0	137	4	0	0
Smolin	371	0	351	288	0	0
Sofia-city	18	0	18	0	0	0
Sofia-region	137	0	226	30	0	0
Stara Zagora	247	0	73	69	0	0
Targovichte	106	0	83	80	0	0
Haskovo	190	0	108	92	0	0
Shumen	242	0	223	169	0	0
Yambol	48	0	22	3	0	0
<b>Total</b>	<b>7 548</b>	<b>0</b>	<b>4 336</b>	<b>3028</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 1.10.08 to 15.01.2009. Test method used: Commercially available antibody ELISA tests on blood samples. Test method used: RT-PCR for organ samples. In

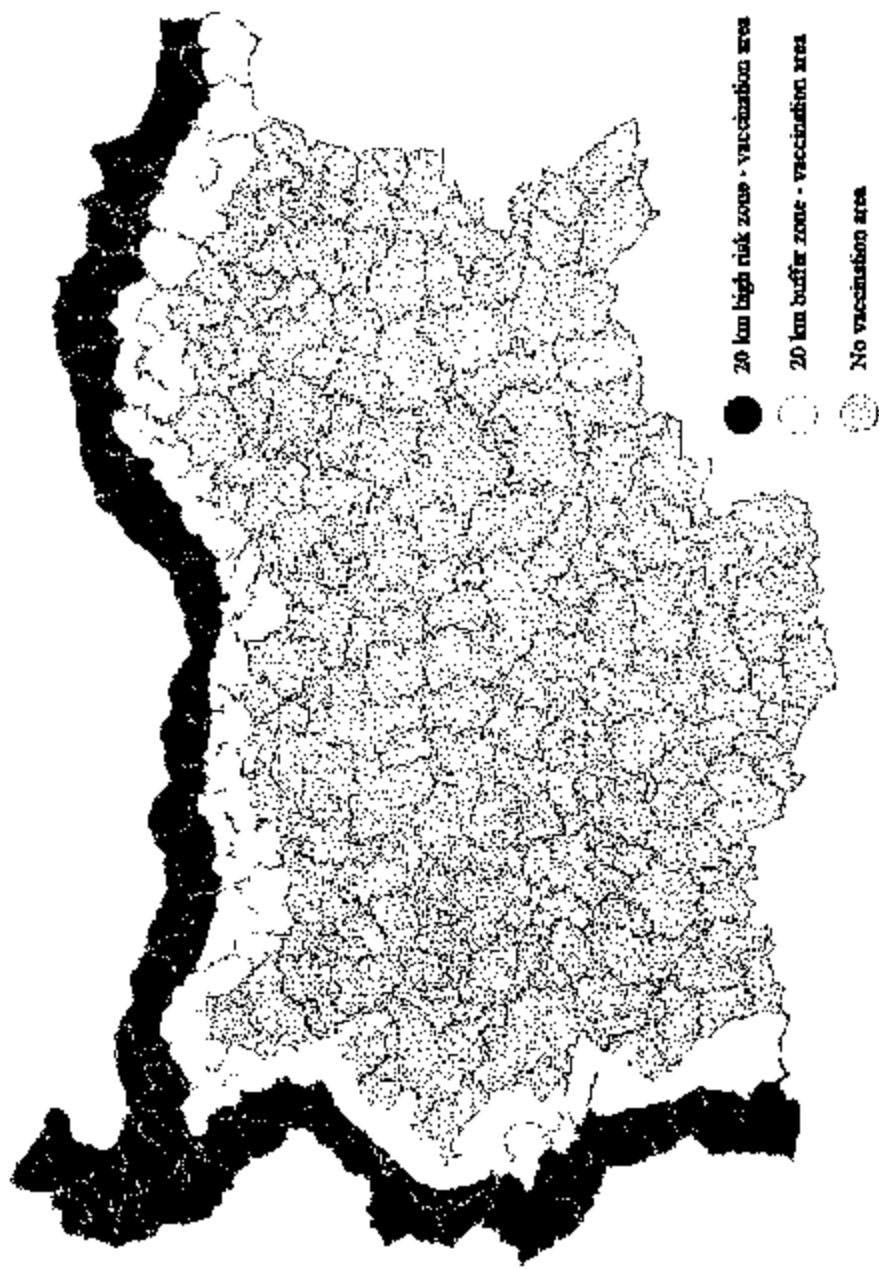
2008 two vaccination campaigns were carried out with oral German vaccine - first one in May with two distributions of baits on the whole territory of the country and second with two bait distributions in the municipalities which border to Romania, Serbia and Macedonia -40km (20 km high risk and 20 km buffer) zone.

### 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 municipalities in Northern and Western borders in the Republic of Bulgaria -40km. ( high risk and buffer zones) for the year 2010.

Regions	The border municipality to the western and northern border on Bulgaria 20km-high risk zone-20km buffer zone	Total numbers of the animals(approximate)	Size of the hunting region or park ( in xa)	Number of baits ( in xa)	Total number of the baits
Blagoevgrad	Peirich	138	51 542	0,0058	900
	Sirumani	255	26 000	0,0231	1 800
	Kresna	131	20 361	0,0147	900
	Similli	256	38 560	0,0156	1 800
	Blagoevgrad	246	47 310	0,0127	1 800
	Sandanski	1 014	121 698	0,0168	6 150
	Kocheritovo	158	21 839	0,0165	1 080
	Nevestino	305	78 054	0,0085	1 980
	Kustendil	434	76 889	0,0124	2 850
	Trekljano	172	36 302	0,0110	1 200
Kustendil	Rila	125	16241	0,0172	840
	Dupnica	162	21846	0,0160	1 050
	Bobov dol	87	24544	0,0081	600
		75	12 519		
	Bobochevo			0,0119	450
	Zemen	170	23 161	0,0173	1 200
	Breznik	75	35 256	0,0057	600
	Tjan	458	56 269	0,0178	3 000
	Kovachevci	63	14 278	0,0140	600
	Radomir	183	50 172	0,0079	1 200
Sofia-region	Dragoman	345	31 120	0,0257	2 400
	Silistra	109	19 070	0,0184	1 050

	Godech		299	39 177	0,0179	2 100
	Bozurishte		85	4 700	0,0382	540
	Svoje-north of Iskar Rever		670	40 398	0,0346	4 200
Montana	Region Montana-whole		1472	350 538	0,0102	10 800
Vidin	Region Vidin - whole		1 322	285 108	0,0095	8 100
	Kozlodui		40	16 982	0,0071	360
	Mizia		22	18 778	0,0053	300
Vratca	Orlovo		30	11 398	0,0088	300
	Xairedin		17	18 874	0,0021	120
	Borovan		20	19 920	0,0025	150
	Bjela Slatina		51	51 992	0,0021	330
	Kareza		59	26 602	0,0056	450
	Iskar		58	15 240	0,0131	600
	Dolina Mitropolia		66	32 705	0,0055	540
	Gulianci		87	46 870	0,0047	660
Pleven	Nikopol		116	35 499	0,0085	900
	Belene		59	11 586	0,0176	600
	Charven briag		58	36 106	0,0033	240
	Dolni Dabnik		58	26 601	0,0045	240
	Pleven-near road F-83		52	39 802	0,0027	330
	Levski-near road F-83		17	20 418	0,0019	120
Veliko Tarnovo	Svistov		235	59 036	0,0102	1 800
Ruse	Poliski Trambesh		243	45 062	0,0110	1 500
	Region Ruse-whole		837	268 651	0,0074	6 000
	Kubrat		283	61 057	0,0098	1 800
Razgrad	Zavet		85	21 991	0,0090	600
	Tear Kalajin		18	12 950	0,0030	120
	Isperix		112	26 413	0,0071	780
Silistra	Region Silistra - whole		1 400	213 120	0,0131	8 400
Dobrich	Region Dobrich - whole		1250	414 729	0,0062	7 800
	<b>Total:</b>		<b>14 082</b>	<b>3 105 134</b>		<b>94 470</b>



## 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 2010.

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	45 820
	VNT	all categories	blood	monitoring, differentiation tests	1000
	FAT	all categories	tissues	confirmation	12000
	AG - Elisa	all categories	blood	confirmation of CSF	2000
	Virus Isolation	all categories	blood or other	confirmation of CSF	500
	RT-PCR	all categories	blood or other	confirmation of CSF	10000

#### 7.1.2. Targets on testing herds and animals

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

Disease – CSF, Animal species- 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 herd prevalence	% new positive herds Expected herd incidence
1	2	3	4	5	6	7	8	9	10	11
Industrial	61	61	61	0	0	0	0	100	0	0
Family farms type A	79	79	79	0	0	0	0	100	0	0
Family farms type B	1 341	1 341	1 341	0	0	0	0	100	0	0
Backyards	50 787	50 787	50 787	0	0	0	0	100	0	0
East-Balkan pigs	107	107	107	0	0	0	0	100	0	0
<b>Total</b>	<b>52 375</b>	<b>52 375</b>	<b>52 37</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 - 2010  
 Disease – CSF, Animal species- domestic pigs and East Balkan pigs

Region: Republic of Bulgaria

Type of pig holdings	Total number of animals (1)	Number of animals (2) under the programme	Number of animals (3) expected to be tested	Number of animals (4) to be tested individually (%)	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	Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered (5)
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9=(4/3)x100</b>	<b>10=(6/4)x100</b>
Industrial farms	425 260	425 260	3 720	3 720	0	0	400 000	0	0
Family farms type A	24 331	24 331	2 820	2 820	0	0	20 000	0	0
Family farms type B	38 697	38 697	27 580	27 580	0	0	35 000	0	0
Backyards	97 535	97 535	-	-	0	0	97 000	0	0
East-Balkan pigs	8 584	8 584	10 700	10 700	0	0	8 000	0	0
<b>Total</b>	<b>594 407</b>	<b>594 407</b>	<b>44 820</b>	<b>44 820</b>	<b>0</b>	<b>0</b>	<b>560 000</b>	<b>0</b>	<b>0</b>

## 7.2 Targets on testing herds and animals

Disease – CSF, Animal species- 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			Expected free from disease		
			Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
Industrial	61	425 260	0	0	0	0	61	425 260	0	0	61	425 260	61	425 260
Family farms type A	79	24 331	0	0	0	0	79	24 331	0	0	79	24 331	79	24 331
Family farms type B	1 341	38 697	0	0	0	0	1 341	38 697	0	0	1 341	38 697	1 341	38 697
Backyards	50 787	97 535	0	0	0	0	50 787	97 535	0	0	50 787	97 535	50 787	97 535
East-Balkan pigs	107	8 584	0	0	0	0	107	8 584	0	0	107	8 584	107	8 584
<b>Total</b>	<b>52 375</b>	<b>594 407</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>52 375</b>	<b>594 407</b>	<b>0</b>	<b>0</b>	<b>52 375</b>	<b>594 407</b>	<b>52 375</b>	<b>594 407</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 administered in the campaign	Expected number of campaigns	Total number of doses of vaccine or treatments expected to be administered
Blagoevgrad	305 471	4450	3	13 350
Kustendil	288 234	3350	3	10 050
Pernik	179 136	2200	3	6 600
Sofia-region	134 463	3430	3	10 290
Montana	350 538	3600	3	10 800
Vidin	285 108	2700	3	8 100
Vratca	137 944	520	3	1 560
Pleven	291 229	1560	3	4 680
Veliko Tarnovo	104 098	1100	3	3 300
Ruse	268 651	2000	3	6 000
Razgrad	132 411	1100	3	3 300
Silistra	213 120	2800	3	8 400
Dobrich	414 729	2600	3	7 800
	<b>3 105 134</b>	<b>31 410</b>		<b>94 230</b>

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

Costs related to	Specification	Number of units for 2010	Unitary cost in euro for 2010	Total amount in euro for 2010	Community funding requested (yes/no)
<b>1. Testing</b>					
1.1. Cost of the analysis	Test: ELISA antibodies	45 820	2,5	114 550,00	Yes
	Test: ELISA antigen	2 000	2,7	5 400,00	Yes
	Virus Neutralisation Reaction Test (VNR)	1 000	12	12 000,00	Yes
	FAT	12 000	4,2	50 400,00	Yes
	RT PCR	10 000	1,5	150 000,00	Yes
	Virus isolation	500	6,5	3 250,00	Yes
1.2. Cost of sampling	No of samples	45 820	2,00	91 640,00	Yes
	Vacuainers	46 000	0,30	13 800,00	
1.3. Other costs- collection and transport of samples to the laboratory				50 000,00	Yes
<b>2. Vaccination of wild pigs</b>					
2.1. Purchase of vaccine/treatment	Oral vaccination	94 470	1,50	141 705,00	Yes
2.2. Distribution costs					
2.3. Administering costs					
2.4. Control costs				30 000,00	
<b>3. Clinical examination</b>		340 378	1,00	340 378,00	Yes
<b>4. Slaughter and destruction</b>					
4.1. Compensation of animals				0	

4.2. Transport costs					20 000,00	Yes
4.3. Destruction costs					10 000,00	Yes
4.4. Loss in case of slaughtering						
4.5. Costs from treatment of products (milk, eggs, hatching eggs, etc)						
5. Cleaning and disinfection					50 000,00	Yes
6. Salaries (staff contracted for the programme only)						
<b>Total:</b>					<b>1 083 123,00</b>	<b>Yes</b>

## Categories of pig holdings on the territory of Bulgaria

Table 1: Industrial pig farms

District	Number of farms	number of pigs
Blagoevgrad	-	-
Burgas	3	13 791
Varna	4	38 600
V. Tarnovo	3	14 500
Vidin	1	4 146
Vratza	1	40
Gabrovo	1	2 135
Dobrich	1	11 634
Kardjali	-	-
Kustendil	-	-
Lovech	2	10 266
Montana	1	4 637
Pazardjik	3	20 300
Pernik	-	-
Pleven	2	1 540
Plovdiv	2	6 900
Razgrad	1	34 000
Russe	7	89 813
Silistra	4	25 500
Sliven	2	11 951
Smolyan	-	-
Sofia - city	-	-
Sofia - region	1	2 850
Stara Zagora	5	41 181
Targovishte	3	15 316
Haskovo	1	1 200
Shoumen	9	63 627
Yambol	5	11 333
<b>Total</b>	<b>61</b>	<b>425 260</b>

**Table 2: Family farms type A**

District	Number of farms	Number of pigs
Blagoevgrad	1	32
Burgas	-	-
Varna	2	52
V. Tarnovo	11	5 600
Vidin	2	230
Vratza	-	-
Gabrovo	5	775
Dobrich	3	255
Kardjali	1	10
Kustendil	2	64
Lovech	5	1 712
Montana	5	590
Pazardjik	6	4 900
Pernik	-	-
Pleven	1	360
Plovdiv	3	1 650
Razgrad	2	1 190
Russe	3	1 335
Silistra	4	629
Sliven	4	2 439
Smolyan	-	-
Sofia - city	2	256
Sofia - region	-	-
Stara Zagora	5	901
Targovishte	1	439
Haskovo	-	-
Shoumen	4	658
Yambol	7	1 254
<b>Total</b>	<b>79</b>	<b>24 331</b>

**Table 3: Family farms type B**

<b>District</b>	<b>Number of farms</b>	<b>Number of pigs</b>
Blagoevgrad	52	2 958
Burgas	86	2 351
Varna	15	629
V. Tarnovo	35	2 600
Vidin	67	404
Vratza	10	604
Gabrovo	47	420
Dobrich	98	1 449
Kardjali	12	199
Kustendil	26	201
Lovech	29	1 736
Montana	41	441
Pazardjik	2	155
Pernik	-	-
Pleven	122	2 284
Plovdiv	50	2 083
Razgrad	15	2 150
Russe	26	1 110
Silistra	13	528
Sliven	20	1 059
Smolyan	18	382
Sofia - city	44	732
Sofia - region	96	3 010
Stara Zagora	180	2 305
Targovishte	68	5 443
Haskovo	30	1 200
Shoumen	11	1 569
Yambol	128	695
<b>Total</b>	<b>1 341</b>	<b>38 697</b>

**Table 4: Backyard holdings**

District	Number of owners	Number of pigs
Blagoevgrad	3 485	5 384
Burgas	1 582	3 135
Varna	2 014	6 787
V. Tarnovo	1 479	2 366
Vidin	2 352	5 552
Vratza	2 987	5 632
Gabrovo	412	898
Dobrich	2 177	3 925
Kardjali	3	5
Kustendil	3 793	5 387
Lovech	1 192	1 599
Montana	1 338	1 933
Pazardjik	2 120	3 248
Pernik	1 239	4 725
Pleven	4 155	8 577
Plovdiv	1 546	2 665
Razgrad	76	257
Russe	126	215
Silistra	897	2 355
Sliven	8 583	14 432
Smolyan	75	168
Sofia - city	81	167
Sofia - region	2 350	4 050
Stara Zagora	3 525	6 080
Targovishte	628	1 884
Traskovo	750	3 000
Shoumen	604	1 201
Yambol	1 218	1 908
<b>Total</b>	<b>50 787</b>	<b>97 535</b>

**Table 5: East-Balkan pigs**

<b>District</b>	<b>Numberf of herds</b>	<b>Number of pigs</b>
Burgas	25	1 029
Varna	59	5 061
Shoumen	23	2 494
<b>Total</b>	<b>107</b>	<b>8 584</b>



**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.

**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; NVS notification via RVS 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 (All rules governing products of animal origin for HC)	ORDINANCE 37/31.03.2006 on health requirements toward animals from which raw materials and feedstuffs 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 (Veterinary controls on food of animal origin)	Directly applicable and in force

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-community 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