STANDARD SUMMARY PROJECT FICHE

Project Number BG 0201.06

1. BASIC INFORMATION

1.1. Desiree Number: BG 0201.06

Twinning Number: BG02/IB-AG-04

1.2. Title: TSE (Transmissible Spongiform Encephalopathy) control

1.3. Sector: Agriculture

1.4. Location: Bulgaria

2. OBJECTIVES

2.1. Overall Objective(s):

To facilitate the introduction of TSE screening in Bulgaria as prescribed in the regulations 999/2001/EC amended by 270/2002, 1248/2001 and 13/26/2001.
The project purpose enfaces 4 components:

1. laboratory equipment for rapid tests for BSE and Scrapie and laboratory equipment for hystopathological examination;
2. rapid tests for 2 years
3. waste burning furnace
4. Twinning.

2.2. Project purpose:

Improvement of national system for control of zoonotic diseases with emphasis on TSE and effective transposition of the EU disease control.

2.3. Accession Partnership and NPAA priority (Annex 3)

The project components are in line with the following Accession Partnership and NPAA priorities:

Accession Partnership
The recently revised Accession partnership includes the priority under Agriculture:
Complete transposition of legislation in the Veterinary sanitary measures for prophylactics and control of zoonoses (OG 108/1999) – Dir 92/117 (incl. Legislation on TSE) and ensure implementation and enforcement.

National Program for Adoption of the Acquis
The NPAA indicates as a priority a number of measures to be implemented in terms of "Epidemic protection" including specific actions on BSE control(Annaex6):
a) National program for monitoring of BSE in cattle (MAF/March'2001)
b) National program for monitoring of TSE in sheep (MAF/June'2001)

2.4. Contribution to the National Development Plan:

Improvement of the diagnostic capability of the laboratories responsible for TSE prevention and control.
Implementation of the EU standards for laboratory TSE tests
Development of long-term plans for monitoring and surveillance of TSE in Bulgaria.

2.5. Cross Border Impact:

Intensifying of the veterinary control in the field of animal health by improvement of the diagnostic capabilities especially for TSE in Bulgaria will have a great importance for the disease control in Europe as a whole, because of the geographical location of the country. After enlargement of the EU, Bulgaria will be the outer south-east border and a barrier against spreading of animal infectious diseases.

3. DESCRIPTION

3.1. Background and justification

TSE lab + prion tests:

In order to assure consumers in- and outside the country about the safety of Bulgarian meet and products of animal origin, Bulgaria needs to verify its BSE status. In order to prove Bulgaria's BSE current status it is necessary to comply with EU conform examination methodology which is described in the following Decisions:

Regulation (EC) No 999/2001 of the European Parliament and the Council of 22 May 2001 (and its amendment) laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies.

Bulgaria has not yet capacity for examinations to be currently executed. The National Veterinary Diagnostic and Research Institute (NVDRI) under the National Veterinary Service (NVS) have already carried out reconstruction of some space from national funds in 2001. (See structures in Annexes 10 and 10.4)

For the implementation of the National program for monitoring of BSE in cattle (MAF/March'2001) and the National program for monitoring of TSE in sheep (MAF/June'2001 additional 1.5Meuro are allocated in the Budget of NVS for year 2002.

To comply totally with the above EC Regulation Bulgaria will have to apply rapid (prion) tests on approximately 50 000 bovine animals per a year and about 3 000 sheep and goat tests. It is only possible to acquire prion (rapid) tests from one of the member states and it is necessary to develop a special background lab for the histopathology examination, immunocytochemistry, immunobloting or demonstration of characteristic fibrils by electron microscopy which examinations are requested as control measures.

Approximately estimated total numbers of animals in Bulgaria

Categories of Animals	Numbers of Animals	Tests needed
Bovines over 24 months of age -emergencies slaughtered -seek at slaughter -fallen stock	103,818 239 not 950	950 239 950
Bovines over 30 months of age -healthy slaughtered	341,697 31,050	 31,050
Sheep over 18 months -healthy slaughtered -fallen stock	1,797,837 19,850 (sheep and goats) 8,990	3000 10,540 8,990
Goats over 18 months -healthy slaughtered -fallen stock	854,748 4,200	14,840 4,200

Reg. 1248/2001/EEC
Number of tests needed:

- For bovine animals = 32,200
- For caprine animals = 27,000
- Total number of tests needed for one year - 60,000
- Total number of tests needed for two years – 120,000

Phare Assistance would support Bulgaria in this first, bi-annual period of full application of the EU requirements by providing a flat contribution of 15 Euro per test which is in line with the contribution provided by the Community Budget to the Member States. It is expected that after this first period Phare assistance will be phased out.

The related measures taken and financed by the Bulgarian authorities:

The regular collection of the samples from the slaughterhouses is organized.

Since January 2001 Veterinarian Authority ordered to apply monitoring prion tests in case of emergency slaughtered or dead animals over 24 months of age.

Since March 2001 a separate collection of and destruction of the specific risk material (from animals with clinic symptoms of nervous destruction) has been ordered.

Since June 2001 Veterinary Authority in Bulgaria ordered laboratory investigations of sheep over 18 months of age for monitoring of TSE.

It is necessary as well to train certain group of persons because of the introduction of new control measures and processing methodologies. In order to inform and educate well the staff in contact with meat during the processing and control we need to train our personal at two levels. First step is to train the vets executing the control on slaughterhouses, the second level is the training of the personal at slaughterhouses.
It is necessary to keep informed the concerned parties at each level such as breeders, producers, consumers, media as well.

3.2. Linked activities

Adoption of **Articles 30** and **31** of **Bulgarian Veterinary Low** for zoonotic diseases.

BG 98 06-03-01 (Phare 98 Twinning) Improvement of Veterinary Control of some zoonoses.

BG 0101 .04 (Phare 2001) Improvement of the veterinary diagnostic control.

Tw. BG/IB/2001-AG-03 (Phare twinning, still under negotiating).

3.3.Results

- EU TSE control practice transposed aimed the availability of monitoring and surveillance plans in Bulgaria.
- The plan for surveillance includes 1890 brain tests for cattle and 99 brain tests for small ruminants annually.
- The project will implement the monitoring and surveillance plan based on the number of test annually performed for cattle and small ruminants.
- Three good established and fully operational laboratories for TSE under the National Veterinary Diagnostic and Research Institute (See structure in Annex 10.4) in Sofia, Stara Zagora and Veliko Tarnovo with biosecurity Level II..
- The active surveillance plan would be based on 50 000 test annually for cattle and 3000 tests annually for small ruminants.

3.4. Activities

- Transposition of EU TSE control practice with reference to monitoring and surveillance plans in Bulgaria.
- Testing of 1890 brains of cattle and 99 brains for small ruminants annually for BSE.
- Implementation of the monitoring and surveillance plan based on the number of test annually performed for cattle and small ruminants.
- Quarterly reports on the number of tested animals and test results
- Creation of BSE laboratory and organization of the screening, monitoring and surveillance practice in the country strictly according to the EU practice. This activity includes a) categorization of animals in the slaughterhouses; b) Laboratory screening of all the suspected animals; c) Different diagnosis using the complete way for laboratory confirmation: Visualization, Histology and immunochemistry, ELISA, Immunobloting.

Project activities include the preparation and implementation of one twinning arrangement on TSE control and two supply contracts on laboratory equipment and prion tests.

3.4.1. Twinning

Twinning project would assist the National Veterinary Service (NVS) in:

- Transposition and implementation of EU's aquis legislation in Bulgaria
- Based on the transposition plan, the twinning experts will work together with the expert staff of National Veterinary Service and National Veterinary Diagnostic and Research Institute on the harmonization of the TSE control system.
- Transposition and implementation of EU's TSE control system
- Training of 6 laboratory specialists in EU referent laboratories for TSE
- Training of 28 veterinary experts on TSE control system in Bulgaria.
- Veterinary experts will train the personals at slaughterhouses,
- Organization of the information to the specialists and public.

Guaranteed results of the twinning project:

EU conform TSE system operating in Bulgaria. Technical harmonization implemented. Some Bulgarian vets (laboratory workers and practicing) trained and the personnel at slaughterhouses educated, public well informed.

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3.4.2. TSE laboratory supply and prion tests

The development of TSE lab has to be indispensable in order to avoid assumed zoonoses. The TSE prion tests Bulgaria needs to implement are available from EU countries.

The TSE laboratory will receive 120 000 prion tests (calculated for two years) and laboratory equipment to implement the TSE screening in Bulgaria as prescribed in Regulation (EC) No 999/2001 of the European Parliament and of the Council.

Considering the particularities of the prion test supply the technical specification may be different from the regular ones.

4. INSTITUTIONAL FRAMEWORK

Legal basis of the system of laboratory and diagnostic control in the National Veterinary Service (NVS) is regulated by the Law on Veterinary Activity (LVA) and the Rules for application of the LVA
The recipient of this project is the National Veterinary Service at MAF /Annex 10/.
Diagnosis of TSE is carried out in specialized laboratories under the National Veterinary Service at:

1. National Diagnostic and Research Veterinary Institute, Sofia; 119 persons (63 vets, 26 laboratory assistants and 30 auxiliaries) (Annex 10.4)
2. Regional Veterinary Institute, Veliko Tarnovo(North Bulgaria) – 20 persons (8 vets, 9 veterinary technicians and laboratory assistants and 3 auxiliaries)
3. Regional veterinary institute, Stara Zagora (South Bulgaria)– 19 persons (10 vets, 7 veterinary technicians and laboratory assistants and 2 auxiliaries.

5. Detailed Budget

	PHARE SUPPOR T					
Description	Investment Support (I)	Institution Building (IB)	Total Phare (I + IB)	Recipient (*)	IFI	Total
Twinning/ TSE control		0.50				0.50
Supply of lab. Equip.	0.50			0.20		0.70
Supply of prion tests	1.50			0.40		1.90
Total	2,00	0.50	2.50	0.60		3.10

MAF will also provide 25% co-financing in cash for the investment component of the project. The national co-financing will be covered from the national budget, and will include waste burning furnace, laboratory consumables and sampling sets enough for two years, etc. Detailed lists of equipment are available in Annex 4

The Phare contribution for the equipment will be 75% of its cost, with a maximum of Phare contribution of 0.50 MEuro and 1,50 MEuro for prion tests. If the total cost of the equipment exceeds 2.60 MEuro, the extra support required will be provided by additional national co-financing. The additional national co-financing will be provided by:

- either allocating extra national funds to conclude a contract with the contractor proposed further to the completion of the procurement process following the Practical Guide to Phare, Ispa and Sapard Contract Procedures,
- or increasing of the cost of the on-going Phare financed contract via an addendum.

All running costs and the maintenance of the equipment purchased under this project will be provided by the Bulgarian authorities.

6. Implementation Arrangement

6.1 Implementing Agency

The CFCU (Ministry of Finance) is in charge of the contracting and financial management of the project.

PAO Mr. K. Katev
Deputy Minister of Ministry of Finance

6.2. Twinning

6.2.1. One twinning covenant with the NVS/NVDRI and *CDFC* is envisaged with duration of twelve months, costing 0.50 MEuro.

Experts Profile

A good knowledge of EU veterinary legislation and experience in implementing it.

Profile of the PAA

The PAA should have the following profile:
- veterinarian with significant experience in the field of disease control
- excellent inter-personal communication skills
- initiative and co-operative attitude
- fluency in English.

Profile of the Short and medium term experts

The short- and medium-term experts should have the following profile:
- veterinarians with significant practical experience in the field of TSE lab control
- veterinarians with experience in the control of slaughterhouses
- veterinarians with experience at each level of the TSE surveillance and control.

The Beneficiary of the twinning project is the NVS / NVDRI.
NVS contact point:

Name:	Dr Nevena Mangarova
Address:	National Veterinary Service, 15A Pencho Slaveikov Blvd, 1606 Sofia, Bulgaria.
Tel No:	+ 359 2 952 09 18
Fax No:	+ 359 2 954 95 93
E-mail:	svetlavet@mobikom.com

6.3. Non-standard aspects

The practical guide for Phare, ISPA and SAPARD contract procedures and Twinning Manual will strictly be followed.

6.4. Contracts:

7. IMPLEMENTATION SCHEDULES

Component	Start of Tendering	Start of Project Activity	Project Completion
Twinning	September 2002	January 2003	January 2004
Laboratory Equipment Supply	January 2003	July 2003	October 2003
TSE Tests Supply	September 2002	March 2003	March 2004

8. EQUAL OPPORTUNITY

All participating Bulgarian institutions are equal opportunity employers. No discrimination of whatever nature will be applied.

9. ENVIRONMENT

Not applicable

10. RATES OF RETURN

Not applicable

11. INVESTMENT CRITERIA

Not applicable

12. CONDITIONALITY AND SEQUENCING

- Project to be implemented through twinning requires the full commitment and participation of the senior management of the beneficiary institution.
- In addition to providing the twinning partner with adequate staff and other resources to operate effectively, the senior management must be whole-heatedly involved in the development and implementation of the policies and institutional change required delivering the project results.
- Before receiving the equipment described in Annex 6 the Laboratories will be refurbished.
- Availability of experts.
- Provision of adequate co-financing.

ANNEX 1 to the Project Fiche	Programme name and number:	Date of Drafting
LOGFRAME PLANNING MATRIX FOR PROJECT: TSE (Transmissible Spongiform Encephalopathy) Control	Contracting period expires	Disbursement Period Expires
	Total budget: 3.1 MEuro	Phare budget: 2.5 MEuro

Overall objective	*Objectively verifiable indicators*	*Sources of verification*	
*The effective transposition of EU disease control and Acquis	* Positive assessment of the transposition of disease control acquis in the Regular Report	* Regular Reports	
Project purpose	**Objectively verifiable indicators**	**Sources of verification**	*Assumptions*
*To facilitate the introduction of TSE screening in Bulgaria as prescribed in the Regulation 999/2001/EC	• 1989 brain tests conducted according to the "Passive plan" annually • 53 000 pcs. prion tests conducted according to the "Active plan" per year	* Reports of the National veterinary Service on BSE control	• All facilities in place for swift action in case of animals' testing TSE positive • Funds available for prevention and containment measures
Results	**Objectively verifiable indicators**	**Sources of verification**	*Assumptions*
• EU TSE control practice transposed • The plans for passive and active surveillance carried out within two years • TSE lab equipped according to the requirements for prion tests evaluation.	• All twinning arrangements , studies, training services and supplies completed and delivered in time and at the right levels of quality and quantity as planned • Justified TSE-status classification	• Progress reports by the National Veterinary Service • Diagnostic Reports by the National Veterinary Institute	• Trained staff could be at the disposal by the National Veterinary Service • Funds for operating the laboratory and conducting the prion tests available when staff need this.
Activities	*Means*		*Assumptions*
National Veterinary Service • Provides staff and manages the project • Prepares tenders and concludes supply contracts	• One supply contract for laboratory equipment, one twinning for the TSE control (Including the training experts) • One supply contract for laboratory consumables (prion tests)		• High quality project management ensured throughout
			Preconditions
			• Staff and co-financing available when required The space for TSE lab refurbished according to the requirement for TSE laboratory diagnostic

ANNEX 2

Detailed Implementation Chart

Year	2002							2003												2004			
Month	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
Twinning , TSE control																							
Supply Lab																							
Supply prion tests																							

Implementing phase

Tendering phase

ANNEX 3

EU Regulations

Regulation (EC) No 999/2001 of the European Parliament and of the Council of 22 May 2001 (and its amendments) laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies

BULGARIAN Regulations

Decision of the Council of Ministers No 779 from 4 December 2001 for endorsement of the List of contagious and parasitic diseases in animals and measures concerning eradication and control, financed by the Bulgarian Government.

Program No VIII-1-215/30012001 of National Veterinary Service for Surveillance of BSE in cattle

Program No I-80/02072001 of National Veterinary Service for Surveillance of TSE in small ruminants

ANNEX 4

CHECKLIST FOR THE PURCHASE OF LABORATORY EQUIPMENT

1. ***Who is the ownership of the laboratory? If any changes in the ownership structure are foreseen?***

National Veterinary Research and Diagnostic Institute is owned by the state. The property rights have not been changed since the establishment (1901). The supervision of the institute is carried out by the National Veterinary Service which is under the order of Ministry of Agriculture and forestry.

2. ***What is the plan for usage of this laboratory for the next 5 years? Which tests will it focus on? Do you have a stable demand for testing samples? Who are your main clients? What is the plan from the staffing point of view?***

The TSE laboratory in the National Veterinary institute would be the only one, because the recent closing of the all regional institutes with exception of two. That's the reason for increasing number of samples. The TSE tests are based mainly on ELISA combined with Western blotting. This requires special sample preparation. The samples are sent by both state and private owned farms. We have to be able to meet these new requirements with recruitment of new employees and increased number of experts.

3. ***What is the existing situation with the laboratories doing similar activities in Bulgaria? Is there any competition?***

The National Veterinary Institute is exclusively responsible for the accomplishment of all the BSE/TSE investigations.

4. ***Why does the need of increasing capacity and upgrading of the equipment exist ?***

Some new way and instruments are required for diagnosing of TSE , improving the diagnostic tests for BSE and researching TSE-causing agents (European Commission, Community Research, Transmissible Spongiform Encephalopathies: the European initiative, Luxembourg: Office for Official Publications of the European Communities, September 2000).

5. ***Which would be the way for the assuring of additional human resources ? Are adequate training needs to be taken into consideration ? If yes, how ? Is sustainability in terms of trained human resources assured ?***

Small number of presently qualified employees are available. We need to develop human resources with qualified staff because of significantly growing number of samples expected.

NEEDS ASSESMENT

1. *Description of the current TSE related activity of the National Veterinary Institute*. Each animal (cattle or small ruminant) showing nervous symptoms should be investigated , using brain methodology according to the "Passive plan" of NVS.

2. *Present capacity*:
   - Tissue processing for paraffin technique
   - Slide microtome (very old) bad working

3. Assessment of capacity gap in terms of quantity or quality of equipment

Capacity of the instruments in the existing lab is not sufficient, results are of bad quality. The chemical and consumables wasting are very laborious and danger.

Plans

Purchasing of new machines would provide results of far better quality, more effective operation and more reliable diagnosis. These could also help in avoiding contamination and infection of personnel and the environment.

LIST OF NECESSARY NEW EQUIPMENT

The currently approved prion/rapid/tests are listed in the point 4, Chapter C, Annex X of the 999/2001 EC Regulation (Prionics Check test, Enfer test, BIORAD test). The companies producing these tests define the concrete sensibility and kind of equipment by the evaluation of their tests needs to be executed. They undertake the responsibility for the safety of their tests only if the prescribed equipment stock is used for the evaluation in the lab. This way, based on the requirements of the prion test companies, the prescribed equipment stock must not be different from the following on the table:

Table of Equipment purchased by Phare

Laboratories for histopathology for diagnosis of BSE in Sofia, Stara Zagora, Veliko Tarnovo

No	Name of equipment	Unit	Price (in Euro)	Total
1	Tissue processor for paraffin technique	3	15 000	45 000
2	Rotary microtome	3	5000	15 000
3	Organ sectioning table	3	800	2 400
4	Cooling plate of the blocks	6	3000	24 000
5	Automated coverslipper	3	1000	3000
6	Precision balance	3	5000	15 000
7	Microscope for consultations	3	10 000	30 000
8	Cabinet for dangerous chemicals	3	2000	6000
9	Thermostat for rapid incubation at 37^{o}C	3	2000	6000
10	Heating plate	3	200	600
11	Back suctioning plate for covering	3	1000	3000
12	Section dryer	3	2000	6000
13	Epi Fluorescence Microscope	3	15 000	45 000
14	Bench-top refrigerated centrifuge	3	10 000	30 000
15	Water purification system	3	6 000	18 000
16	Magnetic stirrer	3	2 000	6 000
17	pH-meter	3	2000	6000

Total: 246.000

Table for the equipment for ELISA for detection of animals infected with BSE for the laboratories in Veliko Tarnovo and Stara Zagora Under the o National Veterinari Diagnostic and Research institute Sofia

No	Name of the product	Unit	Price (in Euro)	Total
1	Ribolyser HYBAID (12 tubes)	2	4 000	8 000
2	Refrigerated centrifuge 5804R without Eppendorf Rotor	2	15 000	30 000
3	Drum Rotor with 6 adapters (30 tubes)	2	3000	6000
4	6 Adapters Rotor Pack	2	1000	2000
5	37 – 100^{o}C Heater block/3 holders/ 60 tubes/	2	5000	10 000
6	37 – 100^{o}C Heater block/3 holders/ 120 tubes	2	5000	10 000
7	Holder Block (20:2 ml Tubes)	2	1000	2000
8	37^{o}C IPS Microplate Incubator (4 microplates)	2	2000	4 000
8	PW 40 Microplate Washer	2	10 000	20 000
9	2L PW 40 Waste bottle without cap	2	1 000	2 000
10	PW 41 Microplate Washer	2	10 000	20 000
11	8L PW41 Waste with cap and Detector	2	1 000	2 000
12	4 ways Screwcap	2	1 000	2 000
13	PR 2100 reader + Printer	2	10 000	20 000

Total: 138.000

Laboratory for immuno-blotting detection of animals infected with BSE by immuno-blotting test in Sofia at NVDRI – NVS

No	Name of the product	Unit	Price (in Euro)	Total
1	Western blot fool equipment with CCD documentation station	1	20 000	20 000
2	System for ECL detection	1	60 000	60 000
3	ECL - hyperfilm			6000
4	Fool system for gel electrophoresis system	1	20 000	20 000
5	Homoganisator	1	5000	4 000
6	37 – 100^{o}C Heater block/3 holders/ 96 tubes	1	5000	4 000

Total: 114 000

Table of Equipment purchased by National Funds
Laboratories for histopathology for diagnosis of BSE in Sofia, Stara Zagora, Veliko Tarnovo

Name of equipment	Unit	Price (in Euro)	Total
Autoclave for antigen exposure	3	10 000	30 000
Autoclave for disinfecting	3	15 000	45 000
Microbiological safety cabinet Class2	3	10 000	30 000
Ultracentrifuge swinging bucket rotor	1	60 000	60 000
Oven (for dry heat sterilization)	3	10 000	30 000
BSE slaughterhouse Kits	3	1 500	4 500
BSE Sampling sets Enough for 2 years	1 000	100	100 000

Table for the equipment for ELISA for detection of animals infected with BSE for the laboratories in Veliko Tarnovo and Stara Zagora Under the structure of National Veterinari Diagnostic and Research institute Sofia

Name of equipment	Unit	Price (in Euro)	Total
Microbiological safety cabinet Class2	6	10 000	60 000
Precision balance	4	5000	20 000
Vortex Genie II	4	1 000	4 000
P20 Gilson pipette	16	200	32 000
P200 Gilson pipette	16	200	32 000
P1000 Giloson pipette	16	200	32 000
Multichannel pipette	16	300	48 000
EPPENDORF Multipipette Plus	20 000	5cents	1 000
Laboratory clothing Enough for 2 years	3000	15	45 000

WASTE BURNING FURNACE for the Experimental base in v. Kokaliane under NVDRI – NVS

WASTE BURNING FURNACE - 24 m2	Unit	Quantity	Unit Rate EURO	Amount EURO
Part: constructive				
Foundation-solid layer of elevation – 1,70m				
Common excavation	M3	30,00	4,00	120,00
Excavation under substructure	M3	3,50	11,20	39,20
Concrete for common substructure plate	M3	5,00	51,50	257,50
Common substructure plate reinforcement	T	0,80	455,00	364,00
Main bearing construction				
Concrete for columns, beams and plate	M3	8,30	92,00	763,60
Reinforcement for columns, beams and plate - AI	T	0,65	478,00	310,70
AIII	T	0,30	478,00	143,40
Casing LT-40	M2	28,50	8,30	236,55
Metal bearing construction for slope	T	0,18	1,070,00	192,60
Metal chimney	Pcs	1,00	2,450,00	2,450,00
Building of brick walls and fire proof furnace	Pcs	1,00	2,100,00	2,100,00
Casing LT-40	M2	70,00	8,30	581,00
Delivery and installment of waste burning installation on gas propan-butan with set	pcs	1,00	14,610,00	
Total:			24. 000	

Annex10

LEGEND

FA – "Financial activities"

JA – "Juridical activities"

CVAAW – "Control of veterinary activities and animal welfare"

RVS – "Regional veterinary service"

RVI – "Regional Veterinary Institute"

CBAS – "Control of breeding activities in stock-farming"

RDCBAS – "Regional Directorate for control of breeding activities in stock-farming"

ICVP – "Institute for control of veterinary products"

CI "Public health" – Capital Inspectorate "Public Health Control"

CLVCE – "Central laboratory for veterinary control and ecology"

NVMDRI – "National Veterinary Medical Diagnostic & Research Institute"

Annex 10.4

Structure of National Veterinary Diagnostic and Research Institute (NDVRI)

Director

I. Scientific Council.

II. Department of virology and viral diseases.

1. **Laboratory for viral diseases in ruminants**
2. **Laboratory for viral diseases in swine.**
3. **Laboratory for viral biochemistry.**
4. **Laboratory for Chlamydiae and Rickettsiae.**
5. **Laboratory for Rabies**
6. **Laboratory for Transmissible Spogiforme Encephalopathie.**
7. **Laboratory of Pathomorphology.**
8. **Laboratory for cell cultures.**
9. **Laboratory for Leukosis.**

III. Department of exotic and extremely dangerous infections.

1. **Laboratory for Foot and Mouth disease and vesicular diseases.**
2. **Laboratory for Bluetongue.**
3. **Laboratory for African and classical swine fever.**
4. **Laboratory for horse viral diseases with reference laboratory for African Horse Sickness.**
5. **Laboratory for poultry viral diseases with reference laboratory for Newcastle disease and Influenza in poultry.**

IV. Department of Bacteriology.

1. **Laboratory for bacterial diseases in ruminants and equidae**
2. **Laboratory for bacterial diseases in swine**
3. **Laboratory for bacterial diseases in poultry.**
4. **Laboratory for bacteriology and immunology.**
5. **Laboratory for molecular microbiology.**
6. **Laboratory for Tuberculosis.**
7. **Laboratory for Brucellosis.**
8. **Laboratory for nutrition media.**

V. Department of veterinary and sanitary expertise of products of animal origin for human consumption and raw materials of animal origin.

1. Laboratory for veterinary and sanitary expertise of meat, meat products, eggs, egg products animal fats and raw materials of animal origin.

2. Laboratory for veterinary and sanitary expertise of milk, dairy products and bee honey.

3. Laboratory for veterinary and sanitary expertise of fish, fish products and fish tins.

4. Laboratory for Salmonellosis

5. Laboratory for Physical and Chemical analysis of products of animal origin for human consumption and raw materials of animal origin.

VI. Department of fish, bee and silk warm diseases.

1. **Laboratory for viral fish diseases.**
2. **Laboratory for bacterial fish diseases.**
3. **Laboratory for parasitic fish diseases.**
4. **Laboratory for bee and silk warm diseases.**

VII. Department of Parasitology

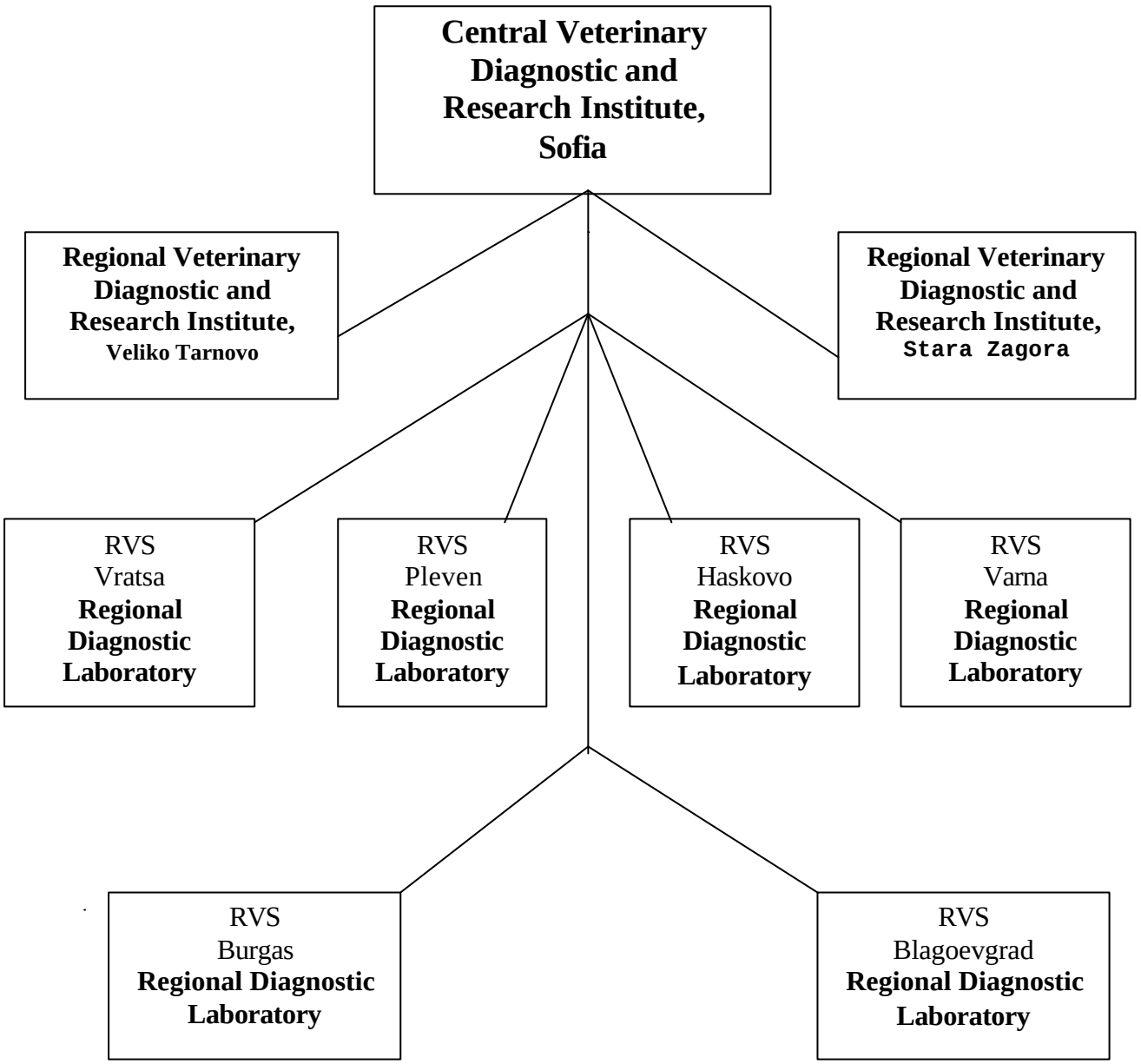
1. **Laboratory for Helminthology**
2. **Laboratory for Protozoa.**
3. **Laboratory for Arachno- entomology.**
4. **Laboratory for Parasitozoonosis.**
5. **Laboratory for Disinfection Deratisation and Desinsection.**

VIII. Department of noninfectious diseases.

1. **Laboratory for Mycology and Mycotoxicology.**
2. **Laboratory for pharmacology and toxicology.**
3. **Laboratory for noninfectious pathology.**
4. **Laboratory for zoo hygiene and animal ecology.**
5. **Laboratory for pathology of animal reproduction.**

Local Units

Annex 4



NATIONAL VETERINARY SERVICE