Standard Summary Project Fiche
Project Number 2003.004-341.02.01

1. Basic Information

Objective 2 - Agriculture

1.1. CRIS Number: 2003.0004-341.02.01

1.2.Title: Strengthening of Control on Infectious Animal Diseases in Lithuania

1.3.Sector: Agriculture

1.4. Location: State Food and Veterinary Service, Lithuania

2. Objectives

2.1. Overall objective:

The overall objective of this **8.003 MEUR** project, of which **1.8885 MEUR** is provided as national co-financing, is to protect public health from the risks of transmission of rabies and other infectious animal diseases via an efficiently functioning control system operating in accordance with the EU *acquis.*

2.2. Project purposes:

In order to fulfil requirements of the epidemio-surveillance and ensure appropriate application of obtained monitoring results with respect to the prevention, control and eradication measures of rabies and other infectious animal diseases, the project purposes are as follows:

- To strengthen administrative and technical capacities of Infectious Disease Control Centres and veterinary laboratories via their proper equipment and training of staff in accordance with relevant EC *acquis* on infectious animal diseases;
- To minimise the number of rabies cases among domestic and wild animals and thereby reduce the possibilities of human infection.

2.3. Accession Partnership and NPAA priority

2.3.1. NPAA 2002

For the year 2003 the Lithuanian National Programme for the Adoption of the *Acquis* foresees Establishing of the Monitoring System of Infectious Animal Diseases in accordance with the EU Requirements (Measure 3.7.4.1-N2).

2.3.2. Accession Partnership for Lithuania, 2001

In Agriculture sector the following priority has been identified:
"Continue alignment of veterinary and phytosanitary legislation and upgrade inspection arrangements, particularly at future external borders."

2.3.3. Regular Reports:

The 2001 Regular Report on Lithuania's Progress towards Accession stressed that:

"In the field of control of animal diseases and animal health, Lithuania still needs to establish contingency plans".

The 2002 Regular Report on Lithuania's Progress towards Accession stressed that:
"As regards animal health and animal diseases Lithuania needs to proceed with the establishment of contingency plans and to create a reserve fund covering compensation expenses in the event of an outbreak of an infectious disease."

3. Description

3.1. Background and justification:

The State Food and Veterinary Service of the Republic of Lithuania is an independent budgetary institution under the Government of the Republic of Lithuania. The main tasks of the State Food and Veterinary Service are to prevent the introduction onto the territory of the country of contagious animal diseases, to arrange protection of animals from contagious diseases and the eradication of disease outbreaks.

The Animal Health Department is responsible for arrangement of veterinary preventive and control measures against animal diseases and drafts legal documents on animal health, animal welfare, and veterinary pharmaceutical activities.

The State Food and Veterinary Service of the Republic of Lithuania introduces and implements strict requirements on animal health according the EC legislation. Main animal health control executor in Lithuania is Infectious Disease Control Centres. Central Infectious Disease Control Centre is founded at the State Food and Veterinary Service and regional Infectious Disease Control Centres – at the regional State Food and Veterinary Services. The main task of Infectious Disease Control Centre is to organise preventive, control and eradication measures against animal infectious diseases, and co-ordination of actions between regional Infectious Disease Control Centres. Regional Infectious Disease Control Centres organise animal infectious diseases eradication measures on the spot, create working groups in case of the outbreak.

For valuable and purposive realisation of functions and in order to ensure effective operation of Infectious Disease Control Centres it is necessary to provide all essential equipment and appropriately train the staff.

The National Veterinary Laboratory is the reference laboratory for the diagnostics of animal diseases in Lithuania. Furthermore it has been decided that four SFVS county laboratories (Kaunas, Panevezys, Šiauliai and Klaipeda) will provide routine diagnostic services concerning animal diseases in the counties. tTo fully implement this decision there is a great need to modernize the departments for the diagnostics of animal diseases at the National Veterinary Laboratory and SFVS county laboratories including pathology, microbiology, serology, virology and rabies diagnostics. The detailed information on number of laboratory staff, tests performed and planned as well as the equipment needed is presented in Annex 6.

The equipment, foreseen in the indicative list (see Annex 5), will serve for serological investigation for effectiveness of vaccination of animals against rabies and will allow to include the NVL into the list of officially approved EU laboratories for that purpose.

The activities of laboratories are planned in connection with animal disease surveillance, monitoring, control and eradication measures and in cooperation with county and regional disease control centers in order to provide immediate reactions to outbreaks of infectious diseases and to apply emergency plans.

In order to provide feedback between diseases control centers, veterinary laboratories, border inspection posts and to strengthen the chains of command it is necessary to provide communication equipment, computers and software for the disease control centers and related SFVS institutions.

One of the major problems in Lithuania is rabies in domestic animals as well as in wildlife. In Lithuania rabies is known from old times, but it has been registered very inconsistently. In Lithuania rabies is a compulsory notifiable disease according to the Law on Veterinary Activities (No. I-2110 of 1992) and the Law on the Care, Keeping and Use of Animals (No. VIII-500 of 1997). Following the Law on the Care, Keeping and Use of Animals, all dogs and other animals who are potential carriers of rabies, must be vaccinated annually. However, usually in practice only dogs and cats are vaccinated. Data on vaccination of domestic animals are shown in Table 1 of Annex 7.

The first oral vaccination of wild animals was conducted in 1995 in the area of 430 sq. km in Panevezys, Pakruojis and Joniskis districts. The *VIRBAC* made vaccine SAG-1 with tetracycline marker was used.

In 1996 the spring vaccination campaign was arranged in the area of 4000 sq. km in 13 districts of northern Lithuania. 100000 doses were used (appr. 25 baits per sq. km). The task was effected by hand, placing the baits in forests and bushes, by the dens. In one district (Birzai) a plane was used for completing the task.

In 1997 two vaccination campaigns in spring (May) and autumn (October-November) in the area of 5349 sq. km have been carried out. 250000 baits in 22 districts were distributed.

In 1998 the vaccination campaign was arranged in the area of 6375-7000 sq. km in 26 districts of northern and western parts of Lithuania. During the last campaign a new type of vaccine *Lysvulpen* Bioveta, made in the Czech Republic, was used. 200000 baits were distributed.

In 1999 two vaccination campaigns in 30 districts in spring (April-May), and autumn in November, using vaccine SAG-1 of *Virbac* with tetracycline marker and *Rabifox* from Dessau-Tornau, have been carried out.

In 2000 two vaccinations campaigns in 30 districts in spring and in 23 districts in autumn using the vaccine SAG-1 of *Virbac* with tetracycline marker and *Rabifox* from Dessau-Tornau, have been carried out.

In 2001 and 2002 oral vaccination of foxes in Lithuania was discontinued, because Lithuanian Government did not provide financial support for this campaign.

For further information on oral immunisation of foxes see Table 2 of Annex 7.

The main source of rabies infection for humans is infected cats and dogs. The last case of rabies in humans was registered in 2000. More details on rabies in humans are shown in Table 4 of Annex 7.

In 1998 - 8754, in 1999 – 9794, in 2000 – 12800, in 2002 - 4952 persons were attacked by wild and domestic animals and sought medical assistance for rabies prevention. Dogs remain the major rabies source for human cases. Of all people, attacked in 2002, dog-bites and scratches were recorded by 3681 persons (73,3%). Cats scratched 621 persons (12,5%), cattle harmed 56 (1,1%) persons and wild animals, mostly foxes, racoon dogs and pine martens, injured 446 (9,0%) people.

Since 1995 the number of rabies cases in wild animals has increased in Lithuania. For instance, in 1995 of 80 reported cases, 41,2% were reported in wildlife and, of those cases, foxes were responsible for 69,7%. In 2001 71,6% of all rabies cases were reported in wild animals and, of those cases, foxes accounted for 40,6% and racoon dogs– for 48,8%. Foxes and racoon dogs appear to be the main source of rabies amongst wildlife in Lithuania. Detailed information on cases of rabies in domestic and wild animals is shown in Table 3 of Annex 7. The peak of rabies cases in domestic and wild animals occurs in the period from August to November.

The long-term strategy for eradication of rabies in Lithuania contains the following elements:
- oral vaccination of wild animals, especially red foxes and raccoon dogs, with vaccine which should create sufficient immunity starting in the territory from the west and west-southern parts of Lithuania along the Baltic sea coast, the Nemunas river bank, at the Lithuanian-Kaliningrad region, Lithuanian-Polish and in the north at the Lithuanian-Latvian borders; for the effectiveness of vaccination campaign against rabies, it would be great advantage if all Baltic states and Poland start this campaign at the same time and coordinate their activities;
- rabies eradication campaign should last not less than 5-10 years;
- in order to keep Lithuanian territory free from rabies it is necessary to create a buffer zone at the border with Byelorussia and Kaliningrad region, where oral vaccination of wild animals should be continued for many years until the rabies will be eradicated in those countries;
- compulsory vaccination of dogs and cats;
- implementation of the identification and registration system for dogs and cats;
- control of the population of stray dogs and cats.

The short-term strategy for eradication of rabies in Lithuania is as following:
- oral vaccination of red foxes and raccoon dogs in the territory, which covers more than 28000 square kilometers, starting along the Baltic sea coast, Nemunas river bank, Lithuanian-Kaliningrad region, Lithuanian-Polish and Lithuanian-Latvian borders;
- oral vaccination of wild animals should be carried out twice a year using aerial distribution of baits; estimated optimal number per square kilometer is not less than 20 baits;
- oral vaccination campaign in this territory should last not less than three years and taking account to the effectiveness of the vaccination of wild animals the territory for oral vaccination should be gradually widened pushing the rabies out from the territory of Lithuania;

- sampling and pathological examination of shot and dead foxes and raccoon dogs for the monitoring of the effectiveness of wild animal vaccination campaign.

During this project is foreseen to start oral immunisation of wildlife population in the western part of Lithuania, covering the area of 30000 sq. km in the first year, and by extending to the whole territory of Lithuania from the second year onwards. As the bait laying density of 20 baits per sq. km is required and two annual campaigns must be performed, the total number of vaccine baits needed for the three-year programm is 6 mln. baits.

The distribution of vaccine baits is foreseen by using aircraft, which would cost approximately 87 000 EUR for the three-year programme.

In order to make sure that vaccination is effective, the plan provides for the control after immunisation by obtaining and laboratory assessment of samples from 15000 animals, which would cost approximately 174 000 EUR for the three-year programme.

The staff of the State Food and Veterinary Service, official and authorised veterinarians, staff of diagnostic laboratories were given training on control of infectious animal diseases. The staff of the National Veterinary Laboratory received training on diagnostics of different infectious animal diseases. However, such training should be repeated annually and the level of knowledge increased.

There have been no FVO missions or peer reviews evaluating the current situation in the field of infectious animal diseases, therefore there are no external remarks.

The project is designed to strengthen administrative and technical capacities of Infectious Disease Control Centres and veterinary laboratories as well as to control and eventually eradicate rabies in Lithuania.

3.2. Linked activities:

Bilateral assistance

In the beginning of 2002 the Lithuanian/Dutch bilateral project No. PPA0/LT/9/1 *"Institutional Strengthening of the National Veterinary Diagnostic Services"* was started. The project implementation period runs to the end of 2003. The specific purpose of the project is to strengthen the institutional structures of the veterinary diagnostic services in Lithuania, aiming to improve the monitoring, surveillance, eradication and prevention of (infectious) animal diseases, in conformity with European Union Legislation. The Lithuanian counterpart in this project is the State Food and Veterinary Service, the beneficiary of the project is the National Veterinary Laboratory. To achieve its objectives, the project will achieve the following results:

- State Food and Veterinary Service strengthened in its organisational and functional capacity, including mutual co-operation with and between subordinate institutions;
- Veterinary laboratories strengthened in the area of diagnostic laboratory activities in accordance with related EU legislation.

The project activities include continuous specialist advice in the different areas, several workshops as well as study visits in both countries and advanced laboratory training for Lithuanian specialists in the Netherlands. One of the objectives of the project was to assess the laboratory network and equipment needs. In the project report the evaluation of the

laboratory structure of SFVS was presented and recommendations were given. In the report it is clearly stated the need for upgrading of the equipment of diagnostic laboratories of SFVS and reducing the number of the laboratories from 9 to 4 regional laboratories. The project includes an investment component, but the budget is very limited (76 000 NGL). It is foreseen to purchase one big autoclave for decontamination of pathological material in serology laboratory of NVL.

Phare
Phare 2002 project *Strengthening of TSE Control System in Lithuania* is foreseen in order to fulfil EU requirements of the epidemio-surveillance and ensure appropriate application of obtained monitoring results with respect to the prevention, control and eradication measures of TSE, however the mentioned project has no overlap with this project.

The Klaipeda County SFVS laboratory (food control part) has been equipped from PHARE project No. LI 004.02.01 "Strengthening and Enforcing of EU Food Control System. Phase III Completion of modernization of Veterinary and Phytosanitary Border Inspection Posts" however the mentioned project has no overlap with this project. This laboratory has been supplied with analytical equipment (AAS with flame burner, AAS with graphite furnace, laboratory microwave sample digestion system, HPLC, GC with ECD, GC), equipment for microbiology laboratory, equipment for general chemistry, equipment for sample preparation for pesticide analysis.

3.3. Results

- Strengthened capacity of Infectious Disease Control Centres to handle emergencies involving contagious animal diseases;
- Strengthened capacity of the National Veterinary Laboratory and its branches in counties in controlling infectious animal diseases;
- The National Veterinary Laboratory – officially approved for rabies serology;
- Staff adequately trained and re-trained in the control of infectious animal diseases in accordance with EU requirements;
- Strengthened capacity to achieve the control and eventual eradication of the rabies in wildlife population prevent the spread of the disease into urban areas and its reintroduction to the neighbouring free zones and other European countries.

3.4. Activities:

The project will be implemented through one Twinning Component, one Supply Component and two Service Contracts.

3.4.1. Twinning and Training package

Scope of Twinning

The activities to be implemented under the Twinning are as follows:
- To evaluate current control systems for infectious animal diseases and assist in developing a new one;
- To develop infectious animal disease control and monitoring programs;
- To analyse the existing working documents and to prepare detailed working instructions;

- To develop and conduct training programmes related to the infectious animal disease control (171 persons);
- To organise study visits to EU member states for the central SFVS and laboratory staff (20 persons).

Total number of staff trained – 191 persons.

Required Inputs:

One PAA (12 p/m) providing general management, consultations and assistance to the State Food and Veterinary Service in the development and implementation of infectious animal disease control and monitoring programs, development of working instructions and training of veterinary staff.

General profile of the Pre-Accession Adviser (PAA)

- A civil servant from the EU Member State Governmental institution experienced in prevention, control and monitoring of animal infectious diseases;
- Familiarity with the relevant legislation in the EU member states;
- Good knowledge of its practical implementation;
- Familiarity with Member State Ministry and associated bodies' structures and procedures;
- Some training experience would be necessary;
- Good communication and management skills;
- Fluency in English (written and spoken);
- Computer literacy.

Short and medium term experts
Series of short and medium term experts (15 p/m), skilled on development of documents and training as regards the strengthening of Infectious Disease Control Centres, experts skilled in different laboratory fields and on control and eradication of rabies are required. The experts should have:

- Knowledge and experience in the working field;
- Experiency in preparing and delivering of training programmes for staff;
- Fluency in English (written and spoken);
- Computer literacy.

3.4.2. Supply Component

A Supply Tender will be organised and will be divided into 6 lots:
- Lot 1. Supply of equipment for Infectious Disease Control Centres.
- Lot 2. Supply of laboratory equipment for pathological anatomical examination.
- Lot 3. Supply of laboratory equipment for diagnostic bacteriology laboratories.
- Lot 4. Supply of laboratory equipment for serology laboratories.
- Lot 5. Supply of laboratory equipment for virology laboratories.
- Lot 6. Procurement and provision of vaccine baits (total 6 mln. baits).

See Annex 5.

3.4.3. Service Contracts

Contract 1. Distribution of vaccine baits using aircraft.
Contract 2. Obtaining and assessment of samples.

3.5. Lessons learned

There have been no previous projects and evaluations in this field before. From the Lithuanian/Dutch bilateral project No. PPA0/LT/9/1 it was learned that it is better to have fewer laboratories, but better equipped, therefore the strengthening only of certain laboratories is foreseen.

4. Institutional Framework

The Project will support strengthening of control on infectious diseases in Lithuania.

- The counterpart and one of the beneficiaries for this project is the State Food and Veterinary Service (SFVS) as the Central Competent Authority (CCA) and CA in the field of animal health, which is responsible for legislation and control of infectious animal diseases in Lithuania.
- Another direct beneficiary involved in this project is the National Veterinary Laboratory as the institution carrying out laboratory tests on animal diseases and providing inspection authorities with relevant analysis.

The State Food and Veterinary Service, which reports directly to the Government of Lithuania, follows the EU concept 'from farm to fork', i. e. is responsible for the legislation and control of feedingstuffs, animal health and welfare, veterinary medicines, to hygiene and safety of food, etc. The SFVS has in its subordination the National Veterinary Laboratory, State Inspection on Veterinary Preparations, Border and Transport State Veterinary Service, Food and Veterinary Audit Service, and regional services: 10 County, 34 District, 4 City State Food and Veterinary Services. The National Veterinary Laboratory is the national laboratory for official control of animal and public health and carries out or co-ordinates all the relevant tests. NVL includes the Food Control Laboratory, Bacteriology, Virology, Serology Departments and Department of Pathological Anatomy and Histology.

The Central Infectious Disease Control Centre consists of:

1. Chief – Deputy Director of the State Food and Veterinary Service;
2. Deputy Chief – Head of the Animal Health Department of the State Food and Veterinary Service;
3. Members:
    - 3.1. Deputy head of the Animal Health Department of the State Food and Veterinary Service,
    - 3.2. Chief veterinarian – epizootologist of the Animal Health Department of the State Food and Veterinary Service,
    - 3.3. Head of the Public Health Department of the State Food and Veterinary Service,
    - 3.4. Head of the Information/Informatics Department of the State Food and Veterinary Service,
    - 3.5. Director of the National Veterinary Laboratory,
    - 3.6. Head of the Department for Infectious Diseases of the Lithuanian Veterinary Academy,

3.7. Director of the Lithuanian Veterinary Institute.

Regional Infectious Disease Control Centres are located in the offices of County and District SFVS.

County Infectious Disease Control Centres consist of:
1. Chief – Chief of the County State Food and Veterinary Service;
2. Members:
   2.1. Head of the Animal Health Department of the County State Food and Veterinary Service,
   2.2. Chief veterinarian of the Animal Health Department of the County State Food and Veterinary Service responsible for the identification of animals,
   2.3. Head of the Public Health and Market Supervision Department of the County State Food and Veterinary Service,
   2.4. Head of the Laboratory Department of the County State Food and Veterinary Service,
   2.5. Chief epizootologist of the City State Food and Veterinary Service.

District Infectious Disease Control Centres consist of:
1. Chief - Chief of the District State Food and Veterinary Service;
2. Members:
   2.1. senior veterinarian,
   2.2. senior specialist – inspector of foodstuffs.

In total, in the activities of the Infectious Disease Control Centres may be involved 171 employees of the State Food and Veterinary Service.

A Steering Committee will be set up to oversee the project implementation. The Steering Committee will meet once in a quarter and it will include the representatives of SFVS, NVL, Ministry of Agriculture, the EC Delegation in Vilnius and the National Aid Co-ordinator.

5. Detailed Budget

Project Components	***Investment Support***	***Institution Building***	***Total PHARE (I+IB)***	***National Co-financing***	***Total***
Twinning and Training package		0.45	0.45		0.45
Supply Component	5.469		5.469	1.823	7.292
Service Contract 1	0.065		0.065	0.022	0.087
Service Contract 2	0.1305		0.1305	0.0435	0.174
Total	**5.6645**	**0.45**	**6.1145**	**1.8885**	**8.003**

The Phare amount is binding as a maximum amount available for the project. The ratio between the Phare and national co-finance amounts is also binding and has to be applied to the final contract price. The national co-financing commitment is a tax-excluded net amount.

6. Implementation Arrangements

6.1. Implementing Agency

The Implementing Agency is the CFCU. The CFCU will be responsible for tendering and contracting. The responsibility for project preparation, implementation and control will remain in the recipient institution.

PAO: Mr. Z. Pajarskas, CFCU Director
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The following persons will act as the contact persons from the State Food and Veterinary Service:

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6.2 Twinning

The Twinning Team will be located at the State Food and Veterinary Service. The counterparts of the PAA will be:

SFVS:
Dr. Petras Maciulskis (SPO)
Deputy Director
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NVL:
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Fax + 370 5 272 90 73
nvl@is.lt

The PAA will be working at the State Food and Veterinary Service (SFVS) and at the National Veterinary Laboratory (NVL).

6.3. Non-standard aspects

No no-standard aspects are foreseen. The PRAG will strictly be followed. For the twinning component, the Twinning manual will be fully applied.

6.4. Contracts
There are four tendering operations foreseen:

Value of the Twinning Covenant:	0.45 MEUR
Value of the Supply Tender:	7.292 MEUR, including 1.823 MEUR of national co-financing
Value of the Service Contract 1:	0.087 MEUR, including 0.022 MEUR of national co-financing
Value of the Service Contract 2:	0.174 MEUR, including 0.0435 MEUR of national co-financing

7. Implementation Schedule

Component	Start of Tendering	Start of Project Activity	Project completion
Twinning Component	2Q/03	4Q/03	4Q/04
Supply Component	2Q/03	4Q/03	2Q/06
Service Contract 1:	2Q/03	4Q/03	2Q/06
Service Contract 2:	2Q/03	4Q/03	2Q/06

8. Equal Opportunity

The Constitution of Lithuania, the Law on Equal Opportunity between Men and Women, and other legal acts explicitly forbid the discrimination on the basis of sex, nationality, and religion. A Controller on equal opportunities between men and women is appointed by the Seimas (the Parliament).

The institution involved in the project execution will observe equal opportunity of men and women in its recruitment and human resources development. Vacancies are equally open to both genders. The beneficiary will also ensure equal access of men and women to the project activities and results.

9. Environment

All equipment supplies will respect the relevant environmental standards of the European Union.

10. Rates of Return

Not applicable.

11. Investment criteria

The investment component of this project relates to institution building activities.

12. Conditionality and sequencing

The project is conditional upon the availability of national co-financing.

Facilities suitable for the usage of the supplied equipment are available by the start of supplies for the Investment component.

The project will be sequenced as shown in the Detailed Implementation Chart for the Project.

Annexes to the Project Fiche

1. Logframe Planning Matrix.
2. Detailed Implementation Chart.
3. Cumulative Contracting and Disbursement Schedule for the Project (MEUR).
4. List of Relevant Laws and Regulations.
5. Investment Part Substantiation (Indicative List of Investment Components of the Project).
6. Justification for Investment Components of the Project.
7. Tables on situation of rabies in Lithuania.

Annex 1

Logframe Planning Matrix for Project **Strengthening of Control on Infectious Animal Diseases in Lithuania**	Project name and number	Strengthening of Control on Infectious Animal Diseases in Lithuania LI2003-X-XX
	Contracting Period Expires: 2Q/05	Disbursement Period Expires: 2Q/06
	Total Budget: **8.003 MEUR**	Phare Contribution: **6.1145 MEUR**

Overall objective	**Objectively verifiable indicators**	**Sources of Verification**	**Assumptions**
Strengthening of control on infectious animal diseases in Lithuania in accordance of the EU *acquis*	Control system on Infectious Animal Diseases operating in accordance with the Council Directive 92/119/EEC and other EU *acquis* on animal health	EU Commission: Regular Reports, OJ. Annual Reports of State Food and Veterinary Service (SFVS) and National Veterinary Laboratory (NVL)	
Project purposes	**Objectively verifiable indicators**	**Sources of Verification**	**Assumptions**
To strengthen administrative and technical capacities of Infectious Disease Control Centres and veterinary laboratories via their proper equipment and training of staff in accordance with relevant EC *acquis* on infectious animal diseases. To minimise the number of rabies cases among domestic and wild animals and thereby reduce the possibilities of human infection	Administrative and control authorities under operation at a proper level Fully operational control system as in comparable EU member states.	EU Commission: Regular Reports, OJ. Annual Reports of State Food and Veterinary Service (SFVS) and National Veterinary Laboratory (NVL). Project reports.	Full co-operation between staff in SFVS and NVL as well experts carrying out the project. Trained staff can be retained.
Results	**Objectively verifiable indicators**	**Sources of Verification**	**Assumptions**
- Training programmes prepared, staff adequately trained and re-trained on control of infectious animal diseases and the competence of the staff increased; - Evaluation and analysis of the current control system done and recommendations prepared; - Analysis of working documents completed and detailed working instructions prepared; - Programmes on infectious animal disease control developed; - Study visits conducted; - Equipment purchased and installed; - The National Veterinary Laboratory – officially approved for rabies serology; - Strengthened control of rabies and eradication of the disease in wildlife population in order to avoid spreading the disease into the urban areas and reintroducing the disease to the neighbouring free zones and countries in Europe.	Staff trained and re-trained on control of infectious animal diseases (191) and quality of the work increased; Review of working documents done, detailed working instructions developed and put into force; Recommendations on the infectious disease control system documented in a working paper; The implementation of programmes on infectious animal disease control introduced; Supplies delivered in time and of the proper level of quality, as planned; Number of rabies cases diminished as possible to zero.	Annual Commission report and Lithuanian progress report. Project reports and independent assessments. The National Veterinary Laboratory listed in the Commission Decision 2001/296/EC as the officially approved laboratory.	Sufficient absorption capacity in the beneficiary institutions to effectively utilise project resources. Sufficient budget funds for staffing and operational costs. Trained staff can be retained.

Activities		Assumptions
- To evaluate the current control system on infectious animal diseases and assist in developing the new one; - To develop infectious animal disease control and monitoring programs - To analyse the existing working documents and to prepare detailed working instructions; - To develop and conduct training programmes related to the infectious animal disease control; - To organize study visits in the EU member states; - To procure the equipment for the Infectious Disease Control Centres and the National Veterinary Laboratory; - To procure rabies vaccine baits; - To organise and perform distribution of vaccine baits; - To obtain and assess samples after vaccination.	Twinning package for strengthening of control on infectious animal diseases. One PAA 1 year (12 p/m). Short and medium term experts (15 p/m). A Supply Tender will be organised and will be divided into 6 lots: - Lot 1. Supply of equipment for Infectious Disease Control Centres. - Lot 2. Supply of laboratory equipment for pathological anatomical examination. - Lot 3. Supply of laboratory equipment for diagnostic bacteriology laboratories. - Lot 4. Supply of laboratory equipment for serology laboratories. - Lot 5. Supply of laboratory equipment for virology laboratories. - Lot 6. Procurement and provision of vaccine baits. Two Service contracts: - Contract 1. Distribution of vaccine baits using aircraft. - Contract 2. Obtaining and assessment of samples after vaccination.	Sufficient absorption capacity in the beneficiary institutions to effectively utilise project resources. Sufficient budget funds for staffing and operational costs. Smooth process of procedures concerning the tendering, contracting and implementation.
	Preconditions	
	Suitable Twinning Partner can be found. Continuing sector policy including maintenance responsibilities. National co-financing available. Facilities suitable for the useage of the supplied equipment available.	

Annex 2

Detailed Implementation Chart for the Project

Strengthening of Control on Infectious Animal Diseases in Lithuania

Year	2003												2004												2005												2006								
Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
Twinning																																													
Supply																																													
Service Contract 1																																													
Service Contract 2																																													

Design
Tendering
Implementation

Annex 3

Cumulative Contracting and Disbursement Schedule (Phare Contribution only – 6.1145 MEUR)

Strengthening of Control on Infectious Animal Diseases in Lithuania

	2003		2004				2005				2006		
	30/09	**31/12**	**31/03**	**30/06**	**30/09**	**31/12**	**31/03**	**30/06**	**30/09**	**31/12**	**31/03**	**30/06**	**30/09**
Contracting													
• Twinning	0.45												
• Supply	5.469												
• Service Contract 1	0.065												
• Service Contract 2	0.1305												
Total contracting (cumulative)	**6.1145**												
Disbursement													
• Twinning	0.225	0.27	0.315	0.36	0.405	0.45	0.45	0.45	0.45	0.45	0.45	0.45	
• Supply	3.2814	3.2814	3.281	3.2814	3.2814	3.2814	4.9221	4.9221	4.922	4.9221	4.922	5.469	
• Service Contract 1	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.065	
• Service Contract 2	0.1044	0.1044	0.104	0.1044	0.1044	0.1044	0.1044	0.1044	0.104	0.1044	0.104	0.130	
Total disbursement (cumulative)	**3.6628**	**3.7078**	**3.752**	**3.7978**	**3.8428**	**3.887**	**5.5285**	**5.528**	**5.528**	**5.5285**	**5.528**	**6.114**	

Annex 4

List of Relevant Laws and Regulations

1. Law No I-2110 On Veterinary Activities, adopted on 17 December 1991, with amendments by the Law No VIII–1350, adopted on 7 October 1999, and by the Law No VIII-1793, adopted on 4 July 2000.

2. Law No VIII-500 On the Care, Keeping and Use of Animals, adopted on 6 November 1997.

3. Order No 284 On Approval of Requirements for Control of Certain Animal Diseases and Specific Measures relating to Swine Vesicular Disease, adopted on 24 June 2002 by the Director of the State Food and Veterinary Service (Council Directive 92/119/EEC).

4. Order No 531 On Approval of Requirements for the Control of Foot and Mouth Disease, adopted on 4 December 2001 by the Director of State Food and Veterinary Service (Council Directive 85/511/EEC).

5. Order No 222 On Approval of the Requirements for the Control of Foot and Mouth Disease in Endangered Species, adopted on 14 May 2002 by the Director of the State Food and Veterinary Service (Commission Decision 2001/303/EC).

6. Order No 420 On Approval of the Measures to be Carried out before Releasing the Restrictions Applied in Foot and Mouth Disease Protection and Surveillance Zones, adopted on 19 September 2002 by the Director of the State Food and Veterinary Service (Commission Decision 2001/295/EC).

7. Order No 276 On Approval of Veterinary Requirements for the Control and Eradication of Bluetongue, adopted on 14 June 2002 by the Director of the State Food and Veterinary Service (Council Directive 2000/75/EC).

8. Order No 497 On Approval of the Rules of Notification of Animal Diseases in the Republic of Lithuania, adopted on 12 November 2001 by the Director of State Food and Veterinary Service (Council Directive 82/894/EEC).

9. Order No 16 On Approval of Rules for Drafting of Programs for the Eradication and Monitoring of Certain Animal Diseases, adopted on 10 January 2002 by the Director of the State Food and Veterinary Service (Council Decision 90/638/EEC).

10. Order No 4-199 On Approval of Rabies Control and Eradication Programme, adopted on 15 November 1996 by the State Veterinary Service.

11. Order No 283 On Approval of the Requirements for Control of Classical Swine Fever, adopted on 21 June 2002 by the Director of the State Food and Veterinary Service (Council Directive 2001/89/EC).

12. Order No 293 On Approval of the Requirements for Granting Status of a Country and a Territory Free from Classical Swine Fever, adopted on 2 July 2002 by the Director of the Statae Food and Veterinary Service (Council Directive 80/1095/EEC).

13. Order No 387 On the Avian Influenza Contingency Plan, adopted on 21 December 2000 by the State Food and Veterinary Service (Council Directive 92/40/EEC).

14. Order No 88 On the Procedure for the Targeted Funding of the Special Rural Support Programme, adopted on March 2001 by the Ministry of Agriculture.

15. Order No 465 On Approval of Documents for Reimbursement of Expenses and Losses, which have Occured Eradicating Focuses of Contagious Animal Diseases, adopted on 31 October 2001 by the Director of the State Food and Veterinary Service (Council Decision 90/424/EEC).

16. Order No 152 On Approval of the Statute for the Infectious Disease Control Centre of the State Food and Veterinary Service, adopted on 03 April 2002 by the Director of the State Food and Veterinary Service.

Investment Part Substantiation **Annex 5**

Indicative List of Investment Components of the Project

	Indicative Phare Budget	**Indicative national Co-financing**	**Total Budget (EUR)**
Equipment for pathological anatomical examination (NVL & 4 regional labs)			
Adjustable autopsy table with lift for large animals (2 units)	48000	16000	64000
Adjustable autopsy table for small animals (2 units)	27000	9000	36000
Stationary autopsy table (7 units)	63000	21000	84000
Transportable autopsy table for large animals (5 units)	18750	6250	25000
Transportable autopsy table for small animals (2 units)	3750	1250	5000
Wall mounted dissecting sink (5 units)	28125	9375	37500
Work station for the gross examination (5 units)	99750	33250	133000
Autopsy room furniture (Special autopsy room sitting and standing height cabinets, wall cabinets, for instruments, reagents, clothes and other means storage)	93750	31250	125000
Adjustable system for large animal transport (5 units)	52500	17500	70000
Electronic floor scale (5 units)	5625	1875	7500
Table scale (5 units)	1875	625	2500
Refrigerator/freezer for specimens storage (5 units)	45000	15000	60000
Refrigerator for biological material storage (5 units)	97500	32500	130000
Autopsy saw (5 units)	8250	2750	11000
Bone saw (5 units)	6750	2250	9000
Vice for head fixation (5 units)	3375	1125	4500
Fluorescent magnifying work lamp (5 units)	1875	625	2500
Autopsy and dissection instruments (5 units)	18750	6250	25000
Autopsy accessories	18750	6250	25000
Autoclave for decontamination of disposal material (5 units)	120000	40000	160000
Autoclave for instrument sterilization (5 units)	46875	15625	62500
Boots washing equipment (5 units)	13125	4375	17500
Washing and disinfection equipment (5 units)	45000	15000	60000
Total for 5 laboratories (NVL and 4 reg lab.)	**867375**	**289125**	**1156500**
Equipment for diagnostic bacteriology laboratory of NVL			
Vortex Mixer (2 units)	900	300	1200
Shaker (2 units)	4500	1500	6000
Water bath (2 units)	1800	600	2400
Centrifuge (1 unit)	1500	500	2000
Incubator (10 units)	18750	6250	25000
Incubator for larvae cultivation (2 units)	7500	2500	10000
CO_2 Incubator (1 unit)	3375	1125	4500
Laminar (5 units)	45000	15000	60000
Water Purification System (2 units)	12000	4000	16000
Refrigerators (4 units)	12000	4000	16000

	Indicative Phare Budget	Indicative national Co-financing	Total Budget (EUR)
Fridge (10 units)	4500	1500	6000
Autoclave (2 units)	25500	8500	34000
Colony counter (2 units)	3000	1000	4000
General laboratory supply (automatic pipettes, laboratory glassware, Petri dishes, timer, laboratory plastic ware, personal safety means and laboratory benches, seating)	22500	7500	30000
Computers, special programs (5 units)	7500	2500	10000
Microscope (1 unit)	6000	2000	8000
Equipment for decontamination of waste water	97500	32500	130000
Total for NVL:	**273825**	**91275**	**365100**
Equipment for diagnostic bacteriology laboratories in 4 regions			
Vortex Mixer (4 units)	1800	600	2400
Shaker (4 units)	9000	3000	12000
Water bath (4 units)	3600	1200	4800
Centrifuge (4 units)	6000	2000	8000
Incubator (4 units)	7500	2500	10000
Computers, special programs (4 units)	6000	2000	8000
CO_2 Incubator (2 units)	6750	2250	9000
Laminar (4 units)	36000	12000	48000
Water Purification System (4 units)	24000	8000	32000
Refrigerators (4 units)	2400	800	3200
Fridge (4 units)	9000	3000	12000
Autoclave (4 units)	51000	17000	68000
General laboratory supply (automatic pipettes, laboratory glassware, Petri dishes, timer, laboratory plastic ware, personal safety means and laboratory benches, seating)	11550	3850	15400
Microscope (4 units)	24000	8000	32000
Colony counter (4 units)	6000	2000	8000
Total for 4 laboratories:	**204600**	**68200**	**272800**
Total for 5 laboratories(NVL + 4 labs)	**478425**	**159475**	**637900**

Equipment for serology laboratory of NVL			
Photometer (Microplate reader ELISA) (1 unit)	12750	4250	17000
Automated sample separator (1 unit)	3000	1000	4000
Computers, special programs (2 units)	6000	2000	8000
Centrifuge (1 units)	1500	500	2000
Water purification system (1 unit)	6375	2125	8500
Laminar air box (2 units)	9000	3000	12000
Incubator (4 units)	4500	1500	6000
Microscope (1 unit)	3750	1250	5000
Microplate shaker (2 units)	2250	750	3000
Vortex Mixer (2 units)	1500	500	2000
Freezer (2 units)	1500	500	2000
Refrigerator (5 units)	3000	1000	4000

	Indicative Phare Budget	Indicative national Co-financing	Total Budget (EUR)
Washing-machine (1 unit)	1500	500	2000
Equipment for blood testing (Hematology equipment) (1 unit)	15000	5000	20000
General laboratory supply (automatic pipettes, laboratory glassware, Petri dishes, timer, laboratory plastic ware, personal safety means and laboratory benches, seating)	22500	7500	30000
Equipment for continuous supply of electricity power	75000	25000	100000
Total for NVL:	**169125**	**56375**	**225500**

Equipment for serology laboratories in 4 regions			
Photometer (Microplate reader ELISA) (4 units)	30000	10000	40000
Computers, special programs (8 units)	12000	4000	16000
Water purification system (4 units)	24000	8000	32000
Centrifuge (4 units)	6000	2000	8000
Laminar air box (2 units)	9000	3000	12000
Incubator (4 units)	3000	1000	4000
Microscope (1 unit)	2250	750	3000
Microplate shaker (4 units)	4500	1500	6000
Vortex Mixer (8 units)	6000	2000	8000
Freezer (4 units)	6000	2000	8000
Refrigerator (12 units)	7200	2400	9600
Washing-machine (4 units)	6000	2000	8000
General laboratory supply (automatic pipettes, laboratory glassware, Petri dishes, timer, laboratory plastic ware, personal safety means and laboratory benches, seating)	30000	10000	40000
Total for 4 laboratories:	**145950**	**48650**	**194600**
Total for 5 laboratories(NVL + 4 labs)	**315075**	**105025**	**420100**

Equipment for virology laboratory of NVL			
Double ended autoclave (1 units)	30000	10000	40000
Homogenization incl. adapter (2 units)	2250	750	3000
Laminar air box(3 units)	38250	12750	51000
Immunofluorescence microscope with accessories for photo documentation (2 units)	27000	9000	36000
CO2 incubator (2 units)	12000	4000	16000
Autoclave (2 units)	18000	6000	24000
Incubator (4 units)	15000	5000	20000
Refrigerators (6 units)	4500	1500	6000
Sterilizing ovens (2 units)	3750	1250	5000
Freezer for biological material storage (2 units)	18000	6000	24000
Vaccu-boy system (4 units)	3000	1000	4000
Laboratory furniture: Laboratory benches and seating: (laboratory tall cabinets and wall cabinets, laboratory chairs, laboratory tables for cells culture, balance tables, other laboratory tables, safety cabinets).	30000	10000	40000

	Indicative Phare Budget	Indicative national Co-financing	Total Budget (EUR)
Ultrahomogenisator (1 units)	1125	375	1500
Washing and disinfection equipment (1 units)	2625	875	3500
Microplate washer (3 units)	4500	1500	6000
Microplate shaker (3 units)	2700	900	3600
pH-meter (2 units)	1500	500	2000
Balance (2 units)	7500	2500	10000
Centrifuge (3 units)	4500	1500	6000
Water bath (3 units)	1500	500	2000
Decontamination equipment with high frequency microwave technology	65250	21750	87000
Vortex Mixer (3 units)	2250	750	3000
Centrifuge refrigerated with rotor (2 units)	12750	4250	17000
Computer with special programs for date registrations and statistical analysis (4 units)	4500	1500	6000
Ventilation equipment with Hepa filters for virology laboratory	300000	100000	400000
Water purification system (1 units)	6000	2000	8000
Pipettes, glassware, plastic ware, vials, timer, microplates	7500	2500	10000
Cryostat for cryosection investigations (1 unit)	18750	6250	25000
Inverse microscope (2 units)	12000	4000	16000
Total:	**656700**	**218900**	**875600**

Equipment for diagnostic of rabies in the NVL & laboratories in 4 regions			
Laminar (rabies investigation) (3 units)	33750	11250	45000
Immunofluorescence microscope with accessories for photodocumentation (rabies investigation) (3 units)	27000	9000	36000
Incubator (rabies investigation) (3 units)	5625	1875	7500
Total for 3 laboratories for diagnostic of rabies	66375	22125	88500
Total for 3 virology laboratories	**723075**	**241025**	**964100**
GRAND TOTAL FOR LABORATORY EQUIPMENT	**2383950**	**794650**	**3178600**

	Indicative Phare Budget	Indicative national Co-financing	Total Budget (EUR)
GRAND TOTAL FOR LABORATORY EQUIPMENT	**2383950**	**794650**	**3178600**
Connection means (Digital telephones, faxes, copiers)	**26550**	**8850**	**35400**
Hardware (Personal computers (60), laptop computers (10), server, network laser printers, skaners) **and software, necessary for infectious diseases control**	**450000**	**150000**	**600000**
Procurement and provision of vaccine baits	**2608500**	**869500**	**3478000**

GRAND TOTAL FOR INVESTMENT COMPONENT	**5469000**	**1823000**	**7292000**

Annex 6

Justification for Investment Components of the Project

Department of Pathological Anatomy and Histology of NVL

In order to fulfil requirements of laboratory diagnostics of infectious animal diseases, it is necessary to strengthen National Veterinary Laboratory and its branches in counties in the sector of pathological anatomical examination of infectious animal diseases, paying attention to the facilities, equipment and professional capacity of the staff in laboratories because all this is very important for the quality and specificity of further examination. Pathological anatomy and histology is the first and very important step in diagnosis of infectious diseases.

Present situation regarding pathological anatomical examination of infectious animal diseases in the Department of Pathological Anatomy and Histology of the National Veterinary Laboratory and autopsy rooms in regional laboratories is not satisfactory. Equipment is old, outdated, not sufficient quantity, not adequate to up-to-date investigations and in a lot of cases not available at all. Facilities and conditions of autopsy rooms are bad. Department of Pathological Anatomy and Histology of the National Veterinary Laboratory will be renovated in 2003. Laboratory for histological examination and autopsy room will be built. It is planned to renovate autopsy rooms in regional laboratories, too. Equipment for the histology laboratory will be delivered as a consequence of PHARE 2002 project *Strengthening of TSE Control System in Lithuania* in 2003. Autopsy equipment and accessories are needed and will not be delivered as a consequence of other projects. The detailed information on equipment, which is needed for pathological anatomical examination is shown in Table 2 below.

At the moment in the Department of Pathological Anatomy and Histology of the National Veterinary Laboratory there are 5 specialists working in field of pathological anatomical and TSE investigations (3 specialists have university veterinary education, technical workers also have veterinary education) and it is enough staff for carrying out such a number of tests per year (see Table 1 below). Number and quality of tests must be increased in future (see Table 1.) and it will be necessary to establish additional job positions. It is planned to establish additional positions for at least 3 persons with university veterinary education and 2 technical workers. All specialists will be trained in field of dissection and examination of infectious animal diseases.

Table 1. Examination of animal diseases in the Department of Pathological Anatomy and Histology of the National Veterinary Laboratory

No	Disease/examination/ preparation	Method of examination	Number of tests in 2001	Expected number of tests per year after Project implementation
1.	Transmissible spongiform encephalopathies (TSEs)	Histology	177	2500
2.	Transmissible spongiform encephalopathies (TSEs)	Chemiluminescense immunoassay	19125	101 000

3.	Dissection with diagnosis confirmation	Dissection	8	200
4.	Preparing of pathological material for the rabies diagnostic	Dissection	235	500
5.	Preparing of material for the rabies oral vaccination effectivity testing	Dissection	142	2000
6.	Dissection and preparing of pathological material for the bacteriological examination of poultry diseases	Dissection	19	1000
7.	Dissection and preparing of pathological material for the virological examination of fish diseases	Dissection	220	500
8.	Histopathological examination of animal diseases (except TSEs)	Histology	-	3000

Table 2. Information on equipment necessary for pathological anatomical examination

Pathological anatomy and histology	**Purpose of the equipment**	**Equipment available at NVL**
Equipment for pathological anatomical examination (NVL & 4 regional labs)		
Adjustable autopsy table with lift for large animals (2 units)	For autopsy	Not available
Adjustable autopsy table for small animals (2 units)	For autopsy	Not available
Stationary autopsy table (7 units)	For autopsy	1 unit 15 years old
Transportable autopsy table for large animals (5 units)	For autopsy	Not available
Transportable autopsy table for small animals (2 units)	For autopsy	Not available
Wall mounted dissecting sink (5 units)	For dissection of tissue	Not available
Work station for the gross examination (5 units)	For gross examination of samples	Not available
Autopsy room furniture (Special autopsy room sitting and standing height cabinets, wall cabinets)	For instruments, reagents, clothes and other means storage	Not available
Adjustable system for large animal transport (5 units)	For animal transport	Not available
Electronic floor scale (5 units)	For weighing	Not available
Table scale (5 units)	For weighing	Not available

Refrigerator/freezer (5 units)	For specimens storage	Not available
Refrigerator (5 units)	For biological material storage	Not available
Autopsy saw (5 units)	For cutting	Not available
Bone saw (5 units)	For cutting	Not available
Vice (5 units)	For head fixation	1 unit
Fluorescent magnifying work lamp (5 units)	For examination of samples	Not available
Autopsy and dissection instruments (5 units)	For autopsy and dissection	1 set 10 years old
Autopsy accessories	Additional means for autopsy	Not available
Autoclave (5 units)	For decontamination of disposal material	Not available
Autoclave (5 units)	For instrument sterilization	Not available
Boots washing equipment (5 units)	For washing of boots	Not available
Washing and disinfection equipment (5 units)	For washing and disinfection of transport and facilities	Not available

Department of Virology of the NVL

Equipment mentioned in Table 4 below will not be acquired from other programs, only from this PHARE program. Purchase of the equipment mentioned in Table 4 below is necessary for strengthening of diagnostics possibilities of Virology department of the NVL. Some equipment is old, not sufficient quantity. With new equipment it will be possible to do the work with virus neutralisation, virus isolation reactions, to work with cell cultures technique, which will enable to perform confirmation of suspected and positive cases of virus diseases. Also majority of EU directives and documents require to detect and to confirm the final diagnosis of virus diseases with VN, VI and other reactions according to the OIE Manual of Standards for Diagnostic Tests and Vacines.

Number of positive rabies cases has increased during five last years, so it is important to renovate diagnostics equipment of NVL, because equipment is old. Also important is to equip regional laboratories with equipment, which will enable to detect positive cases of rabies and secure laboratory work. The concentration of rabies investigations only in NVL is not possible, because there are many samples for investigation with respect to rabies in Lithuania. The delivery of the samples to one laboratory is too expensive. Therefore at least two laboratories of regions, which will be selected according to geographically convenient position, have to be equipped in accordance with EU requirements.

Also equipment is necessary to shorten time for confirmation of rabies negative cases. Now mice's inoculation test continues 30 days. This time period will be shortened till few days, if it will be performed with VN and FAVN tests. Then expenses of human vaccination will be slowd down.

Number and quality of tests must be increased in future and it will be necessary to establish additional job positions. Currently, in Virology Department work five persons: 3 specialists with university veterinary education, 2 laboratory technicians with special education. In future it is planned to hire 3 additional specialists with university education and 4 laboratory technicians with special education.

Table 3. Examination of animal diseases in the Virology Department of the National Veterinary Laboratory

Disease	Methods of examination	Number of samples in 2001	Expected number of tests per year after Project implementation
Rabies	IF VN	1631 -	2000 800
Clasical swine fever	Elisa FAVN NPLA	1937 - -	3000 300 300
Aujeszky's disease	Elisa VN	1495 -	2500 500
Porcine reproductive and respiratory syndrome	Elisa VN	1806 -	3500 400
Swine parvovirus infection	Elisa	526	1500
Swine vesicular disease	Elisa VN	252 -	1000 500
Swine transmissible gastroenteritis	Elisa VN	320 -	1500 300
Swine influenza	Elisa	30	300
Swine rotavirus infection	Elisa	129	300
Infectious bovine rhinotracheitis	Elisa VN	1401 -	3000 800
Bovine viral diarrhoea	Elisa VN	1034 -	3500 800
Foot and mouth disease	Elisa Agent. id.	1652 -	3000 800
Newcastle disease	Elisa HI	1014 -	2000 300
Avian influenza (Fowl plague)	Elisa HI AGID	807 - -	2000 300 200
Avian infectious bronchitis	Elisa VN HI	212 - -	1000 200 400
Infectious bursal disease	Elisa AGID	205 -	1000 300
Avian reovirus infection	Elisa	100	500
Avian encephalomyelitis	Elisa	25	
Egg Drop syndrome	Elisa	60	200
Chicken anemia	Elisa	80	200
Turkey infectious rhinotracheitis	Elisa	12	200
Equine viral arteritis	VN	-	200

Table 4. Information on equipment necessary for virology examination

	Purpose of the equipment	**Equipment available at NVL**
Equipment for virology laboratory of NVL		
Double ended autoclave (1 units)	For establishing the lab of 3 biosecurity level. For decontamination of infected cell culture with virus and materials.	Not available
Homogenization incl. adapter (2 units)	For homogenization of tissue for cell culturing and ELISA	Not available
Laminar (3 units)	2 units for clean cell culture; 1 unit for infected cell culture; Subsidiary equipment for microbiological analysis, for safety of personnel, working with pathogens, isolated form pathological material	Available: 2 units 3 year old
Immunofluorescence microscope with accessories for photodocumentation (2 units)	For rabies fluorescent antibody test (FAT) and virus neutralization (FAVN)	Available: 1 unit 10 year old 2 units 4 year old
CO_2 incubator (2 units)	1 unit will be used for growing of clean cell culture 1unit will be used for infect cell culture cabinets	Available: 3 units 3 year old
Autoclave (2 units)	1 unit for sterilisation of laboratory glassware (ELISA) and cell culture. 1 unit for decontamination of pathology material (ELISA) and cell culture	Not available
Incubator (4 units)	1 unit for ELISA 37°C 1 unit for ELISA 23 °C 1 unit for rabies FAT 37°C 1 unit for cell culture 37°C	Available: 2 units 10 year old
Refrigerators (6 units)	2 unit for storage of ELISA samples 1 unit for storage of rabies FAT, FAVN 2 unit for storage clean cell culture, media.	Available: 2 units 3 year old
Sterilising ovens (2 units)	1 unit for preparation of glassware for clean cell culture, for solutions, suspensions, instruments. 1 unit for preparation of clean glassware and solutions for	Available: 2 units 5 year old

	ELISA	
Freezer for biological material storage (2 units)	1 unit for should be used for sterile culture media and virus 1 unit for infected cell culture, non-sterile solutions, chemical stock.	Available: 1unit -50 ℃ 1 unit -80 °C 3 year old
Vaccu-boy system (4 units)	4 units for washing of micro plate (ELISA- FMD, CSV, AI, Aujezky's)	Not available
Laboratory furniture (Equipment for virology investigation) Laboratory benches and seating: (laboratory tall cabinets and wall cabinets, laboratory chairs, laboratory tables for cells culture, balance tables, other laboratory tables, safety cabinets).	For laboratory of biosecurity levels 2 and 3	Available 15-20 year old
Ultrahomogenisator (1 unit)	For tissue preparation of cell culture	Not available
Washing and disinfection equipment (1 unit)	For clean and infect cell culture of laboratory equipment	Not available
Microplate washer (3 units)	3 units for ELISA	Not available
Microplate shaker (3 units)	2 unit for ELISA 1 unit for cell culture	Available: 1 unit 4 year old
pH-meter (2 units)	1 unit for control pH distillate water and pH solution of ELISA 1 unit for control pH distillate water and pH solution of cell culture	Not available
Weighing Balance (2 units)	1 unit for ELISA 1 unit for cell culture	Not available
Centrifuge (3 units)	1 unit for preparation of sample for ELISA; 1 unit for cell culture sample preparation; 1 unit for Rabies	Available: 2 units 10 -15 year old
Water bath (3 units)	1 unit for clean cell culture; 1 unit for infect cell culture; 1 unit for Rabies cell culture	Available: 1 unit 10 years old
Decontamination equipment with high frequency microwave technology	For decontamination of all biological waste	Not available
Vortex Mixer (3 units)	1 unit for clean cell culture; 1 unit for infect cell culture; 1 unit for Rabies cell culture;	Not available
Centrifuge refrigerated with rotor (2 units)	1 unit for clean cell culture; 1 unit for Rabies cell culture;	Available: 1 unit 2 years old
Computer with special programs (4 units)	1 unit for clean cell culture room (reading and interpreting the results),	Available: 2 units : 2 and 7 year old

	1 unit for ELISA (reading and interpreting the results) 1 unit for infect cell culture room (reading and interpreting the results), 1 unit for rabies cabinet	
Ventilation equipment with Hepa filters for virology laboratory	For the facilities of biosecurity level 3	Not available
Water purification system (1 units)	For investigations of ELISA and cell culture	Not available
Pipettes, glassware, plastic ware, vials, timer, microplates, ice container, ice tubs, microscope slides , covers slips, microscope slide magazin ,mailing boxes	For growing cell culture, solution, suspension, storage samples, for ELISA, for FAT, FAVN.	Available: 1-10 year old
Cryostat for cryosection investigations	For organs from pigs is used for detection of CSV antigen	Not available
Inverse microscope (2 units) With accessories for photodocumentation	1 unit for cell culture with phase contrast optics and photographic facility for clean cell culture morphology 1 unit for cell culture with phase contrast optics and photographic facility for infect cell culture morphology	Available: 1 units 5 year old without photodocumentation system

Virology	**Purpose of the equipment**	**Equipment available at NVL**
Equipment for diagnostic of rabies in the NVL & laboratories in 4 regions		
Laminar (rabies investigation) (3 units)	For safety work	Not available
Immunofluorescence microscope with accessories for photodocumentation (rabies investigation) (3 units)	For fluorescent antibody	Not available
Incubator (rabies investigation) (3 units)	For incubation (FAT)	Not available

Department of Serology of NVL

The Department of Serology of the NVL and regional laboratories perform monitoring of zoonoses and various infectious diseases according to EU legislation, but situation regarding the equipment is very bad. Present situation in Department of Serology of National Veterinary Laboratory and regional laboratories is not satisfactory. Equipment is outdated, not sufficient quantity, not adequate to up-to-date investigations and in a lot of cases not available at all. According to the Strategy for reorganisation of network of the laboratories it is foreseen to reduce the number of regional laboratories from 9 to 4 (Klaipeda, Kaunas, Panevezys, Siauliai) regional laboratories and the NVL. Monitoring and

other investigations will be performed in 4 regional laboratories. Number of serology investigations will be much higher than now. In order to perform sufficent number of tests and guarantee the quality of the analysis the need of new equipment is evident. Also it is foreseen to implement new diagnostic techniques as it is described in EU directives (64/432/EEC, 91/499/EEC). In the future there are plans to participate in the European research projects. The detailed information on serological tests performed in the NVL and regional laboratories is shown in Table 5 and Table 6, respectively.

None project in field of serology was implemented and in the nearest future it is not planned to have project in this field from other resources except this Phare Project. The needed equipment is presented in Table 7.

At the moment in the department are working 3 specialists with university education and 4 laboratory technicians. Afer the implementation of the Project it is foreseen to have more laboratory staff: additionally 2 specialists with university education and 3 laboratory technicians.

Table 5. Serological examination of animal diseases of Serology Department of the National Veterinary Laboratory

No	Diseases	Method of examination	Number of tests in 2001	Expected number of tests per year after Project implementation
1	**Anthrax** (hide) cattle sheep, goats, horses	Ascolli	200	1000
2	**Brucellosis** (serum) cattle, sheep, goats, hare, horses, pigs, wild animals	Agg Absorbtions-Agg BBAT CF ELISA Absorbtions-ELISA	32621 0 12694 77 7322 0	50000 1000 30000 1000 10000 1000
	Brucellosis (milk) cattle	ELISA	789(pooled) 13282(milk probe)	30000(milk probe)
3	**Paratuberculosis** (serum) cattle, sheep	CF ELISA	135 279	200 1000
4	**Leptospirosis** (serum) cattle, sheep, goats, hare, horses, pigs, wild animals	MAT ELISA	6805 0	20000 1000
5	**Enzootic bovine leucosis** (serum) cattle	AGID ELISA	24465 5431(pooled) 41472(serum probe)	40000 60000(serum probe)
	Enzootic bovine leucosis (milk) cattle	ELISA	2181(pooled) 13650(milk probe)	70000(milk probe)
6	**Chlamydiosis** (serum)			

	cattle, sheep, goats, pigs, dogs and cats	CF ELISA	323 -	1500 1000
7	**Equine infectious anaemia** (serum) horses	AGID	5235	8000
8	**Glanders** (serum) horses	CF	4751	7000
9	**Dourine** (serum) horses	CF	945	2000
10	**Mycoplasmosis** (serum) pigs	ELISA	760	2000
11	**Ovine epididymitis** (serum) sheep	CF	74	300

Table 6. Serological examination of animal diseases of serology in 9 regional laboratories

No	Diseases	Method of examination	Number of tests in 9 regional labs in 2001	Expected number of tests per year in 4 regional labs after Project implementation
1	**Anthrax** (hide) cattle, sheep, goats, horses	Ascolli	23876	40000
2	**Brucellosis** (serum) cattle, sheep, goats, hare, horses, pigs, wild animals	Agg BBAT CF ELISA	29680 84480 3477 0	40000 100000 6000 50000
	Brucellosis (milk) cattle	ELISA	-	300000(milk probe)
3	**Paratuberculosis** (serum) cattle, sheep	CF ELISA	0 0	0 2000
4	**Leptospirosis** (serum) cattle, sheep, goats, hare, horses, pigs, wild animals	MAT	2603	5000
5	**Enzootic bovine leucosis** (serum) cattle	AGID ELISA	493076 0	600000 6000(serum probe)
	Enzootic bovine leucosis (milk) cattle	ELISA	0	700000(milk probe)
6	**Chlamydiosis**(serum) cattle, sheep, goats, pigs, dogs and cats	CF ELISA	0 0	1500 1000
7	**Equine infectious anaemia** (serum) horses	AGID	15380	17000
8	**Glanders** (serum)	CF	12150	15000

	horses			
9	**Dourine** (serum) horses	CF	433	2000
10	**Mycoplasmosis** (serum) pigs	ELISA	0	2000

Table 7. Information on equipment necessary for serology examination

Equipment for serology laboratory of NVL	**Purpose of the equipment**	**Equipment available at NVL**
Photometer (Microplate reader ELISA) (1 unit)	reading ELISA test	1 unit 9 y./ out of order
Automated sample separator (1 unit)	Collection of samples	Not available
Computer whit special programs (2 units)	for test results interpretation	Insufficient number
Centrifuge (1 unit)	for blood samples (500-5000 turn)	Available: 1 unit 28 years old
Water purification system (1 unit)	for testing	Not available
Laminar air box (2 units)	for leptospirosis	Not available
Incubator of microplates (4 units)	Incubation of microplates brucellosis, enzootic bovine leucosis testing +5°C+80°C – 4 units	Is lacking
Microscope (1 unit)	for leptospirosis	Available: 34 years old
Microplate shaker (2 units)	5-500 turn /sec ELISA test	Not available
Vortex Mixer (2 units)	200-2500 turn ELISA test and solution	Not available
Freezer (2 units)	for blood samples (-20-50°C)	Not available
Refrigerator (5 units)	for blood samples , diagnostic kits (0-+10°C)	Available: 17-19 years old
Washing-machine (1 unit)		Not available
Equipment for blood testing (Haematology equipment) (1 unit)	for blood testing	Not available
General laboratory supply (automatic pipettes, laboratory glassware, Petri dishes, timer, laboratory plastic ware, personal safety means and laboratory benches, seating)	for sample testing	Lacking
Equipment for continuous supply of electricity	To assure continuous supply of laboratories with electricity power	Not available
Equipment for serology laboratories in 4 regions	**Purpose of the equipment**	**Equipment available**
Photometer (Microplate reader ELISA)	reading ELISA test	Not available

(4 units)		
Computer whit special programs (8 units)	for test results interpretation	Is lacking
Water purification system (4 units)	for testing	Not available
Centrifuge (4 units)	for blood sample (500-5000 turn)	Available: 3 unit 32 years old

Department of Diagnostic Bacteriology of NVL

It is planned to reorganize laboratories of the State Food and Veterinary Service decreasing the number of county laboratories from 9 to 4. As a result the number of tests performed in NVL and four county laboratories will increase. The microbiological tests of hazard diseases, such as tuberculosis and paratuberculosis, will be performed only at NVL.

The equipment in the Bacteriology Department of NVL as well as in the laboratories of counties is old, purchased 10-30 years ago. The State Food and Veterinary Service never had project in diagnostic field. In order to improve diagnostic of animal diseases, ensure the quality of performed tests, prevent spread of zoonozes and infectious diseases, improve the health of animals and poultry, it is necessary to purchase modern laboratory equipment. The equipment for Bacteriology Department and 4 regional laboratories listed in Table 9 will not be delivered as a consequence of other projects.

At the moment in the department are working 3 specialists with university education and 2 laboratory technicians. Afer the implementation of the Project, it is foreseen to have more laboratory staff: additional 2 specialists with university education and 4 laboratory technicians.

Table 8. Bacteriology tests performed at the NVL and regional laboratories

Disease	National Veterinary Laboratory, in 2001	9 laboratories in counties, in 2001	Expected number of tests at NVL per year after Project implementation	Expected number of tests at 4 regional labs per year after Project implementation
Salmonellosis	1974	8215	6500	6500
Confirmation of Salmonella spp. culture	51	0	300	0
Coliform diseases	749	3413	2500	1700
Pasteurellosis	2	442	250	750
Tubercullosis	67	47	200	0
Listeriosis	5	1	1000	1000
Confirmation of Listeria spp. culture	1	0	200	0
Campilobacteriosis	1328	1073	3000	3000
Confirmation of Campylobacter spp. culture	0	0	400	0
Staphylococcal infections	817	1329	1000	2000
Streptococcal infections	804	1868	1500	3000

Clostridial diseases	713	169	900	0
Pseudomonosis	176	218	300	800
Different bacterial diseases	807	598	900	1500
Confirmation of bacterial culture	20	0	300	0
Fungal diseases	78	256	100	450
Mastiting milk	179	14107	1000	20000
Bacterial resistance to antimicrobial substances	497	1880	1000	5000

Table 9. Information on equipment necessary for bacteriology examination

Diagnostic bacteriology of NVL	**Purpose of the equipment**	**Equipment available at NVL**
Vortex Mixer (2 units)	1 unit dilution mixing, 1 unit of samples for TBC analysis	Available: 1 unit, 2 years old
Shaker (2 units)	samples preparation	not available
Centrifuge (1 unit)	TBC analysis	not available
Incubator (10 units)	culture incubation in various temperature 1 unit (22^0C), 1 unit (30^0C), 5 unit (37^0C) - mycobacterium, salmonella, campylobacter 2 unit (42^0C) salmonella, campylobacter 1 unit (44^0C) salmonella, campylobacter	Available: 7 units, 20-30 years old
CO_2 incubator (1 unit)	*Campylobacter* incubation	not available
Laminar (5 units)	TBC analysis, patolog. material of preparation Subsidiary equipment for microbiological analysis, for safety of personnel, working with pathogens, isolated form pathological material	Available: 2 units, 6 and 9 years old
Water Purification System (1 units)	media preparation, for washing lab. glassware	not available
Freezer (4 units)	for TBC samples, for patolog. materials samples	not available
Refrigerators (10 units)	5 units keeping of media, 3 units keeping of media;	Available: 8 units 10-37 years old

	2 units keeping of media	
Autoclave (2 units)	decontamination of samples	Available: 2 units, 14 years old
Equipment for decontamination of waste water	Decontamination of waste water from laboratories	Not available
Colony counter (2 units)	Counting of bacterial colonies	Available: 2 units, 7 years old
General laboratory supply (automatic pipettes, laboratory glassware, Petri dishes, timer, laboratory plastic ware, personal safety means and laboratory benches, seating)	samples preparation, dilution of samples, for growing culture, 2 biosafety lab investigation	
Computer whit special programs (5 units)	registration, printing and report preparation, collection of information, statistical data analysis	Available: 1 unit, 6 years old
Light dissection microscope, (1unit)	Microscopical methods of identification of agent	Available: 1 unit, 7 years old

Equipment for bacteriology laboratories in 4 regions	**Purpose of the equipment**	**Equipment available**
Vortex Mixer (4 units)	dilution mixing salmonella, campylobacter TBC analysis	2 years old
Shaker (4 units)	samples preparation	Not available
Water bath (4 units)	Incubation for keep media in right temperature	Available: 5 years old
Centrifuge (4 units)	TBC analysis	Available: 10 – 12 years old
Incubator (4 units)	culture incubation	Available: 15 years old
CO_2 Incubator (2 units)	for anaerob., and *Campylobacter* incubation	Available: 3 years old
Laminar (4 units)	TBC analysis patolog. material preparation. Subsidiary equipment for microbiological analysis, for safety of personnel, working with pathogens, isolated form pathological material	Available: 7 – 10 years old
Water Purification System (4 units)	media preparation for washing lab. glassware	Available: 5 – 8 years old
Freezer (4 units)	keeping of TBC analysis and patolog. material	Available: 5 years old

Refrigerators (4 units)	keeping of media and diagnostic	Available: 10 years old
Autoclave (4 units)	decontamination of pat. material	Available: 10 years old
General laboratory supply (automatic pipettes, laboratory glassware, Petri dishes, timer, laboratory plastic ware, personal safety means and laboratory benches, seating)	dilution, for growing culture, 2 biosafety lab investigation	Lacking
Computer whit special software (4 units)	registration, printing and report preparation, collection of information, statistically data analysis	Not available

Annex 7

Tables on situation of rabies in Lithuania

Table 1. Prophylactic vaccination of domestic animals

Number of animals (thousands)			
Year	**Dog**	**Cattle**	**Cat**
1989	157,2	9,7	12,0
1990	158,0	7,6	12,8
1991	150,9	3,0	13,0
1992	132,0	2,0	5,0
1993	113,4	4,1	2,9
1994	128,1	1,0	2,6
1995	158,2	1,4	2,1
1996	169,0	2,2	9,7
1997	174,1	10,2	11,9
1998	203,7	5,1	16,6
1999	210,3	16,1	24,8
2000	228,8	13,7	29,8
2001	194,8	19,6	24,8

Table 2. Oral immunization of foxes in Lithuania

Year	Time of distribution	Distribution by hand (H) air (A), mixed (HA)	Vaccine Producer	Baits Producer	Price of bait, in LTL	Vaccination area (sq. km)	Number of baits		Expenses for distribution, in LTL		Premium for shooting fox	Marker investigation (OTS)	Investigation antibodies (ELISA, SNT)	IFR positive	Virus typing
							Total	Per sq. km	Hand distrib.	Air distrib.					
1995	1	H	SAG-1	VIRBAC	3,6	940	19000	20	5000		25	11	38	38	28
1996	2	HA	SAG-1	VIRBAC	3,6	4000	200000	20-25	15950	5400	25	17	30	30	15

1997	2	HA	SAG-1	VIRBAC	3,6	4338	200000	20-25	20000	6000	-	-	-	-	-
1998	2	HA	Lysvulpen	Lysvulpen	1,6	6375	100000	20-25	20000	25000	-	76	40	40	27
1999	2	HA	SAG-1	VIRBAC	2,5	7000	100000	15-20	23000	25000	-	-	-	-	-
1999	2	H	Rabifox	Dessau-Tornau	2,6	8000	100000	15-20	27000	30000	25	85	30	39	-
2000	2	HA	SAG-1	VIRBAC	2,3	6000	100000	15-20	25000	40000	25	-	-	-	-
2000	2	HA	Rabifox	Dessau-Tornau	2,6	6000	100000	15-20	25000	40000					

Table 3. Rabies cases in domestic and wild animals in Lithuania

Year	Dog	Cat	Cattle	Other domestic animal	Fox	Raccoon dog	Other wild animals	TOTAL
1995	13	15	22	2	23	6	4	80
1996	9	12	46	3	25	7	6	108
1997	9	20	91	4	47	22	13	206
1998	12	20	57	4	72	44	17	226
1999	10	27	49	4	129	125	20	364
2000	43	57	177	8	266	238	61	850
2001	35	56	93	8	197	237	44	677
2002/10/01	33	37	54	5	199	203	55	586

Table 4. Human rabies in Lithuania

Area	Year	Number of cases	Source of infection
Vilnius	1960	1	Dog
Kaisiadorys	1962	1	Fox
Svencionys	1965	1	Racoon dog
Kedainiai	1972	1	Badger
Trakai	1979	1	Fox
Joniskis	1992	1	Racoon dog
Trakai	1992	1	Dog
Trakai	1993	1	Cat
Kedainiai	1997	1	Fox
Pasvalys	2000	1	Fox