Standard Summary Project Fiche for the Transition Facility

1. Basic Information

1.1. CRIS Number: 2004/016-925/04-04

Twinning: LT/2004/NS /01

1.1 Title: Development of national ionising radiation measurement infrastructure according to the practice of EU member states

1.2 Sector: Internal Market

1.3 Location: Lithuania

2. Objectives

2.1 Overall Objective(s):

The overall objective of this **1.5 MEUR** institution building and investment project, of which **0.12 MEUR** is provided from national co-financing, is to develop necessary infrastructure to ensure free movement of goods by providing reliable measurements in ionising radiation field to increase effectiveness of operation of market surveillance and conformity assessment bodies.

2.2 Project purpose:

Correctness and traceability of measurements in ionising radiation field through the relevant conformity assessment infrastructure in metrology field in Lithuania improved and aligned with the relevant Acquis requirements and corresponding to the best EU practices.

2.3 Justification

As it is stated in the 2001 Monitoring Report, attention must be paid to completing alignment in all areas of the free movement of goods *acquis*, and to the development of market surveillance and certification structures. In its 2003 Monitoring Report the Commission stated that “The implementation structures for metrology, accreditation, conformity assessment and market surveillance are all in place but need to be strengthened both in terms of training and equipment.”

Furthermore, attention will be paid to completing alignment, strengthening the administrative capacity, in particular in the area of market surveillance.

3. Description

3.1 Background and justification:

The Law on Metrology came into force in 1996, and the Law on Radiation Protection came into force in 1999. The Government of the Republic of Lithuania approved list of national measurement standards and list of state laboratories, authorised to develop and maintain national measurement standards in 1997. The Government of the Republic of Lithuania approved the State Programme on Radiation Protection on 1

July 2000. State metrology service, Radiation protection centre and Institute of Physics are listed among the authorities and organizations responsible for the implementation of the programme along with the Ministry of Environment, the Ministry of Economy as well as other line Ministries.

Regarding metrology field, the Commission particularly emphasized in its Monitoring Report 2002 that some progress has been made in improving calibration equipment and in strengthening operational capacities and know-how. A lot of effort has already been put into the area, but further improvements as regards implementation of the new EU legislation in the field is necessary.

In the field of ionising radiation emphasis by the EU directives (for example, 96/29/EURATOM, 97/43/EURATOM) is made on conformity assessment of measuring equipment and their calibration and inspection. Due to recent developments in equipment that can be used for measurement of dose rates and supply of such equipment to various customers such as Radiation Protection Centre, Department of Civil Protection etc., there are much more meters in Lithuania now in terms of their type and number. Therefore, national conformity assessment capabilities should match the needs of market surveillance authorities to reduce the time needed for testing and measurement of products in question. As this is important to provide traceability of measurements upon request of users, training of involved personnel has to be performed, certain equipment has to be provided and calibration capabilities and national measurements standard developed. Finally, the laboratory has to be made ready for accreditation at the end of the project.

Therefore, the project aims at strengthening of metrology infrastructure, conformity assessment infrastructure and market infrastructure as relevant to radiation field with an added value to accreditation sector by provision of the specific expertise.

3.2 Linked activities:

Phare 2003 projects 2003.004-341.03.02 on metrology in chemistry and 2003.004-341.03.03 on legal metrology focus on chemical, temperature, mass and length measurements, as well as quality systems in laboratories and software for uncertainty calculation. These projects aim at strengthening of measuring infrastructure in chemistry field, facilitation of application of quality systems in chemical laboratories, training of specialists according to the requirements of the standard ISO 17025 plus field-specific documents produced by various international organisations. Supply of equipment to develop specific measurement capabilities is to be carried out to enable practical implementation of certain annex-related requirements of the measuring instruments directive. The proposed project will have a positive effect on sustainability of the above projects through provision of traceable laser based measurements and will support maintenance of specific quality systems related issues.

As well, this proposed project will contribute to the on-going Phare 2001 LT 01.06.02 Radiation Protection project through enhancing its through development of local knowledge and experience at central level that can be effectively used in maintenance of accreditation of Radiation Protection Centre according to European standards as well as providing RPC with various consultancy and traceability services.

3.3 Results:

The project will achieve the following results:

- National strategy plan reviewed, improved and adopted.
- New secondary legislation developed and adopted.
- Traceability of measurements in ionising radiation ensured.
- Staff of the market surveillance authorities, calibration laboratories as well as other engaged public institutions trained.
- Interlaboratory comparison carried out, data published.
- Calibration methods developed and validated.
- Calibration and measurement capabilities submitted for the review to the regional metrology organisation.
- Equipment, necessary for calibration of radiation measuring equipment purchased and installed.
- Quality system of the national standard laboratory developed according to the requirements of ISO 14000 and ISO 17025, implemented and certified.
- Recommendations for further development produced, plans developed, requests filled in and submitted to relevant institutions.
- Detailed technical specification of equipment to be supplied prepared.
- Data exchange and storage system developed.

3.4 Activities:

3.4.1 Twinning and Training package

Activities

- Reinforcement of state metrology service, relevant conformity assessment bodies, market surveillance authorities and calibration laboratories.
- Development of recommendations on improvement of national legislation to facilitate free movement of goods in particular areas as well as to ensure high level of protection of consumers.
- Review of the recommendations of developed through the previous PHARE projects relevant to the project and refinement of the development plan.
- Preparation of secondary legislation acts or their revision.
- Establishment of a national measurement standard in ionising radiation field.
- Realisation of the unit of radionucleids activity and dissemination of traceability.
- Development and validation of measurement techniques for the activity measurements.
- Analysis of training needs, preparation of training programmes, training of staff, dissemination of information.
- Development of detailed technical specifications for the Supply component.
- Organising and carrying out of international interlaboratory comparison, including publishing of a report.
- Development of calibration and measurement capability data set.
- Development, implementation and certification of the quality system of national standard laboratory according to ISO 17025 and ISO 14000 standards.

Required inputs

One PAA with good administrative skills and good knowledge of written and spoken English for about 16 months, who will administer the project. The PAA will possess the following qualifications:

- Has worked in ionising radiation sphere of his state for 5 years;
- Technical and methodological qualifications in calibration of equipment widely used in the ionising radiation field, other qualifications as required for a quality manager and consultant for the development of training programme and new examination methods based on new equipment.

The task of PAA will consist of acting as a quality manager and consultant for the development of the training programmes and organisation of development of calibration methods. S/he will be expected to carry out the analysis of the current situation in ionising radiation sphere in Lithuania. PAA will co-ordinate preparation of tender documentation for the supply component. In his/her work s/he will be assisted by a team of STEs, who will identify needs for the supply component and carry out necessary training as well as co-ordinate intercomparisons. Therefore, needs assessment will take place at the very beginning of the Twinning component.

Preferably, the PAA should be trained in strategic planning as well, should have sound computer literacy and working in team as well as alone.

Short and medium term experts

A group of Short-term experts for about 8 person/months. Experts have to be familiar with measurements in ionising radiation or laser radiation, have experience in preparing and delivering training programmes, and have good knowledge of spoken and written English. At least some of the experts must originate from a body that has implemented quality system according to the ISO 17025 and recognised internationally. It is necessary that some of the experts have participated in interlaboratory comparisons organised by EUROMET. Additionally, some of the experts must possess procurement experience to provide with assistance in the preparation of the Tender Dossier for the Supply component.

3.4.2 Technical assistance component

Technical assistance will be used for development of data exchange and storage system as well as for development, implementation and certification of quality system of the beneficiary.

3.4.3. Supply component

In order to ensure the implementation of project, supply of equipment for ionising radiation will be procured. Preliminary list is given in the annex 4.

3.5 Lessons learned:

Due to experience from the selection meetings of future Twinning partners, it is useful for them to check the language knowledge of the PAA proposed, especially if the

PAA proposed has not been previously contracted by the institution submitting its candidacy for Twinning. Furthermore, it was noticed that there is a difficulty to find an appropriate long term expert for duration of 18 months or more, so the proposed project will have to be implemented in less than 18 months.

4. Institutional Framework

State metrology service (VMT) under the Ministry of Environment is authorised by the Government of Lithuania to carry out metrology policy, ensure uniformity of measurements, to carry out other scientific, legal and administrative activities. It is also a founder of 5 State Companies – Metrology Centres that are a part of conformity assessment infrastructure with a personnel amounting to three hundred people. Furthermore, together with 5 national standards laboratories (Lithuanian Energy Institute, Semiconductor Physics Institute, Physics Institute, SC Vilnius metrology centre and closed joint stock company Brown&Sharpe – Precizika) it constitutes national metrology institute of Lithuania. VMT is closely co-operating with the Radiation Protection Centre as well to create an added value to the projects implemented by this institution and other relevant bodies.

The direct beneficiary will be State metrology service. As equipment concerned ($4\pi\beta$-γ (NaI) coincidence and liquid scintillation counters, large volume pressurised proportional counter etc. will become property of State metrology service and will be installed in the Institute of Physics.

Implementation of the project will be ensured through the Steering Committee set up by the director of State metrology service with observers from Central project management agency and National aid co-ordinator.

5. Detailed Budget (MEUR)

	Transition Support Facility					
	Investment Support	Institution Building	**Total TF(=I+IB)**	**National Cofinancing ***	**IFI***	**TOTAL**
Twinning		0.720	0.720			0.720
TA component		0.300	0.300			0.300
Supply contract	0.360		0.360	0.120		0.480
Total	0.360	1.020	1.380	0.120		1.500

6. Implementation Arrangements

6.1 Implementing Agency

__PAO__: **Aloyzas Vitkauskas**, Director of the CPMA
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The CPMA will organise carrying-out public procurement procedures in line with the legal requirements.

6.2 Twinning

The beneficiary institution is State Metrology Service and the following person is the responsible officer for the Project and the main contact point for the various aspects of the twinning:

	Osvaldas Staugaitis, Director of State metrology service (VMT)		
Address:		Telephone:	+370 5 213 33 49
	03219 Vilnius	Fax:	+370 5 216 34 69
	Lithuania	E-mail:	info@lvmt.lt

6.3 Non-standard aspects

The Twinning manual and public procurement legislation will be strictly followed.

6.4 Contracts

Three contracting operations are expected in this project:

Value of Twinning Covenant 0.720 MEUR.
Value of Supply component 0.480 MEUR, including 0.120 MEUR of national co-financing.
Value of Technical assistance component 0.300 MEUR.

7. Implementation Schedule

7.1 Start of tendering/call for proposals
3Q 2004
7.2 Start of project activity
2Q 2005
7.3 Project Completion
3Q 2006

8. Sustainability

Since the overall number of personnel in the national metrology institute is high (approximately 400 people), there are no staff related problems envisaged for the time being. Furthermore, completion of the other two Phare 2003 projects will allow directing more staff on the activities of the proposed project.
In 2003 State metrology service invested approximately 200 kEUR in the measuring equipment alone. Cumulative investments in maintenance and up-date are consistently increasing at min. 5% rate per year.
The project will provide local specialists with necessary expertise, knowledge, and know how thus allowing to create a stable basis for further development in related institutions as well.

9. Conditionality and sequencing

The following conditionality, which applies is availability of co-financing. The supply of equipment will have to be started within the three months from the start of the Twinning activities to allow timely procurement of necessary equipment.

ANNEXES TO PROJECT FICHE

1. Logical framework matrix in standard format (compulsory)
2. Detailed implementation chart (compulsory)
3. Contracting and disbursement schedule by quarter for full duration of programme (including disbursement period) (compulsory)
4. Reference to Feasibility/Pre-feasibility Studies
5. List of relevant legislation

LOGFRAME PLANNING MATRIX FOR Project		Programme name and number	
Development of national radiation measurement infrastructure according to the practice of EU member states		Contracting period expires 3Q/2006	Disbursement period expires 3Q/2007
		Total budget: 1.500 Million EUR	Transitional Facility Budget: 1.380 Million EUR
Overall objective	**Objectively verifiable indicators**	**Sources of Verification**	
Traceability of measurements in various fields and conformity infrastructure in metrology field in Lithuania improved and aligned with the relevant Acquis requirements and corresponding to the best EU practices	Acquis requirements in the relevant fields met.	EU Commission's reports Assessment reports of the IMEP programme European and national proficiency testing schemes Conference reports	
Project purpose	**Objectively verifiable indicators**	**Sources of Verification**	**Assumptions**
• Preparation of secondary legislation and enforcement guidelines covering Sectoral Approach as regards metrology to meet present standards. • Improved and implemented national strategy and plans in metrology in radiation • A national measurement standard established and calibration capabilities improved • Strengthened co-operation between public and private sector actors.	• Legislation improved to meet the newest requirements by the end of the project • Progress report to EUROMET and IAEA in 2006 • One national measurement standard approved by the Lithuanian metrology council. • Calibration capabilities approved by regional metrology organisation in 2006.	• Official newspaper of Lithuania • Project reports • Report of regional metrology organisation • Publications in newspapers	Political support from the Government continued.
Results	**Objectively verifiable indicators**	**Sources of Verification**	**Assumptions**
National strategy plan reviewed, improved and adopted. Secondary legislation developed and adopted to implement technical advancements. Traceability of measurements in ionising radiation ensured. Staff of the market surveillance authorities, calibration laboratories as well as other engaged public institutions trained.	• National strategy and plans prepared in 2005 • Secondary legislation adopted and implemented. • Calibration methods developed and validated.	• Project progress report • Reports on the results of interlaboratory comparison • Official newspaper of Lithuania	Necessary legal acts adopted by the relevant institutions

Interlaboratory comparison carried out, data published. Calibration and measurement capabilities submitted for the review to the regional metrology organisation (ERUOMET). Quality system of the national standard laboratory developed according to the requirements of ISO 14000 and ISO 17025, implemented and certified. Recommendations for further development produced, plans developed, requests filled in and submitted to relevant institutions. Detailed technical specification of equipment to be supplied prepared. Data exchange and storage system developed.	• 60 persons trained locally. • 8 persons trained in Member State. • One interlaboratory comparisons run. • Revision of data by EUROMET • 10 seminars run and certificates to participants issued. • Specifications approved by experts. • Quality system certified. • Acceptance report of the data exchange and storage system developed.	• Equipment supply documentation	
Activities	**Means**		**Assumptions**
Reinforcement of state metrology service, relevant conformity assessment bodies, market surveillance authorities and calibration laboratories. Development of recommendations on improvement of national legislation to facilitate free movement of goods in particular areas as well as to ensure high level of protection of consumers. Review of the recommendations of developed through the previous PHARE projects relevant to the project and refinement of the development plan. Preparation of secondary legislation acts or their revision. Establishment of a national measurement standard in ionising radiation field. Realisation of the unit of radionucleids activity and dissemination of traceability. Development and validation of measurement techniques for the activity measurements. Analysis of training needs, preparation of training programmes, training of staff, dissemination of information. Development of detailed technical specifications for the Supply component. Organising and carrying out of international interlaboratory comparison, including publishing of a report.	A pool of short and medium term experts (8 person/months) RTA for 15 months Supply component Technical assistance component		Successful start and smooth implementation of the project.

Development of calibration and measurement capability data set. Development, implementation and certification of the quality system of laboratory according to ISO 17025 and ISO 14000 standards.			
			Preconditions
			• Co-financing available • Experts available

Annex 2

Detailed Implementation Chart for the Project

Year	**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**
Twinning																																	
TA																																	
Supply																																	

Design
Tendering
Implementation

Annex 3

Cumulative Contracting and Disbursement Schedule for the Project – Transition Facility Contribution (1.38 € Million)

	2004				2005				2006			
	31/03	**30/06**	**30/09**	**31/12**	**31/03**	**30/06**	**30/09**	**31/12**	**31/03**	**30/06**	**30/09**	**31/12**
Contracting												
• Twinning						0.710	0.710					
• TA							0.307					
• Supply							0.36					
Total contracting (cumulative)						**0.710**	**1.38**					
Disbursement												
• Twinning						0.4	0.4	0.4	0.57	0.57	0.57	0.72
• TA							0.18	0.18	0.27	0.27	0.30	0.30
• Supply							0.21	0.21	0.32	0.36	0.36	0.36
Total disbursement (cumulative)						**0.4**	**0.79**	**0.79**	**1.16**	**1.20**	**1.23**	**1.38**

Annex 4

Reference to Feasibility/Pre-feasibility Studies

The preliminary calculations were conducted by the VMT after visits to reference laboratories of the member states. The preliminary calculations below were done in 2004, but the list and amount of allocations for each item will be finalised in co-operation with the Twinning experts.

Indicative list of the Investment Components of the Project

	Indicative Transition Facility Budget	**Indicative National Co-financing**	**Total Budget (MEUR)**
Investment Component			
Establishment of national measurement standards of activity: A) $4\pi\beta$-γ (NaI) coincidence and liquid scintillation counters B) large volume pressurised proportional counter C) internal gas counting system D) gamma spectrometer with large efficiency HPGe detectors, cables, computers, software etc.	0,36	0,12	0.48
Total for Investment Component	**0.36**	**0.12**	**0.48**

Annex 5

List of Relevant Laws and Regulations

Council Directive 96/29/EURATOM of 13 May 1996 Basic Safety Standards for Protection of the Heath of Workers and the General Publics Against the Dangers Arising from Ionizing Radiation

Council Directive 97/43/EURATOM of 30 June 1997 on Health Protection of Individuals Against the Dangers of Ionizing Radiation in Relation to Medical Exposure, and repealing Directive 84/466/EURATOM Council Directive

Council Directive of 27 November 1989 on informing the general public about health protection measures to be applied and to be taken in the event of a radiological emergency (89/618/EURATOM)