

## **Standard Summary Project Fiche – IPA decentralised National programmes**

### **1. Basic information**

1.1 CRIS Number: TR2009/0301.02

1.2 Title: **Supply of chemical metrology equipment to TUBITAK UME**

1.3 ELARG Statistical code: **01**

1.4 Location: **TURKEY**

#### **Implementing arrangements:**

1.5 Implementing Agency:

The Central Finance and Contracts Unit (CFCU) will be the implementation agency of this project and will be responsible for all procedural aspects of the tendering processes, contracting matters and financial management, including payment.

The director of the CFCU will act as Programme Authorizing Officer (PAO).

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1.6 Beneficiary (including details of SPO):

Scientific and Technological Research Council of Turkey

National Metrology Institute (TUBITAK UME)

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#### **Financing:**

- 1.7 Overall cost (VAT excluded)<sup>1</sup>: EUR 3,000,000  
1.8 EU contribution: EUR 2,550,000  
1.9 Final date for contracting: 2 years after the signature of the FA  
1.10 Final date for execution of contracts: 4 years after the signature of the FA  
1.11 Final date for disbursements: 5 years after the signature of the FA

## 2. Overall Objective and Project Purpose

2.1 Overall Objective: The overall objective is the better functioning of the EU-Turkey Customs Union Agreement regarding the free movement of goods as well as to facilitate the implementation of *acquis communautaire* in quality of life related areas such as environmental, health and consumer protection and food safety

2.2 Project purpose: The purpose is to improve institutional capacity of TUBITAK UME in order to help Turkish laboratories carrying out environmental and food analysis to produce traceable and comparable measurement results, leading to improvements in quality of life, and facilitating the adoption of *acquis* related to free movement of goods. In this respect, TUBITAK UME's infrastructure will be improved by supplying needed equipments to conduct TR080209 project activities.

### 2.3 Link with AP/NPAA / EP/ SAA

#### AP

In AP 2008 document (2008/157/EC), the following issues are indicated as the medium-term priorities:

- Enhance laboratory and control capacities in the food safety, veterinary and phytosanitary domain in particular as regards reference laboratories, residue testing (including control plans) and sampling procedures
- Continue to transpose and implement the *acquis* related to the framework legislation, international environmental conventions and legislation on nature protection, water quality, chemicals, industrial pollution and risk management and waste management.
- Pursue integration of environmental requirements into other sectoral policies

#### NPAA

Chemical metrology can be linked to the *acquis* based on the following NPAA priorities:

- NPAA 2007-2013 (12.2007.2.06, 12.2007.2.10, 12.2007.2.11, 12.2008.2.04): analysis of foodstuff in terms of their harmful chemical content,
- 01.2008.2.06, 01.2008.2.07 of NPAA 2006: establishment of national authorities for the implementation of EU directives on GLPs, determination of hazardous effects of goods, presentation of safe products in order to save public health and environment.
- NPAA 2007-2013 (01.2008.2.08, 01.2008.2.09): regulations on the supply

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<sup>1</sup> The total cost of the project should be net of VAT and/or other taxes. Should this not be the case, the amount of VAT and the reasons why it should be considered eligible should be clearly indicated (see Section 7.6)

detergents and surface active substances used in detergents, and procedures and principles that should be applied in order to protect environment and human

#### 2.4 Link with MIPD

In the most recent Multi-Annual Indicative Planning Document (MIPD) 2008-2010 for Turkey, the adoption of a revised programmes for transposition and implementation of the acquis by transposition of framework legislation, international environmental conventions, and legislation on nature protection, water quality, air quality, Industrial Pollution Control and waste management, environmental impact and strategic impact assessment, chemicals and GMOs, climate change, strengthening of the relevant institutions, implementation of EU health and food safety related standards in food production and food-processing establishments, Implementation of residues control programmes are foreseen. In addition to the priorities in the fields of agriculture and environment, Institution Building support may also be provided in the Free Movement of Goods (support for quality assurance at testing and calibration laboratories) for the transposition and implementation of the acquis.

#### 2.5 Link with National Development Plan (where applicable)

Improvement in food is included in 9<sup>th</sup> National Development Plan 2007-2013 as a major priority under the EU Accession Process heading. It has been reported that implementation of EU norms and standards for food safety will increase the life quality of Turkish people (Please refer to list number 458 - Development of integrated and accurate information systems related to Environment and improvement of surveillance, control and reporting infrastructure). It has been reported that knowledge and technology intensive areas such as defense, aviation, space, chemicals, materials and plant genetics will be developed and importance will be given to production of high value-added chemicals in order to increase the production of high value-added goods with the aim of raising the competitiveness of the economy and obtaining a higher share from world exports (Refer to list number 530 and 534).

#### 2.6 Link with national/ sectoral investment plans(where applicable)

2002-2006 Quality Infrastructure country report suggests TUBITAK UME to improve in networking within Turkey. TUBITAK UME has found to have very limited competence in the report. However, TUBITAK UME has significantly increased the number of researchers as well as activities in chemical metrology. Additionally, stakeholders have been progressively involved in planning of future developments in metrology in chemistry, in particular in the consultations for the TR080209 and this project. Further progress is conditioned on technical capabilities and concrete services that TUBITAK UME is able to provide to national laboratories. Hence, the TR08022009 will support TUBITAK UME for better networking in Turkey and this project will add new measurement capacity.

### **3. Description of project**

#### 3.1 Background and justification:

The need to enhance the quality of chemical measurements for the improvement of quality of life related areas such as environment, health and consumer protection and food safety has been recognized with the approval of the TR080209 project entitled “Improving chemical and ionising radiation metrology”. In order to achieve the main objective, it is crucial to supply the necessary equipment needed.

The project TR080209 under IPA 2008 programming is accepted and to be started by the end of 2009. In the scope of this project national cooperations with stakeholders are also continuing. The stakeholders and some governmental organizations related to the activities of the project are being informed and the preliminary negotiations about the activities are being shared. As mentioned in the needs assessment document in detail, TUBITAK MRC Food and Environment Institutes' capabilities and the experts will be issued for some of the project activities. The protocols between TUBITAK UME and other TUBITAK institutes regarding the responsibilities of those institutes will be signed in the near future. It has been decided that one of the experts for long term training under the activities of TR080209 project will be employed from the MRC Food Institute. The other experts for long term training will be hired by TUBITAK UME. The applications for the candidates have already been collected. Sufficiently qualified applicants will be invited for the interview. Regarding the conditionality about the facilities for the equipments, the present buildings of both TUBITAK UME and TUBITAK MRC Food Institute will be used for the preparation and the certification equipments.

Turkey as a candidate for the membership to European Union has to adopt and implement the *acquis communautaire*. In the field of free movement of goods, the process relies on the capacity of Turkish quality infrastructure for which metrology is of importance. Metrological activities enable laboratories and economic operators to carry out traceable and comparable measurements. Thus metrology has a horizontal impact on the process of alignment of national legislation and the development of institutional infrastructures. Metrology situation in Turkey has been assessed during the screening process under the Chapter 1 "Free movement of goods". The implementing capacity has been found sufficient to a large extent. However, further alignment in the area of horizontal measures is recommended and set up as a benchmark for opening of the negotiations. In Turkey 2008 Progress Report under the free movements of goods, it has been reported that the technical barriers to trade still exist in particular in the area of chemicals and foodstuffs. Furthermore, the progress in the area of metrology had been limited and accreditation and standardisation processes had been delayed. Aflatoxin contamination has been reported as a major problem. A communiqué on the methods of sampling and sample preparation and analysis for official control of toxic/harmful contaminants in foodstuffs have entered into force. However, the capabilities of testing and control laboratories should be improved. Turkey must enhance its capacity in metrology as recommended for the implementation of the EU *acquis*. Under Chapter 27 Environment, overall level of alignment remains low in the fields of chemicals, waste management, and water quality and nature protection.

The implementation of the Turkey - EU Customs Agreement of 1995 is facilitated by mutual recognition of testing and conformity assessment certificates for industrial goods. Similarly, free trade of agricultural products within the EU-Turkey Agricultural Agreement is possible under the condition of acceptance of measurements and certificates. Deficiencies in national capacity in chemical metrology limit the ability of testing laboratories to produce traceable and comparable results needed for the implementation of the *acquis*. Thus, inadequate quality control systems and lack of acceptable certificates result in technical barriers to trade of industrial and agricultural products.

Metrology system in Turkey comprises the fundamental, industrial and legal metrology. TUBITAK UME is the national metrology institute of Turkey. It maintains the national measurement standards, provides metrological services to laboratories and industrial

operators and supports testing, conformity assessment and accreditation activities in the country. TUBITAK UME is well advanced in the area of classical physical measurements where TUBITAK UME is in a position to provide a wide range of traceable and internationally recognized calibration and measurement services. Unfortunately, metrological capacity in the field of chemical metrology lags behind, weakening the potential of testing laboratories, and by extension, handicapping export-oriented industries that require internationally recognized measurement and testing services in the fields of food safety and environmental control. TUBITAK UME is a member of the European Association of National Metrology Institutes, EURAMET, and a representative of Turkey in the European analytical chemistry network (EURACHEM). TUBITAK UME has achieved recognition of 351 calibration and measurements capabilities (CMCs) under the terms of the Mutual Recognition Arrangement of the International Committee for Weights and Measures (CIPM MRA) in all fields of physical measurements however CMC entries for chemical measurements are still under preparation. In order to increase the capabilities of TUBITAK UME in the field of chemical metrology, the infrastructure of the institute must be improved to produce reference materials which are not available from other producers and of crucial importance for the national goods exported to EU countries. Deficiencies in the capacity in chemical metrology limit the ability of national testing laboratories to produce traceable and comparable results needed for the implementation of the acquis. Thus, inadequate quality control systems and lack of acceptable certificates result in technical barriers to trade of industrial and agricultural products. For example, Turkey is an important exporter of foodstuff of non-animal origin, such as fruits and vegetables, to the EU. The quality compliance of country specific export food (e.g. dried vegetables, hazelnut, pistachio etc.) should be proved in respect to relevant EU legislation. Since 2002, due to a number of problems being encountered especially to prove food quality and safety, figs, hazelnuts, pistachios and certain derived products originated in or consigned from Turkey have been subjected to safeguard control when imported into the EU.

There is a strong demand in enhancing quality control systems in Turkey. The availability of institutional and measurement capacity in chemical metrology will respond to testing laboratories' needs. TUBITAK UME could provide certified reference materials (CRMs) and reference measurements to secondary level laboratories which on their term make available quality assurance tools for field laboratories. In order to satisfy quality requirements such as method validation, internal and external quality control, individual laboratories need reference materials, CRMs and proficiency testing schemes. For some tests, the CRMs are available from other countries. However, it is not possible to find CRMs for a number of food samples of products produced in Turkey and exported to the EU. Other environmental samples such as soils and sediments have specific matrices and shall be locally developed.

The aim of the project is to facilitate the better functioning of the EU-Turkey Customs Union Agreement and implementation of the acquis under the chapters "Free Movement of Goods" as well as "Food Safety, Veterinary and Phytosanitary", "Environment" and "Consumer and Health Protection" by developing new metrological activities carried out in the country. The proposal will have a horizontal impact on both the free movement of goods and quality of life, enabling improvements in quality and safety control and consumer protection in general. The purpose of this project is to supply necessary equipments for the production and certification of reference materials for country specific products and also for the development of new analytical methods not available yet. Consequently, it will enable to overcome the

above mentioned difficulties during trade that Turkish testing laboratories and economic operators face with.

### 3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)

#### a) Project Impact

The proposed project will support to the establishment of new capabilities of TUBITAK UME by TR080209 to provide metrological services not available in the country. The equipment needed for the production and certification of reference materials will be supplied to TUBITAK UME to produce CRMs for country specific products. For example, certified food reference materials will support national food laboratories to overcome difficulties that they are facing now when they issue export oriented testing certificates. Similarly, the environmental control system will benefit by the development of Turkey specific materials (starting with soils) which will be never included in the production list of foreign producers.

#### b) Catalytic effect:

The project will have a catalytic effect on the implementation of TR080209. The effective use of supplied equipment will produce CRMs and validated methods. Direct users of these services are Turkish laboratories and economic operators which are concerned by the implementation of the harmonised legislation.

The project will have a catalytic effect on the accreditation. It will increase the number of test materials available and thus proficiency testing schemes and extend the scope of test parameters. Turkish Accreditation Agency (TURKAK) will be in a position to organise/request more interlaboratory comparisons for accredited laboratories.

The project will contribute to Turkey's alignment in the area of free movement of goods. Confidence in Turkish certificates will increase when the quality of measurement results is improved. If it is proven that Turkish test results are comparable with results produced in the EU, additional control and safeguard clauses shall be withdrawn.

#### c) Sustainability:

Sustainability of the project results is ensured by:

- The supplied equipment will be used in the approved TR080209 project
- Increasing demand for metrological services due to harmonisation of legislation, higher laboratories' interest in accreditation, export requirements to the EU
- Large number of customers and end users (laboratories, universities, research institutes, industrial operators). The number of national test and analysis laboratories serving in the field of quality of life excluding universities and clinical analysis laboratories is 781 (Ref. Consultative Document, Regulations on the framework of governmental laboratories in Turkey). Such laboratories need to use produced CRMs to ensure the quality of their testing results.

- The networking while making the best use of various competencies that exist in the country.
- The need of quality control of country specific commodities for which Turkey is the leading exporter

d) Cross Border Impact:

Laboratories of all countries - trade partners of Turkey could benefit from the availability of new reference materials with Turkey-specific matrixes. TUBITAK UME is potential CRM provider for neighbouring Middle Eastern and North African countries as well as the European countries for the CRMs which are not available from other producers. Moreover, the development in the TUBITAK UME infrastructure will promote its metrological activities at the international arena.

3.3 Results and measurable indicators:

- 1.1 TUBITAK UME fully equipped for the production of CRM in the identified scope.
- 1.2 TUBITAK UME experts trained to operate new equipments
- 1.3 New certified reference materials of Turkey-specific matrixes available to laboratories
- 1.4 New proficiency testing schemes launched with the use of these reference materials

Indicators for the results:

- New equipment supplied and operational
- At least 8 TUBITAK-UME experts trained to operate new equipments
- First candidate reference materials released by TUBITAK UME in 2012
- At least 5 new types of proficiency testing schemes offered to national laboratories in a period of 5 years after the completion of the TR080209 project.

3.4 Activities:

The mean by which the activities of the project will be performed is a Supply contract. On-site training will be started once the equipment is supplied and put into operation. The production of reference materials, which are not available yet, and finally their use by the end users together with the other activities under the project TR080209, will facilitate the improvement in the quality of life in Turkey and finally the adoption of the acquis related to free movement of the goods. Some of the activities will be carried out in cooperation with TUBITAK MRC Food Institute, and TUBITAK MRC Environment Institute. The existing infrastructure of MRC institutes will also be used for both production and certification of CRMs to be produced.

The following activities will be carried out for the achievement of project purpose within the period of project.

- 1.1 Procurement of equipment needed for the development of the new capabilities in chemical metrology.
- 1.2 On-site training of TUBITAK UME experts on the use of the new equipment.

### 3.5 Conditionality and sequencing:

This project which includes the supply of equipment for the preparation and certification of reference materials shall be started one year after the IPA 2008 technical assistance project, TR080209, entitled “Improving chemical and ionizing radiation metrology” implemented by the European Commission’s Joint Research Centre - Institute for Reference Materials and Measurements (EC JRC-IRMM). The proposed list of equipment will be reviewed and technical specifications of those equipments will be drafted as part of the technical assistance activities. Furthermore, TUBITAK UME will be provided with recommendations on the improvement of existing laboratory infrastructure. Supply of equipment shall be conditional on the availability of appropriate facilities for preparation of reference materials. The activities of the supply project will be completed before TA, TR080209, project finishes.

### 3.6 Linked activities

There are two projects related to the one proposed here. The first one, “Support to the Strengthening of Quality Infrastructure in Turkey”, which should have begun in 2008 with the purpose of a strengthened institutional and infrastructural framework in Turkey to enable better implementation of the acquis regarding the free movement of goods. This project is mainly focused on the training activities with the aim of raising awareness. TUBITAK UME is also partially included in this project to supply experts in the workshops and will participate in relevant activities.

The second project was initiated in 2004 and is entitled “Restructuring and Strengthening of the Food Safety and Control System in Turkey/Establishment of National Food Reference Laboratory (NFRL)” (Project No: TR 0403.03). It concerns the establishment of a reference laboratory for measurements in the field of food safety control. The laboratory will serve as the reference laboratory for Ministry of Agricultural and Rural Affairs (MARA) food control laboratories. There is also another laboratory being established in the field of environment and will serve as the reference as in food reference laboratory. Such projects are compulsory for transferring the metrological activities/knowledge to other laboratories. The abovementioned projects will be supported by technical assistance TR080209 and the supply project proposed with this fiche. Differing from the NFRL project, where only the test materials will be supplied for food materials for the proficiency testing, the purpose of this project is to produce matrix CRMs not only for food, but also for environmental materials for PT providers.

The proposed project is interlinked with the IPA 2008 Technical Assistance project, TR080209 “Improving chemical and ionizing radiation metrology” as explained in 3.5. Technical assistance deliverables namely the reviewed list of equipment, draft technical specifications for equipment to be supplied and recommendations for improvement of TUBITAK UME laboratory facilities will serve as inputs for the supply project.



### 3.7 Lessons learned

The foundation of the chemical metrology department in TUBITAK UME is the outcome of a 6 year long World Bank project to develop Turkey's industrial technology infrastructure. The project, implemented between years 1999 and 2006, allocated approximately 45 million USD in funds for the development of metrology services in Turkey through TUBITAK UME. The funds were used for civil works, equipment procurement, technical assistance, and staff training. The chemical metrology laboratories were purpose-built as part of the civil works component, and approximately 4 million USD was used to equip the laboratories. The execution of the World Bank project, with its size and complexity, has endowed TUBITAK UME with significant experience and expertise in project management, including appropriate procurement mechanisms. The main difficulties were related with the service supplied by the companies. The supplier could not provide efficient service and sometimes failed to operate the equipments effectively. It is very important that the technical specifications of the instruments should be clearly specified in detail to fit the purpose of the project. In addition, maintenance contracts should be included in the tendering process. The equipments should be tendered in separate lots in such a way that each lot will contain instruments that can be supplied from the same company.

#### 4. Indicative Budget (amounts in EUR)

			SOURCES OF FUNDING										
			TOTAL EXP.RE		TOTAL PUBLIC EXP.RE		IPA COMMUNITY CONTRIBUTION		NATIONAL PUBLIC CONTRIBUTION				
ACTIVITIES	IB (1)	INV (1)	EUR (a)=(b)+(e)	EUR (b)=(c)+(d)	EUR (c)	% (2)	Total EUR (d)=(x)+(y)+(z)	% (2)	Central EUR (x)	Regional/ Local EUR (y)	IFIs EUR (z)	EUR (e)	% (3)
Activity 1													
contract 1.1 Supply		x	3,000,000	3,000,000	2,550,000	85	450,000	15	450,000	-	-	-	-
TOTAL IB													
TOTAL INV				3,000,000	2,550,000		450,000		450,000				
<b>TOTAL PROJECT</b>				3,000,000	2,550,000		450,000		450,000				

NOTE: DO NOT MIX IB AND INV IN THE SAME ACTIVITY ROW. USE SEPARATE ROW

Amounts net of VAT

(1) In the Activity row use "X" to identify whether IB or INV

(2) Expressed in % of the **Public** Expenditure (column (b))

(3) Expressed in % of the **Total** Expenditure (column (a))

## 5. Indicative Implementation Schedule (periods broken down per quarter)

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1.1 Supply	2010/III	2011/I	2012/I

All projects should in principle be ready for tendering in the 1<sup>st</sup> Quarter following the signature of the FA

## 6. Cross cutting issues (where applicable)

### 6.1 Equal Opportunity

Equal participation of women and men will be secured through appropriate information and publicity material, in the design of projects and access to the opportunities they offer. An appropriate men/women balance will be sought on all the managing bodies and activities of the programme and its projects.

### 6.2 Environment

The project does not have any potential negative effect to environment as well as to any living bodies. Furthermore, it will assist the environmental protection via producing CRMs which will be used in environmental control laboratories.

### 6.3 Minorities

According to the Turkish Constitutional System, the word minorities encompass only groups of persons defined and recognized as such on the basis of multilateral or bilateral instruments to which Turkey is a party.

This project has no negative impact on minority and vulnerable groups. Training programs and workshops will be held in buildings where access to buildings for handicapped people is possible.

## ANNEX 1 - Log frame in Standard Format

LOGFRAME PLANNING MATRIX For The Project Fiche		Programme name and number	Supply of chemical metrology equipment to TUBITAK UME
		Contracting period expires : FA + 2 years	Disbursement period expires: FA + 5 years
		<b>Total Budget: EUR 3,000,000</b>	<b>IPA Budget: EUR 2,550,000</b>
Overall objective	Objectively verifiable indicators	Sources of verifications	
The overall objective is the better functioning of the EU-Turkey Customs Union Agreement regarding the free movement of goods as well as to facilitate the implementation of acquis communautaire in quality of life related areas such as environmental, health and consumer protection and food safety	<ul style="list-style-type: none"> <li>- Improved implementation of harmonized legislation in the field of free movement of goods, food safety and environmental, health and consumer protection</li> <li>- The number of measurements linked problems related to export of products to EU countries decreased to one third of that encountered now</li> <li>- The number of measurements related problems reported for the domestic market decreased by one half</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- European Commission Country Progress Reports</li> <li>- Publications of Rapid Alert System for Food and Feed</li> <li>- Foreign Trade Secretariat Reports</li> <li>- Reports by both Governmental and Non-Governmental Organizations</li> </ul>	
Project Purpose	Objectively verifiable indicators	Sources of verifications	Assumptions
Project purpose: The purpose is to improve institutional capacity of TUBITAK UME in order to help Turkish laboratories carrying out environmental and food analysis to produce traceable and comparable measurement results, leading to improvements in quality of life, and facilitating the adoption of acquis related to free movement of goods. In this respect, TUBITAK UME's infrastructure will be improved by	<ul style="list-style-type: none"> <li>- TUBITAK UME metrological capabilities are improved and support the implementation of the acquis</li> <li>- The number of laboratories accredited for the chemical analysis in the field of environmental, food safety and life quality doubled</li> <li>- Increased metrological activities and PT providers as well as number of test materials</li> </ul>	<ul style="list-style-type: none"> <li>- CIPM MRA CMC database</li> <li>- EURAMET records</li> <li>- TURKAK records</li> <li>- Individual PT providers reports</li> </ul>	<ul style="list-style-type: none"> <li>- Increased demand for metrological services in the field of chemical metrology due to the implementation of EU regulations and directives</li> <li>- Dedication to the objectives of beneficiary institutions, as well as competent ministries and stakeholders</li> <li>- Governmental support to the public laboratories were supplied to modernize their infrastructure and</li> </ul>

supplying needed equipments to conduct TR080209 project activities.			<ul style="list-style-type: none"> <li>- improve their institutional capacity</li> <li>- The technical assistance should be supplied by a separate project for the justification of equipments and training of the TUBITAK UME experts for the production of CRMs.</li> </ul>
<b>Results</b>	<b>Objectively verifiable indicators</b>	<b>Sources of verifications</b>	<b>Assumptions</b>
1.1 TUBITAK UME fully equipped for the production of CRM in the identified scope 1.2. TUBITAK UME experts trained to operate new equipments 1.3 New certified reference materials of Turkey-specific matrixes available to laboratories 1.4 New proficiency testing schemes launched with the use of these reference materials	<ul style="list-style-type: none"> <li>- New equipment supplied and operational</li> <li>- At least 8 experts trained to operate new equipments</li> <li>- First candidate reference materials released by TUBITAK UME in 2012</li> <li>- At least 5 new types of proficiency testing schemes offered to national laboratories in a period of 5 years after the completion of the TR080209 project.</li> </ul>	<ul style="list-style-type: none"> <li>- Acceptance documents</li> <li>- Training documents</li> <li>- Training reports presented by trainees</li> <li>- TUBITAK UME records</li> <li>- Certificates of the reference materials</li> <li>- TURKAK records</li> <li>- Individual PT providers reports</li> </ul>	<ul style="list-style-type: none"> <li>- The required instruments are available on the market or produced on request</li> <li>- Deliverables of the TR080209 will be achieved as currently planned.</li> </ul>
<b>Activities</b>	<b>Means</b>	<b>Costs</b>	<b>Assumptions</b>
1.1 Procurement of equipment needed for the development of the new capabilities in chemical metrology 1.2. On-site training of TUBITAK-UME experts on the use of the new equipment	<ul style="list-style-type: none"> <li>- Supplies Contract</li> </ul>	EUR 3,000,000	<ul style="list-style-type: none"> <li>- Technical assistance is provided by EC JRC-IRMM under the TR080209 project.</li> </ul>
			<b>Preconditions</b>
			<ul style="list-style-type: none"> <li>• The TUBITAK UME laboratories and facilities have necessary conditions for the operation of the new equipment</li> </ul>

