PROJECT PROPOSAL

PEREZ-GUERRERO TRUST FUND FOR ECONOMIC AND TECHNICAL COOPERATION AMONG DEVELOPING COUNTRIES, MEMBERS OF THE GROUP OF 77
GOVERNMENT OF BRAZIL

Type of project:	Interregional
Title:	SIM EMWG Training and Development
Sector:	[UNDP will insert]
Beneficiaries:	Representatives from National Metrology Institutes from 12 countries in Central and South America that are members of the Group of 77
Duration of project:	February 2009 – July 2009
Estimated starting Date:	20 February 2009
PGTF inputs:	US$ 39,520.00
Other inputs:	US$ 51,340.00
Total cost of project:	US$ 90,860.00

Signed on behalf of:

UNDP _____*[signed]*_____ Date:
Resident Representative

Government :_____*[signed]*_____ Date:
Name
Title e.g. Permanent Secretary - Finance

Implementing Institution: _____*[signed]*_____ Date:
Humberto Siqueira Brandi
SIM president and Director of Scientific
and Industrial Metrology of Inmetro

Part Ia. Situation Analysis

About half of all manufactured products in the world is accounted for by individual items such as aircraft, motor vehicles and computers, together with their component parts. The other half mostly comprises goods manufactured in bulk. Of this, about half is in the automobile industry, other important sectors being aerospace and instrumentation. It is important for the development of the country members of the Group of 77 to become increasingly aware of these market opportunities. For most of these products their performance and perceived quality, and hence their commercial success, is determined by how well they are made. Electrical technology is increasingly being used in manufactured products. The performance of such products is therefore often evaluated by measuring to what extent the electrical quantities depart from specifications.

The field of electrical metrology is also important in the performance evaluation of the electrical power transmission and distribution network of each country. Several electrical quantities need to be measured traceably to generate and distribute electrical power safely, economically and attending quality requirements.

International telecommunication systems work reliably and efficiently, but for high rates of data transmission time scales across the world must be closely coordinated and must not fluctuate from microsecond to microsecond, from minute to minute or from day to day. In addition, traceable radio-frequency measurements need to be done to ensure the security and quality of the communication network.

This is what we call electrical metrology. All these measurements need to be reliable and traceable to a National Metrology Institute (NMI) in each country. This traceability is ensured by periodic calibration of the industry standards in the National Calibration Network of each country. Also, the calibration network standards are sent to the NMI to be calibrated periodically. In order to provide confidence among the traceability chains of each country, international comparisons on electrical quantities are held periodically among the several NMIs of the respective Regional Metrology Organization (RMO). Several RMOs have been setup in many parts of the world. The Interamerican Metrology System (SIM) is the RMO of the Americas.

The Interamerican Metrology System (SIM) resulted from a broad agreement among national metrology organizations from all 34 member nations of the Organization of American States (OAS). Created to promote international, particularly Interamerican, and regional cooperation in metrology, SIM is committed to the implementation of a Global Measurement System within the Americas, in which all users can have confidence.

The objectives of SIM are: (a) cooperate in the development of National Metrology Institutes in each country in the region; (b) contribute to the development of measurement infrastructure required to promote equity in trade; (c) foster competitiveness and quality of the manufacturing sector in order to promote trade and commerce; (d) identify sectors and institutions that can conduct specific multinational activities in support of metrology; (e) contribute to the development of metrological infrastructure required to protect the environment and to promote the general well-being of the population, including its health and safety.

For this purpose, measures taken by the members will help to achieve the following: (a) the establishment of national and regional measurement systems; (b) the establishment of a hierarchy of the national standards of each country and their linkage with regional and international standards; (c) the compatibility of results obtained from measurement processes performed in laboratories within the system; (d) the development of competitive technical and scientific personnel; (e) the collection and distribution of technical and scientific information and documentation; (f) the linkage with the several international organizations specialized in the area of metrology.

SIM has specific working groups each dealing with specific measurement quantities.

The SIM Electricity and Magnetism Working Group (SIM EMWG) is concerned with (a) promoting closer collaboration among SIM laboratories in projects related to electrical metrology and measurement services, (b) optimizing the use of EM resources and services of the SIM laboratories and foster the development of these EM services so they may satisfy regional demands, (c) documenting the traceability of EM measurement systems in SIM laboratories and encourage the regional acceptance of this traceability, in accordance with international definitions and trends, (d) evaluating the current status of the ongoing international comparisons on electrical quantities among the SIM laboratories and studying the future EM comparison needs of SIM laboratories, (e) supervising SIM EM comparisons, taking the necessary measures to expedite them in case of delays, (f) harmonizing procedures proposed by the SIM EMWG to perform EM comparisons of SIM laboratories and (g) evaluating the training and development needs of SIM laboratories.

In order to accomplish the above goals annual meetings have been organized attached to training and development events.

Part Ib. Strategy

The issue addressed by the project is the training and capacity building of representatives of ten (10) countries in the field of electrical metrology, members of SIM EMWG. For that it has been envisaged the organization of an annual meeting of SIM EMWG, of tutorials on electrical metrology, and the participation at the VIII International Seminar on Electrical Metrology (VIII SEMETRO) to be held in June 2009 in the city of Joao Pessoa/Paraiba, in Brazil. This is the only periodic conference in the Americas especially devoted to electrical metrology. Several experts in the field typically attend that conference. International consultants present lectures during the conference. It is an adequate forum for discussing new technology in topics of interest to the SIM EMWG and for exchanging experience. The conference typically occurs in the last three working days of the week. The first two working days of the week are typically devoted to tutorials on electrical metrology by international consultants. The annual meeting of the SIM EMWG is scheduled to be held on Sunday, prior to the training events. The meeting, the tutorials and the conference are aimed at the development of competitive technical and scientific personnel in the Americas.

The project proposed attends the needs of the SIM EMWG whose members include representatives from member countries of the Group of 77. The following countries will

participate at the Project: Argentina, Brazil, Costa Rica, El Salvador, Ecuador, Panama, Paraguay, Peru, Uruguay and Trinidad-Tobago. The SIM EMWG members will be stimulated to present technical papers during the VIII SEMETRO so that technical information exchange may take place.

The SIM EMWG members from the above countries, and that will participate at the present Project are listed below.

Country	Institute	Name	E-mail
Argentina	INTI	Lucas Di Lillo	Ldili@inti.gov.ar
Brazil	Inmetro	Gregory Kyriazis	Gakyriazis@inmetro.gov.br
Costa Rica	ICE	Harold Sanchez	Hsanchez@ice.co.cr
Ecuador	CMFT	Bolivar Aguilera	bolivaraguilera@yahoo.com
El Salvador	LNML	Douglas Edgardo Brito Hurtado	dbrito@ns.conacyt.gob.sv
Panama	CENAMEP	Carlos Sauders	Csauders@cenamep.org.pa
Paraguay	INTN	Robert Duarte	Rob_duarte@hotmail
Peru	SNM-INDECOPI	Henry Postigo Linares	Hpostigo@indecopi.gob.pe
Uruguay	UTE	Daniel Slomovitz	Dslomovitz@ute.com.uy
Trinidad-Tobago	TTBS	Francis Hamilton	Francis.Hamilton@ttbs.org.tt

As a result of the proposed Project it is expected the capacity building, training and development of ten (10) representatives of SIM EMWG members promote the strengthening of electrical metrology activities within the region, increasing the recognition and reliability of metrological services that support international trade. For that the methodology proposed consists of, besides the exchange of experience among participants, the multiplication of such experience in their countries, through national meetings, seminars and other internal activities.

Resources for travel tickets and per diem of the SIM EMWG members listed above (except the Brazilian one who is a member of the host country) will be inputted by PGTF. Resources for the conference registration of those members and the meeting room allocation will be inputted by the Brazilian National Metrology Institute (Inmetro).

Part II. Results Framework

PROJECT RESULTS AND RESOURCES FRAMEWORK

Intended Outcome: Increasing international comparisons on electrical metrology among SIM countries				
• Outcome indicator: Capacity building of ten (10) representatives of SIM EMWG members.				
Project title and number: SIM EMWG Training and Development				
Intended Outputs	**Activities**	**Inputs**	**Budget Line**	**Budget (Year)**
1. Evaluate the ongoing and the future international comparisons on electrical quantities among the SIM laboratories.	1. SIM EMWG Meeting 2. Elaboration of a Report to evaluate the activity.	1.Travel tickets for nine (9) SIM EMWG members 2. Travel ticket for the SIM EMWG member of the host country (Rio de Janeiro X João Pessoa) - **counterpart** 3. Per diem for the SIM EMWG member of the host country (one day) - **counterpart** 4. Per diem for nine (9) SIM EMWG members (one day) 5. Per diem for 3 (three) international consultants (one day) 6. Meeting room (equipment and coffee-break) - **counterpart** 7. Technical men-hours of nine (9) SIM EMWG members (one day) - **counterpart**	0	US$ 18,000.00 US$ 500.00 US$ 90.00 US$ 1,170.00 US$ 750.00 US$ 1600.00 US$ 3,600.00
2. Evaluate the training and development needs of SIM laboratories. This output will be part of a report to be issued soon after the activity execution.	1. SIM EMWG Meeting 2. Elaboration of a Report to evaluate the activity.	_____	_____	___
3. SIM EMWG training and development.	1. Tutorials on electrical metrology (two days) 2. VIII SEMETRO (three days) 3. Certificates of participation in the	1. Assumes execution of input 1 2. Per diem for nine (9) SIM EMWG members (five days) 3. Per diem for the SIM EMWG	[UNDP will insert]	___ US$ 5,850.00 US$ 450.00

	tutorial and conference will be issued to each member.	member of the host country (five days) - **counterpart** 4. Travel tickets for 3 (three) international consultants 5. Per diem for 3 (three) international consultants (five days) 6. Infrastructure for the training events (tutorial and conference registrations, course notes, etc.) - **counterpart** 7. Support for the conference (registration, travel tickets, men-hours and per diem for 10 Inmetro officers) - **counterpart** 8. Technical men-hours of nine (9) SIM EMWG members (five days) - **counterpart**		US$ 10,000.00 US$ 3,750.00 US$ 5,000.00 US$ 22,100.00 US$ 18,000.00
		Execution Fee %	[Leave blank when submitting. UNDP will insert]	[Leave blank when submitting. UNDP will insert]
		Total		**US$ 90,860.00**

Part III. Management Arrangements

Management arrangements.
The project will be implemented by Instituto Nacional de Metrologia, Normalização e Qualidade Industrial (Inmetro). Inmetro has appointed a project coordinator who will report to it, namely, Dr. Gregory Kyriazis, SIM EMWG chairperson, Email: gakyriazis@inmetro.gov.br. All project staff will be appointed by Inmetro and will not hold UNDP contracts. The UNDP Country Office will, on request by SU-TCDC, release an advance equivalent to 90% of budget resources after project approval. Inmetro will produce a report to be submitted to the UNDP Country Office and forwarded to SU-TCDC. SU-TCDC will recommend release of the remaining 10% of the budget by the Country Office. The role of the Country Office will be to facilitate signature of project document, disbursement of 90% of resources, forwarding the report to SU-TCDC and disbursing the final 10% of project funds.

Execution Arrangements. The project will be executed under the National Execution modality (NEX) with the Brazilian Government as Executing Agent and Inmetro as the Designated or implementing institution.

Project Work Plans.
A work plan prepared by Inmetro will be attached as Annex 1 to the Project Document. It will be revised when the first allocation is made.

Monitoring and evaluation; lessons learned.
Progress monitoring will be done by the Executing Agent (Brazilian Government). However, any staff from the UNDP or Perez-Guerrero Trust Fund may undertake monitoring activities in line with managerial roles above.

The project may be audited by the Perez-Guerrero Trust Fund.

Part IV. Legal Context

Standard legal context if a country has signed standard agreement with UNDP. (Country office will provide).

Project Budget

INT/--/K--/95/99 [UNDP will insert] – SIM EMWG Training and Development

Budget "A"

Main Source of Funds: Perez-Guerrero Trust Fund.

Please note that the budget should reflect Perez-Guerrero Trust Fund Resources only. There is a standard format to the UNDP budget which should be followed. Please note that descriptions are for demonstration only. Budget lines and nomenclature to be inserted by UNDP.

Bud. Line	**Description**	**Exe. Agy**	**Total**	**Year 1 (2009)**
	Missions (international travel tickets)	NEX	**US$ 18,000.00**	**US$ 18,000.00**
	Missions (per diem – one day)	NEX	**US$ 1,170.00**	**US$ 1,170.00**
	Missions (per diem – five days)	NEX	**US$ 5,850.00**	**US$ 5,850.00**
	International consultants (international travel tickets)	NEX	**US$ 10,000.00**	**US$ 10,000.00**
	International consultants (per diem – one day)	NEX	**US$ 750.00**	**US$ 750.00**
	International consultants (per diem – five days)	NEX	**US$ 3,750.00**	**US$ 3,750.00**
090	**EXECUTION FEE**			
96.01	***Execution Fee (?%) [Leave blank when submitting. To be inserted by UNDP]***	NEX	**US$**	**US$**
096.99	Line Total		**US$**	**US$**
099	**BUDGET TOTAL**		**US$ 39,520.00**	**US$ 39,520.00**

Annex 1 Work plan.

Work plan for the next [five] months

INT/--/--/-/-/- [to be inserted by UNDP]

Revision: A

Outcome	Output	Activities and Management Actions	Feb/ 2009	Mar/ 2009	Apr/ 2009	May/ 2009	Jun/ 2009	Jul/ 2009
T01	01	Activity 1 (for output 1 of outcome 1) [b/]	XXX	XXX	XXX	XXX	XXX	XXX
		Action 1: Full-equipped meeting room reservation and allocation Responsibility: Gelson Rocha		**Mar/ 2009**				
		Action 2: Travel ticket booking for SIM EMWG members and international consultants Responsibility: Taynah L. de Souza				**May/ 2009**		
		Action 3: Travel ticket issuing for SIM EMWG members and international consultants Responsibility: Taynah L. de Souza					**Jun/ 2009**	
		Action 4: Per diem forwarded to SIM EMWG members and international consultants Responsibility: Gelson Rocha					**Jun/ 2009**	
		Action 5: SIM EMWG Meeting Responsibility: Gregory Kyriazis					**Jun/ 2009**	
T01	02	Same management actions as those reported for Activity 1 (for output 1 of outcome 1)						
T01	03	Activity 1 (for output 3 of outcome 1) Action 1: Tutorial programme definition Responsibility: Gregory Kyriazis and Gelson Rocha	**Feb/ 2009**					

Action 3: Tutorial registration for the SIM EMWG members and international consultants Responsibility: Gelson Rocha	**Feb/ 2009**	**Jun/ 2009**	
Activity 2 (for output 3 of outcome 1) Action 1: Organizing the conference paper submission of the SIM EMWG members and international consultants Responsibility: Gregory Kyriazis	**Feb/ 2009**		
Action 3: Conference registration for the SIM EMWG members and international consultants Responsibility: Gelson Rocha	**Feb/ 2009**	**Jun/ 2009**	
Activity 1 (for output 2 of outcome 1) Action 1: Elaboration of Final Report of the Project Responsibility: Gregory Kyriazis			**Jul/ 2009**