



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

**Orientation for the Report of a Short Term Expert**

## **Project**

**“Quality Infrastructure in Renewable Energy Sources and  
Energy Efficiency in Latin America and the Caribbean”**

**PN. 2011.2026.0 (95069)**

## **REPORT**

**“Workshop about development and  
implementation of accreditation programmes  
for certification bodies in the field of energy  
efficiency and renewable energies in the  
framework of the ISO 17065:2012”**

Buenos Aires, 23<sup>th</sup> – 26th April 2014

Realized by: Imilce Zuta, PTB, Germany



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

**0. INDICE**

<b>1. Executive Summary</b>	<b>3</b>
<b>2. Introduction</b>	<b>4</b>
<b>3. Programme</b>	<b>5</b>
<b>4. Realization and results of the activity</b>	<b>6</b>
<b>5. Revision of Expectations</b>	<b>29</b>
<b>6. Oral Evaluation of the Workshop</b>	<b>31</b>
<b>7. Conclusions</b>	<b>32</b>



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

2. EXECUTIVE SUMMARY

<b>PROJECT</b>	Quality Infrastructure for Renewable Energies and Energy Efficiency in Latin America and the Caribbean
<b>ACTIVITY</b>	Workshop about development and implementation of accreditation programmes for certification bodies in the field of energy efficiency and renewable energies in the framework of the ISO 17065:2012
<b>OBJECTIVE</b>	<ul style="list-style-type: none"> <li>• To present the new requirements of the ISO/IEC 17065:2012 and discuss its interpretation</li> <li>• To exchange experiences in the development and implementation of accreditation programmes for Certification Bodies in the field of Energy Efficiency and Renewable Energies and other fields in which the region is interested in.</li> <li>• To evaluate a certification activity in the field of Energy Efficiency and Renewable Energies.</li> </ul>
<b>EXPECTED RESULTS</b>	<ul style="list-style-type: none"> <li>• Interpretation about the requirements of the current standard ISO/IEC 17065:2012.</li> <li>• Capacities strengthened in the design and implementation of the product certification accreditation programme in the fields of Energy Efficiency and Renewable Energies and others, taking into account current regulations when applicable.</li> <li>• Capacities strengthened in the assessment of product certification activities</li> </ul>
<b>ORGANIZER</b>	IAAC-PTB
<b>DATE OF THE WORKSHOP</b>	23 <sup>th</sup> - 25 <sup>th</sup> April 2014
<b>PARTICIPANTS</b>	IAAC: Miriam Romo – OAE Paola Mársico - OAA PTB: Imilce Zuta Accreditation Bodies Members of IAAC: Responsible or Personnel of the Certification Bodies Accreditation Programme

The participants took knowledge about the certification schemes operated by the Accreditation Bodies, referred to Energy Efficiency and Renewable Energies. The countries which attended the meeting and have Accreditation Programmes for Certification Bodies for Products in Energy Efficiency and Renewable Energies are Argentina, Colombia and Chile and potentially Costa Rica, Ecuador and Paraguay would be further interested in implementing an Accreditation Programme for Certification Bodies for Product in Energy Efficiency and may be also El Salvador, Guatemala and Bolivia.

We had a block in which three Certification Bodies for Products of Programmes of Energy Efficiency in:



## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

- Washing Machines
- Refrigerators
- Air Conditioning

They talked us about the legal framework and key aspects of the certification process, for instance sampling and sampling traceability among others.

On the other hand, the discussion about the ISO/IEC 17065:2012 took into account the different situations of the countries and as an outcome we have got a preliminary common document which contains the interpretation of what we consider key requirements of this document which is currently in revision by the group.

The key subjects were impartiality, liability, process, resources, among others.

The discussion led us to a common interpretation of the requirements, to find out new situations that occur in other countries of the region and to understand them.

Based on this workshop the group has got a document about the interpretation of the ISO/IEC 17065 (currently in process of revision) which will be delivered to the IAAC Certification Body Sub-Committee and agreed to propose a next activity for working jointly with the regulators.

### 3. INTRODUCTION

#### BACKGROUND

In the framework of the project “Quality Infrastructure for Renewable Energies and Energy Efficiency in Latin America and the Caribbean” the realization of activities about certification in the framework of the Renewable Energies and Energy Efficiency (EE) were approved.

The designated persons of IAAC to coordinate these activities are Mrs. Miriam Romo of OAE and Mrs. Paola Mársico of OAA.

#### PREPARATION

The preparation of the workshop was made in coordination with the representatives of IAAC Certification Body Sub-Committee, Mrs. Miriam Romo and Mrs. Andrea Melo in order to define, first of all, the concept of the workshop and then, its programme and content to be presented by the participants and by the experts.

As it was decided to do the workshop in Buenos Aires, Argentina, we had the collaboration from people of the OAA (Argentine Accreditation Body).

The workshop was in charge of:

- a) Mrs. Miriam Romo, OAE



## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

- b) Mrs. Paola Mårsico, OAA
- c) Mrs. Imilce Zuta, PTB

The workshop was proposed with the following blocks:

- a) Situation of the Accreditation Programmes for Certification Bodies for Products in LAC Countries  
For harmonizing the information sent by the participants, it was prepared some guidelines. The presentations were in general very well adjusted to the guidelines established.  
From the attendance group, Chile and Argentina were the countries with more experience in the programmes of Energy Efficiency so they had more time for their respective presentations.
- b) Study about the current version of the ISO/IEC 17065, discussing the points of view of the Accreditation Bodies Representatives from different countries, who attended the meeting. The objective was to have a document with agreed interpretation of the main requirements of the standard.
- c) Present at least two cases of Product Certification Programmes in the field of Energy Efficiency in Household Appliances, specifically in: Lighting and Refrigerators. The lecturers also addressed the subject of Electrical Equipment Safety, considering this a basic subject, which is perhaps preferable to be implemented before beginning the Energy Efficiency Programmes, specially for those countries which are in an initial stage.  
The Certification Bodies for Product – CBP selected for this objective were:
  - Intertek – Argentina
  - IQC and
  - INTI
- d) Finally it was foreseen a plan of activities agreed with participants for continue advancing in these programmes in their corresponding countries and in consequence in the region. See Annexe 1.

Moreover, there were some previous meetings with the experts and the inspection body CIEN CONSULTORES SAC and with the responsible of the organization of the event.

#### 4. PROGRAMME

The structure of the programme is shown in Annex 2 and had three main parts.

##### **Part 1:**

Each participant commented about the main accreditation programmes for certification bodies for products they have or are thinking to have in their countries. The Table 1 shows the results of the discussion.



## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

### **Part 2:**

During the presentation about the requirements of the ISO/IEC 17065:2012 standard and its interpretation, each participant gave its own interpretation. When different interpretations appeared, it generated a discussion around the subject. The observations or comments for some key requirements are shown in Table 2.

### **Part 3**

Finally, representatives of 03 Certification Bodies for Product accredited by OAA made an explanation about the certification activity in energy efficiency for:

- Washing Machines by IQC
- Air Conditioning by IQC
- Refrigerators by INTI
- Sampling in Energy Efficiency Certification by INTERTEK

We also had the presentation of a Laboratory Representative for Lighting who gave us a brief comment about the testing methods for Energy Efficiency in Lighting.

## **5. REALIZATION AND RESULTS OF THE ACTIVITY**

### **Part 1**

During the workshop the experiences of the Representative of the Certification Bodies Accreditation Programme in the fields of Energy Efficiency and Renewable Energies were explained. The summary of this experience is shown in Table 1:



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

Table 1

Country	Current or in process Accreditation Programmes for Certification Bodies for Products, related with Energy Efficiency and Renewable Energies
Argentina	<p>Automobile parts, cement and steel for construction, personnel protection, lighters (typical and cooking machines),</p> <p>Energy Efficiency in Electrical Products.</p> <p><b>In the regulatory sector we have: Refrigerators, Freezers, Incandescent Tungsten Lamp, Ballasted Fluorescent, Single Capped Fluorescent, Double Capped Fluorescent, Air Conditioning, Washing Machines.</b></p> <p><b>In the voluntary sector we have: Electromagnetic and Electronic Ballasts connected to Fluorescent, Phase Motors, Centrifugal Pumps, Electric Water Heaters of Accumulation, Heating for buildings according to electrical transmittance of the envelope, TV Receivers.</b></p>
Bolivia	<p>Minerals</p> <p>Planning EE in Refrigerators and Lighting</p>
Chile	<p><b>Electrical Products: Refrigerators, Freezers, Incandescent Tungsten Lamp, Ballasted Fluorescent, Air Conditioning, Microwave cooking ovens, Clothes Dryers and recently Washing Machines.</b></p> <p>Electronics Products: Televisions, DVD Reproducers, Blue Ray, Music Equipment)</p> <p>Fuel</p> <p>Cement</p> <p>Construction Material</p> <p>Tanks for risky substances</p> <p>Personnel Protective Equipment</p> <p>Extinguishers</p> <p>Medical devices</p> <p>Containers and industrial facilities</p> <p>Containers and water tanks</p> <p>Solar Water Heaters (Collectors)</p> <p>Organic Agriculture</p>
Colombia	<p>Safety of products from the electric sector (40%),</p> <p>Metallic products (13,6%)</p> <p>Automotive products (8,3%)</p> <p>Plastics (Toys), (6.8%)</p> <p>Fuels (5,9%)</p> <p>Water, Food, Agriculture (4,9%)</p>



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

Country	Current or in process Accreditation Programmes for Certification Bodies for Products, related with Energy Efficiency and Renewable Energies
	<p>They have one certification body accredited for Energy Efficiency in Compact Fluorescent according to the RTE-INEN.36:2008. (Ecuadorian Regulation)</p> <p>Nearly the 90% of the certification schemes are regulated.</p>
Costa Rica	<p>Rubber and plastic products Cement and gypsum</p> <p>Electrical material and equipment. Currently it is regulated the certification of compact and circular fluorescents. However the law has prioritized the refrigerators, air conditioning and phase motors The country has developed the Mark of Conformity “Energice”.</p>
Ecuador	<p>Quality and quantity of Liquid Hydrocarbons Safe Installations of Hydrocarbons. Non-destructive testing (ISO/IEC 17020 and ISO/IEC 17025)</p>
El Salvador	<p>Programme “Ahorra Energia”.</p> <p>Agreement with the General Superintendency of Electricity and Telecommunications – SIGET for the use the services of conformity assessment bodies for verifying the application of the technical standards about electrical connections and reconnections in electrical distribution networks</p>
Honduras	<p>Currently they are working on having an Accreditation Programme for Certification Bodies for Products.</p>
Guatemala	<p>Voluntary Programme for Refrigerators</p> <p>An enterprise that manufactures refrigerators has a Testing Laboratory accredited. Energy Star issues a conformity certificate based on the results of this laboratory.</p>
Dominican Republic	<p>No programmes</p>
Paraguay	<p>Meat Certification for exportation, required by Chile Certification of Low Voltage Cables</p>
Peru	<p>Infant Food, PVC Pipes Hotel Services, it is an example of Certification of Processes</p>

During the workshop we had representatives from Argentina and Chile which more than four products involved in a Programme of Energy Efficiency as it is shown in Table 1, so we received enriched information from these countries in terms of how they initiate the regulation in Energy Efficiency, in the





## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

case of Argentina it initiates in 1999, in case of Chile it initiates in 2005. On the other hand, Costa Rica shared with us the incentive policy they implemented in an initial stage for promoting the use of fluorescent lamps they established to sell two fluorescent and pay one, so one was free, moreover they have estimated the save of energy in MW and in MWh per year as an excellent tool to demonstrate the benefit of these programmes. According to the ECA Representative the savings obtained in three years were about 51 MW and 147 500 MW-h/year.

The group agreed the main problem for implementing an accreditation programme for certification bodies for products in Energy Efficiency is to convince the regulators, however some of the strategies we could try would be:

- Establish a sustainable relationship with the corresponding governmental entity, in this case the ministry of energy or equivalent in each country and the related governmental entities of the sector.
- Establish a strategic policy of promotion, which includes economic benefits for the consumers as discounts in the sell price, tax exoneration or others.
- Continuous promotion of the benefits of using these household appliances more efficient in energy.
- If necessary or corresponds makes mandatory for the beginning the classification of a selected household appliance, usually lighting or refrigerator.
- In those countries in which the regulation of electrical devices is in the beginning, the safety is the first step, so the implementation of this requirement could be considered a must to continue with the following step, which could be the awareness for the society about the use of energy efficiency household appliances and the design and implementation of these programmes.
- In the framework of the activities exposed above, the necessity of having conformity assessment bodies as testing laboratories and certification bodies for products becomes a demand.



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

**Photo 1.** Paola Mársico (Facilitator) and Nicolás Fernández (Participant) from OAA –Argentine Accreditation Body and Host Entity of the Event



**Part 2**

After this, Miriam Romo and Paola Mársico exposed about the requirements of the ISO/IEC 17065:2012, which was supported by the facilitation of Imilce Zuta. The information was enriched by the interventions of the participants: representatives from accreditation bodies, evaluators and one representative of the certification body. There were some requirements in which the participants agree since the beginning and other ones in which they had different interpretations or point of view, so in these cases, the discussion arose and finally, the group, as necessary, agreed to propose an interpretation for the requirements we considered to do it.



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

Below, in Table 2 it is written in black the text the group considered it would be good to consider in an interpretation document in order to harmonize it among the members of IAAC. The text in red is just a recommendation of this report.

It was fruitful to share points of view, in some cases there were absolved some doubts and in other ones we arrived to a common understanding as shown in Table 2. The content about the interpretation of the ISO/IEC 17065 is in Spanish in order to have a better understanding about it considering all the participants were Spanish speaker.

This table constitutes a support for the IAAC members who manage the Accreditation Programme of Certification Bodies for Products and according to its consideration to the Certification Body Sub-Committee of IAAC.

**Table 2**

REQUISITO DE LA NORMA ISO/IEC 17065		INTERPRETACIÓN DEL REQUISITO ADOPTADA EN EL TALLER
<b>3. Términos y definiciones</b>		
3.2	Consultoría	Hace una distinción entre los términos producto, proceso y servicio.
3.7	Requisito de Certificación	Implica no sólo los requisitos del producto, sino también otros aspectos tales como los requisitos establecidos en el acuerdo de certificación.
3.9	Esquema de Certificación	Se entiende por requisitos especificados a los requisitos de certificación
<b>4.2 Gestión de la Imparcialidad</b>		



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

4.2.3	Identificación de los riesgos de imparcialidad	<p>La nota 1 constituye una guía, que el Organismo de Certificación de Producto debe, al menos, para su análisis de riesgos cada uno de los factores de la nota 1.</p> <p>Si el Organismo de Certificación de Producto considera que en determinados factores no tiene riesgo deber documentar o sustentar porque no existe un riesgo en dicho factor.</p> <p>Se espera que este análisis de riesgos sea revisado y de ser el caso actualizado periódicamente. (de manera continua). <b>Se espera que el Organismo de Certificación de Producto defina una frecuencia.</b></p>
4.2.6	La imparcialidad en relación con otras partes de la misma entidad jurídica y entidades bajo control de la organización	<p>De acuerdo a la norma el Organismo de Certificación de Producto no puede dar servicios de consultoría a sus clientes, lo cual puede interpretarse que para otros casos si podría prestar servicios a otros (potenciales clientes). , Sin embargo, al ser el Organismo de Certificación de Producto una entidad de tercera parte no podría dar servicios de consultoría en general en el alcance acreditado.</p> <p>Se recomienda tomar como referencia lo establecidos por la norma ISO/IEC 17020 acerca de la imparcialidad.</p>
4.2.7	La imparcialidad en relación con personas jurídicas distintas	Se espera encontrar el cumplimiento de este requisito en el análisis de riesgos
4.2.8	La imparcialidad en relación con personas jurídicas distintas	<p>Estar alerta con laboratorios que soportan a los Organismos de Certificación de Productos.</p> <p>-Se puede tomar como referencia los dos años que se indican en la Nota 1 del requisito.</p>



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

4.3 Responsabilidad Legal y financiamiento		
4.3.1	Responsabilidad y financiación	<p>Con relación al seguro tener en cuenta la cobertura y las exclusiones del mismo respecto del alcance de la acreditación.</p> <p>En caso que el Organismo de Certificación de Productos cuente con un seguro internacional, evaluar si éste tiene cobertura en el país</p> <p>El Organismo de Certificación de Producto debe sustentar el monto asignado (reserva o seguro), evidenciando los aspectos considerados para dicha asignación. Esta reserva debe figurar en el balance general anual de la empresa. Esta reserva no se debe utilizar para otros fines, sino para los previstos en este requisito.</p> <p>Se debe entender por responsabilidades legales errores u omisiones que se derivan de sus operaciones.</p>
4.3.2	Estabilidad financiera	<p>Tener en cuenta que un balance negativo no implica inestabilidad financiera pero puede ser una alerta para investigar otros aspectos que pudieran demostrar una inestabilidad. En estos casos, prever que el personal responsable de las finanzas esté disponible durante la evaluación.</p> <p>En el caso de entidades estatales que no sea autónomas solicitar el presupuesto.</p>



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

4.4 Condiciones no discriminatorias		
4.4.	Condiciones no discriminatorias	<p>No se considera práctica discriminatoria si el Organismo de Certificación de Producto:</p> <ul style="list-style-type: none"> <li>- solicita un adelanto de pago a los clientes que considera o ha calificado como riesgosos.</li> <li>- estratifica su lista de precios dependiendo por ejemplo de: volumen de compra de servicios, fidelidad del cliente</li> <li>- Otorga descuentos</li> </ul> <p>siempre que estas prácticas sean transversales para todos los clientes en función de las políticas establecidas por el Organismo de Certificación de Producto.</p>
4.5 Confidencialidad		
4.5	Confidencialidad	<p>Se entiende por documento legal al acuerdo contractual con el cliente y lo establecido en las regulaciones vinculadas al proceso de certificación, según aplique.</p> <p>Véase 6.1.3</p>
4.6 Información disponible al público		
4.6	Información disponible al público	<p>Un mecanismo para poner a disposición es la publicación de esta información en la página web del Organismo de Certificación de Producto, pero no es el único.</p>
5.1 Requisitos relativos a la estructura		
5.1.1	Estructura que salvaguarda la imparcialidad.	<p>Se espera que se realice un análisis de la imparcialidad con base en la estructura organizacional y funcional del Organismo de Certificación de Producto.</p>



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

5.1.3	Estructura de la organización y alta dirección	Se ha incorporado como requisito la competencia del personal. Se debe entender por actividades de certificación la ejecución de la certificación.
<b>5.2 Mecanismo para salvaguardar la imparcialidad</b>		
5.2.1	Mecanismo para salvaguardar la imparcialidad	<p>Un mecanismo para salvaguardar la imparcialidad es establecer un comité presencial o virtual que incorpore una representatividad equilibrada (en el que no predomine un interés) de las partes interesadas. de acuerdo a la nota 2 de este requisito.</p> <p>El Organismo de Acreditación no puede ser parte de los Comités que el Organismo de Certificación de Producto establezca para salvaguardar la imparcialidad.</p> <p><b>Un evaluador que no pertenezca al programa de acreditación de certificación de productos podría ser parte del Comité antes mencionado.</b></p> <p><b>Véase 4.2.4</b></p> <p>En caso que el Organismo de Certificación de Producto establezca que el mecanismo de salvaguarda de la imparcialidad, es a través del establecimiento de comités, en cada sesión de éstos se espera además de lo indicado en el numeral 5.2.1, que se aborde lo siguiente:</p> <ul style="list-style-type: none"> <li>- Matriz de Análisis de Riesgos de la Imparcialidad o equivalente.</li> <li>- Quejas y apelaciones enfocadas en la afectación de la imparcialidad.</li> </ul> <p>Las actas de sesión de los comités deben incluir el tratamiento, análisis y conclusiones de estos temas.</p>



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

6 Requisitos para los recursos		
6.1.1	Personal del Organismo de Certificación	<p>En determinados países se aceptan acuerdos formales para la actividad laboral.</p> <p>En caso que una persona trabaje para dos organizaciones vinculadas en diferentes horarios, puede ser necesario un acuerdo formal.</p> <p>Se entiende que personal suficiente de personal debe cubrir el alcance de la acreditación y su capacidad operativa. El Organismo de Certificación de Producto debe valorar los retrasos en el otorgamiento del servicio de certificación.</p>
6.1.2.1	Personal del Organismo de Certificación	Status profesional se refiere a nivel profesional
6.1.2.2	Registros de personal	Las autorizaciones aplican para el personal que realiza la evaluación, la revisión y toma la decisión
6.1.3	Contrato con el personal	La declaración de asociaciones previas o actuales aplica para el personal que realiza la evaluación y el que toma la decisión (no comprende al que efectúa la revisión)
6.2	Recursos para la evaluación	<p>Nota 1, primera viñeta, se puede referir a que el esquema de certificación comprenda por ejemplo, algún tipo de inspección, ensayo o auditorías y que el personal del Organismo de Certificación de Producto posea competencia para realizarlas.</p> <p>Una buena práctica sería que los requisitos aplicables de las normas ISO/IEC17020, ISO/IEC 17021 é ISO/IEC 17025 estén establecidos en el esquema de certificación correspondiente.</p>





QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

6.2.2.2. y 6.2.2.3	Recursos externos	<p>En caso que el Organismo de Certificación de Producto emplee un laboratorio de fábrica y no se encuentra acreditado se puede tomar como referencia el documento de CEN/CENELEC</p> <p>La persona designada para evaluar el laboratorio debe poseer similar competencia al analista del laboratorio evaluado.</p> <p>Se mencionó que en el caso que el Organismo de Certificación de Producto realice pruebas en las instalaciones de un laboratorio fabricante se puede requerir un contrato entre el Organismo de Certificación de Producto y el Laboratorio sobre:</p> <ul style="list-style-type: none"> <li>- Calibración de equipos</li> <li>- Empleo de equipos por personal que labora en el Laboratorio Acreditado.</li> <li>- Otros</li> </ul>
6.2.2.4	Recursos Externos	<p>Se entiende que la lista de proveedores aprobados incluye también a los subcontratistas.</p> <p>En el caso de que el Organismo de Certificación de Producto contrata a un OEC, se requiere que establezca criterios para su evaluación.</p>
<b>7. Requisitos del proceso</b>		
7.1	Requisitos del proceso	Se sustituye el término “sistema” por “esquema”.
7.2 y 7.3	Solicitud y Revisión de la Solicitud	Se enfatiza de manera más específica las actividades de solicitud y revisión de la solicitud.



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

7.3.5	Revisión de la solicitud	<p>La omisión de algunas actividades de un proceso de certificación se puede dar en los siguientes casos:</p> <ul style="list-style-type: none"> <li>a) Cuando el Organismo de Certificación de Producto basa su certificación en certificaciones otorgadas al mismo cliente. Por ejemplo en el caso de un proceso de ampliación de alcance de la certificación o cuando una certificación de tipo ya realizada es válida y requerida por el proceso de certificación que está siendo evaluado.</li> <li>b) Cuando el Organismo de Certificación de Producto basa su certificación en certificaciones otorgadas a otros clientes: control de calidad en fábrica (sistema ISO/CASCO 5)</li> </ul> <p>Ejm; En el caso de la certificación de un líquido de freno en envase de volumen 1, en el que la elaboración del líquido se realiza en la fábrica 1 (origen). La certificación del líquido de freno en la fábrica 1 (origen) es válida para las certificaciones de las diferentes presentaciones de volumen del envase de la misma empresa o de diferentes empresas envasadoras.</p>
7.4.1	Evaluación.	<p>El Plan de Evaluación se formula con base en los componentes del esquema de certificación.</p> <p>Usualmente cuando se trata de una evaluación a entidades ya certificadas el plan suele ser el mismo.</p>



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

7.4.2	Evaluación	<p>Los Acuerdos entre Organismo de Certificación de Productos se pueden dar si ´por ejemplo un Organismo de Certificación de Producto “A” emplea documentación emitida por el Laboratorio de un Organismo de Certificación de Producto “A”, la cual es también utilizada por un Organismo de Certificación de Producto “B”.</p> <p>Este requisito aplica en el caso que se requieran evaluaciones previas.</p> <p>Para el establecimiento de los acuerdos de reconocimiento mutuo, se puede tomar como referencia la Guía ISO/IEC 68:2002. Una de las condiciones para el establecimiento de estos acuerdos es que el Organismo de Certificación de Producto debe estar acreditados por un Organismo de Acreditación que haya firmado un ARM con IAF, IAAC, EA o PAC.</p> <p>Estos acuerdos se dan usualmente entre Organismo de Certificación de Productos que operan en el marco de un intercambio comercial, en el marco del cual se hace necesario una certificación de producto en origen y en destino. Otro ejemplo que se puede citar sobre este tema es el de la IEC, en el cual se requiere cumplir con las condiciones establecidas por la red.</p>
7.4.9	Evaluación	En la Nota 1 se destaca que lo que se puede proporcionar es una opinión
<b>7.5 Revisión</b>		
7.5	Competencia del que efectúa la revisión	<p>La evaluación debe ser realizada por personas competentes.</p> <p>El esquema de certificación puede prever que el que firme sea el que decide.</p>



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

7.6 Decisión de la Certificación		
7.6	Competencia del que decide	La revisión debe ser realizada por personas competentes.
7.6.1	Decisión de la Certificación	Se acota que se debe conservar la autoridad en las decisiones relacionadas con la certificación
7.6.3	Decisión de la Certificación	Personas empleadas bajo contrato
7.6.4	Control Organizacional	Es un requisito nuevo.
7.6.6	Control Organizacional	Se requiere que el Organismo de Certificación de Producto cierre el proceso de la conclusión de la certificación sea favorable o no para el solicitante.  Esto debe ser incluido en el esquema de certificación
7.7 Documentación de la certificación		
7.7.2	Documentación de la certificación	La persona que firma el certificado (o algunas de éstas) no necesariamente son las que toman la decisión
7.8 Directorio de los productos certificados		
7.8	Directorio de los productos certificados	Poner a disposición a solicitud implica otorgar también los canales para ello.
7.9 Vigilancia		
7.9	Vigilancia	En el ámbito voluntario, el Organismo de Certificación de Producto diseña el esquema con base en las necesidades del cliente, partes interesadas y con base en ello firma el acuerdo.
7.9.3	Vigilancia	Se demanda que los Organismos de Certificación de Productos ejerzan control sobre el uso de marca. Tener especial cuidado en el caso de productos con marca de conformidad que es impresa en cada producto (no autoadhesivo).  La colocación una marca de conformidad puede ser razonable en certificación de lote y en esquemas que cuenten con vigilancia y evaluación de fábrica.



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

<b>7.10 Cambios que afectan a la certificación de productos</b>		
7.10	Cambios que afectan a la certificación	Comprende también cambios que se pudieran hacer en los costos
7.10.3	Cambios que afectan a la certificación	<p>Los procesos de ampliación y reducción del alcance de la certificación, los cuales pueden estar definidos dentro de los esquemas de certificación, implica ampliar la familia (producto, documento normativo y esquema) o reducirla.</p> <p>Este requisito no se refiere a la reducción de los requisitos que apliquen al producto, puesto que esta situación generaría la modificación del esquema.</p>
<b>7.11 Finalizar, reducir, suspender o retirar la acreditación</b>		
7.11	Finalizar, reducir, suspender o retirar la certificación	<p>Las autorizaciones para el uso de marca se incluyeron principalmente por el ámbito regulado.</p> <p>El retiro o cancelación de la certificación es por decisión del Organismo de Certificación de Producto y la finalización o terminación es a pedido del cliente, lo cual es equivalente a una renuncia voluntaria.</p>
7.11.4	Suspensión de la certificación	Se debe designar a una persona con conocimiento y competente para que formule o comunique al cliente acerca de lo que implica el proceso de suspensión de la certificación
7.11.6	Restablecimiento de la certificación, luego de una suspensión	El restablecimiento de la certificación, luego de una suspensión, puede requerir una evaluación completa del proceso de certificación del producto en cuestión.
<b>7.12 Registros</b>		
7.12	Registros	<p>El periodo de mantenimiento de registros usualmente está establecido por el Organismo de Acreditación. Este periodo puede estar establecido en el esquema de certificación.</p> <p>Se recomienda definir ciclo.</p>



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

7.13 Quejas y apelaciones		
7.13	Quejas y apelaciones	Sólo se abordan los términos “quejas” y “apelaciones”.
8. Requisitos del sistema de gestión		
8.1.2	Opción A	No se demanda expresamente que el Organismo de Certificación de Producto cuente con un manual de calidad
8.1.3	Opción B	La Opción B se establece para dejar en evidencia (a los clientes del OCP) que los Organismos de Certificación de Producto que tienen implementado la norma ISO 9001 implica que cuentan con un sistema de gestión de la calidad, el cual es parte del sistema de gestión de un Organismo de Certificación de Producto con base en la Norma ISO/IEC 17065. Dicho de otra manera, contar solamente con un sistema de gestión ISO 9001 no es suficiente para demostrar la competencia del Organismo de Certificación de Producto.
8.2.3	Documentación general del sistema – Opción A	Se resalta que este responsable sea miembro de la dirección (no puede ser externo o no ser parte de la dirección).

QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

**Photo 2.** Exchange of experiences among the facilitators and the participants about the interpretation of the ISO/IEC 17065 requirements



**Photo 3.** Contributions from the participants



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

**Photo 4.** Discussion about the interpretation of the ISO/IEC 17065 requirements



### Part 3

#### Contribution of the Certification Bodies for Product in Energy Efficiency

*The INTERTEK Representative* told us that since 1998, it has been established that in Argentina, the electrical products has to be certified by a Certification Body accredited by OAA. After this it was established that the testing laboratorios would have to be also accredited.

In general, currently it is required that Certification Bodies are accredited for:

- Safety for electronic devices
- Safety for electrical devices
- Energy Efficiency in eletrical devices
- Safety in toys
- And other ones

The scope in the programme of Energy Efficiency in electrical devices are:





## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

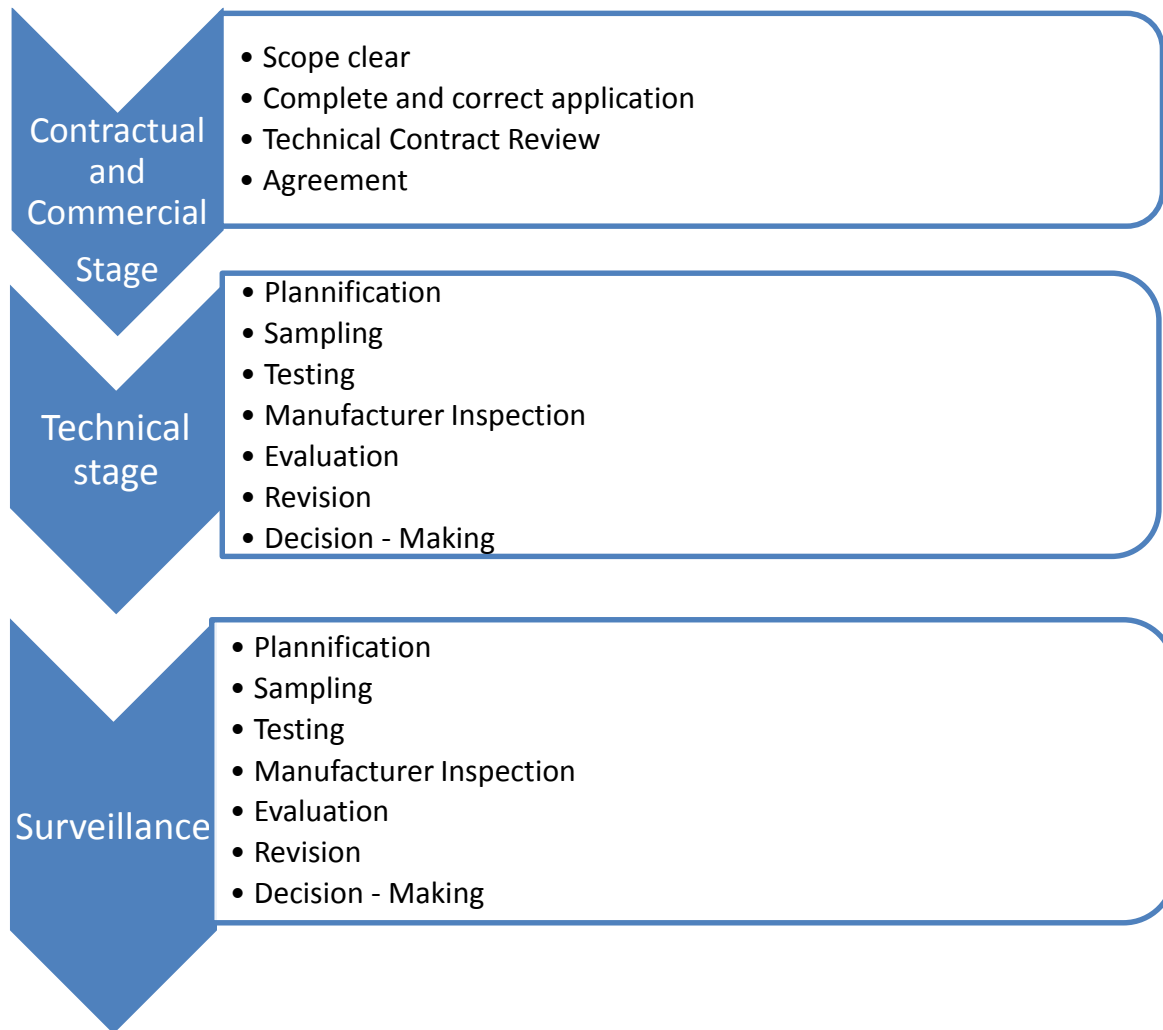
- Lamps
- Refrigerators
- Air Conditioners
- Washing Machines
- Dryers

It seems to be that the next electrical device to be included in the regulatory sector are ballasts for fluorescent lamps. It is also being studied the energy consumption in the use of televisions.



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

**Certification Process in Electrical Safety and Energy Efficiency.**



**Sampling**

The **INTERTEK Representative** showed us the mechanism the use for sampling.

Frst of all they identify adequately the batch to be sampled, taking into accout the traceability information of it, after that in order to assure its representativenes , they took out the number of samples according to a sampling table and acceptation criteria, and choose the ítems by counting randomly, using the method of the balls or making non – influenced questions to the present people.



## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

For identification of the samples they used an inviolable sticker which is put on the item.

Also, they commented us about the criteria they use for selecting non-accredited testing laboratories:

So for the traceability of the sample they consider:

- Labeling Number, using an inviolable sticker.
- Agreement
- Testing Report with photos as evidence

According to this scheme, the identification of the sample is made by the Certification Body, sometimes it could be established that the importer puts the mark of the samples.

### ***Criteria applied to non-accredited laboratories***

- Accredited by OAA or any AB who has signed the ILAC MRA
- To make an assessment to the laboratory with competent technical personnel focusing in chapter 5 of the ISO/IEC 17025
- Establishment a contractual agreement with the laboratory to be subcontracted

The Certification Body can grant a Conformity Certificate with part of the requirements established by the regulation or the standard, however, this situation would have to be distinguished in the Certificate and in the internal documentation which support it

There are resolutions as “Resolución 237 del 2010 INFOLEG” which let to the Certification Body to use laboratories from the manufacturers, in this case it is usual that the conformity assessment scheme is type 5 and includes the witnessing of the execution of the testing methods. (item 7. ISO/IEC Guide 23)

***The IQC Representative*** talked us about the Energy Efficiency Programmes they manage and the legal framework:

### **The Resolution 319/1999 of Energy Efficiency covers:**

- Refrigerators and freezers
- Dryers
- Washing machines
- Dish Washers
- Ovens
- Air conditioners
- Water Heating
- Lighting



## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

### **Energy Efficiency in Washing Machines. Resolution 761/2010**

The reference standard is IRAM 2141:2010

The representative commented us the scheme consists of:

It arrives 04 washing machines for each model, if the results of those tests are OK, they let the importation of the washing machines, putting the name of the importer in the corresponding certificate. After this activity, the verification consists of reviewing the information of the label, because of this it is a "Labeling Certificate".

After implementing an Energy Efficiency Programme in Washing Machines, the level of energy efficiency of the washing machines have improved. Now in Argentina you can find in the commerce refrigerators at least with Level B of energy efficiency. This has been established by the National Direction of Internal Commerce as a mandatory requirement since October 2013.

Note: In Chile, it is mandatory to classify determined household appliances in energy efficiency. The commerce is not restricted to any level.

### **INTI (Governmental Certification Body)**

*The INTI Representative* begins its presentation telling us they certify:

- Toys safety
- Presence of phthalates in toys
- Electrical safety
- Energy Efficiency in washing machines
- Bicycles
- Tires

Respect to the application it is fundamental to determine adequately the concept of model of product, because respect to this information it is going to be defined the initial tests and next surveillances.

### **Testing Laboratories of Energy Efficiency in Lighting**

We have also the presentation of a laboratory in Energy Efficiency in Lighting.

He told us the testing methods for lighting takes long period of time, for instance till 84 days, however it was precised there is no so much tests which evaluates the duration of the lamps.



## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

There is a minimum number of lamps which have to be turned off, if this requirement is not fulfilled by the set of lamps in evaluation, it is declared the no fulfillment of the requirement by this batch of lamps.

With the Programme of Energy Efficiency in Lighting In near future it is expected the majority of the lamps which are used in the country will be fulfilling the standardized requirements

It is expected in near future, in Argentina will be issued the standards for testing stand by TV.

**Photo 5.** Presentation from the Certification Bodies for Product in Energy Efficiency Programmes



### 6. REVIEW OF EXPECTATIONS

At the end of the workshop the team review the fulfillment of the expectations mentioned by the participants and we noticed these were fulfilled as follows:

- Enrich and share experiences
- Harmonization of criteria which could support the evaluations
- Know another certification programmes for product



## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

- To give out experiences in Energy Efficiency and Renewable Energies in order to evaluate its application in other countries
- Strengthen the knowledge and interpretation about the requirements of the ISO/IEC 17065 and its transition plan.

**Photo 6. Group Photo around the place of the workshop**





## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

### 7. ORAL EVALUATION OF THE WORKSHOP

#### Spanish

- Espectacular la experiencia, ha despejado muchas dudas, aclaración sobre los esquemas, requisitos de la certificación, y demás temas que incluye la ISO/IEC 17065.
- Se agradece al PTB por el taller, excelente por la oportunidad de armonizar conocimientos, pues como firmantes de los acuerdos la obligación de operar bajo lineamientos técnicos.
- El taller es de mucha utilidad por los aportes.
- La organización muy buena, el beneficio es la uniformización de los criterios, armonización en la interpretación de la norma.
- Es importante que se tenga en cuenta la regulación pues puede haber complicaciones como en varios lugares.
- Se ha generado un producto lo cual se ve en el resultado de trabajo de utilidad para los asistentes y que será de utilidad. Documento que será para consulta del subcomité de certificación.
- Agradecimiento y el ideal que el intercambio de experiencia está plasmado en un documento.
- El taller ha sido una herramienta de aprendizaje,
- Reconoce que las jornadas de trabajo, ha despejado dudas. Experiencias fabulosas
- Excelente la participación de IRAM.
- El representante del Organismo de Certificación manifestó que trató de ser neutral y pasar la información como parte interesada en el contexto de la norma. Está satisfecho del trabajo y de haber participado y aportado.
- La información recopilada es muy útil para ONAC para nuevos programas.
- Intercambio de información en los mejores términos con mucho respeto.
- Agradecer al OAA, al interés de todos, se ha cumplido lo previsto.



## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

**Photo 7. Group Photo after working**



### 6. CONCLUSIONS.

After concluding the workshop the team arrived to:

- a) Relevance to have a strategic approach to the corresponding representatives of the regulatory agencies, which have in charge the subjects demanded currently by participant countries.
- b) Propose the execution of a joint activity with the regulators in order to promote the relevance to be supported by the accredited conformity assessment activities as needed in a regulatory framework or equivalent.
- c) As one of the result obtained in the ISO/IEC 17020 Workshop was similar to what exposed in b). and considering the majority of the participants who attended this workshop made know their interest in Energy Efficiency in Household Appliances and a few of them in Green Buildings. The idea is to propose a joint activity with the regulators, focusing in promoting they support in the conformity assessment bodies and referred in the corresponding ISO/IEC Standards as the ISO/IEC 17067,





## QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY IN LATIN AMERICA AND THE CARIBBEAN

sharing experiences about certification schemes the countries have adopted. So, as corresponding this certification scheme could be supported by laboratories, inspection bodies (ISO/IEC 17020 Workshop) and certification bodies.

- d) Disseminate the “interpretation about the ISO/IEC 17065 requirements” to the members of IAAC Responsible for the Accreditation Programme of Certification Bodies for Product in order to share with them the content of the discussion about the interpretation of this current standard.
- e) Propose the “interpretation about the ISO/IEC 17065 requirements” document to which the team of the workshop has arrived to the Certification Bodies Sub-Committee of IAAC for its consideration.

**Imilce Zuta, PTB**

12<sup>th</sup> August 2014



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

**ANNEX 1**

**PLAN OF ACTIVITIES**

Activities	Responsible	Date	State
Sending of survey	Miriam & Imilce	31st May 2014	Done
Internal Revision		June 2014	Done
Final Version	Miriam or Andrea & Imilce	By 18th August 2014	Pending
Answer for the Survey by ABs	Answer from ABs mentioning the demand by the the regulatory agencies	By 30th August 2014	Pending
Evaluation of the proposals for doing the workshop ABs + Regulatory Agency Representative	Miriam, Andrea & Imilce	By 10th September 2014	Pending
Concept of Workshop + Registration	Miriam, Andrea & Imilce	By 18th September 2014	Pending
Execution of the Workshop	PTB, IAAC	Third quarter of 2014	Pending



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

ANNEXE 2

**“ Workshop about development and implementation of accreditation programmes for Certification Bodies in the field of Energy Efficiency and Renewable Energies in the framework of the ISO/IEC 17065:2012”**

3 days, April 23 – 25, 2014;

Place: INPI (instituto Nacional de la Propiedad Industrial), Av. Paseo Colón 717, Piso 6, Buenos Aires, Argentina

Time	Activity, Responsible
<b>First Day: 23/04/2014</b>	
08:30 h	Registration
<b>09:00 h</b>	<b>Part 1: Introduction</b>
	Welcome, OAA Representative
	Presentation of the Program and Expectations of the participants Imilce Zuta, PTB
<b>09:30 h</b>	<b>Part 2: Presentation of Experiences</b>
	Presentations of the Certification Bodies Accreditation Programme preferably related in Energy Efficiency and Renewable Energies Accreditaton Body Representatives
<b>10:45 – 11:15 h</b>	<b>Break</b>
	Presentations of the Certification Bodies Accreditation Programme preferably related in Energy Efficiency and Renewable Energies Accreditaton Body Representatives
<b>13:00 h</b>	<b>Lunch</b>
<b>14:00 h</b>	<b>Part 2: Presentation of Experiences (continue)</b>



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

	Presentations of the Certification Bodies Accreditation Programme preferably related in Energy Efficiency and Renewable Energies Accreditaton Body Representatives
	Presentation of the Argentine and Chilean Certification Body Representative Paola Marsico, OAA Chilean Representative, INN
<b>15:30 – 16:00 h</b>	<b>Break</b>
	Presentation of the Argentine and Chilean Certification Body Representative Paola Marsico, OAA Chilean Representative, INN Chilean Representative, INN
<b>Second Day: 24/04/2014</b>	
<b>09:00</b>	<b>Part 3: Interpretation of the requirements of ISO/IEC 17065</b>
	Explanation of the requirements of ISO/IEC 17065, Discussion Paola Marsico, OAA Miriam Romo, OAE Imilce Zuta, PTB
<b>10:45 – 11:15 h</b>	<b>Break</b>
	Explanation of requirements of ISO/IEC 17065, Discussion Paola Marsico, OAA Miriam Romo, OAE Imilce Zuta, PTB
<b>13:00 – 14:00 h</b>	<b>Lunch</b>
	Explanation of requirements of ISO/IEC 17065, Discussion Paola Marsico, OAA Miriam Romo, OAE Imilce Zuta, PTB
<b>15:30 – 16:00 h</b>	<b>Break</b>
	Explanation of New requirements of ISO/IEC 17065, Discussion Paola Marsico, OAA Miriam Romo, OAE



QUALITY INFRASTRUCTURE FOR RENEWABLE ENERGY SOURCES & ENERGY EFFICIENCY  
IN LATIN AMERICA AND THE CARIBBEAN

	Imilce Zuta, PTB
<b>Third Day: 25/04/2014</b>	
<b>09:00</b>	<b>Wrap-up</b>
<b>09:15</b>	<b>Part 3: Interpretation of the requirements of ISO/IEC 17065</b>
	Explanation of New requirements of ISO/IEC 17065, Discussion Paola Marsico, OAA Miriam Romo, OAE Imilce Zuta, PTB
<b>10:45 – 11:15 h</b>	Break
<b>11:15 h</b>	<b>Part 4: Presentation of Experiences Representatives of an Argentine Enterprise (Certification Body for Products Accredited)</b>
	Presentations of the Application of some product certification scheme programme in Energy Efficiency and Renewable Energies Certification Body Representative
<b>13:00 – 14:00 h</b>	Lunch
	Presentations of the Application of some product certification scheme programme in Energy Efficiency and Renewable Energies Certification Body Representative
<b>15:30 – 16:00 h</b>	Break
<b>16:00 h</b>	<b>Next Steps. Evaluation</b> Imilce Zuta