



SAC

AIDE-MÉMOIRE

Working Group Meeting TOWARDS AN INTERNATIONAL ENERGY MANAGEMENT SYSTEM STANDARD

Organized by:

**United Nations Industrial Development Organization - UNIDO
Standardization Administration of the People's Republic of
China - SAC**

Beijing, China, 9-11 April 2008

About UNIDO

The United Nations Industrial Development Organization (UNIDO) is a specialized agency of the UN system providing a wide range of technical assistance services aimed at promoting and supporting the sustainable industrial development of its members and clients. Energy efficiency in industry contributes to decoupling economic growth and environmental impact while reducing industrial energy intensity and improving competitiveness. UNIDO's core industrial energy efficiency program is centred on building the capacity needed within government institutions and industries to effect system optimization approaches in energy system design and operation, and to introduce energy management systems. UNIDO ultimately seeks to establish closer links between business practices for the management of energy and core industry values of cost reduction, increased productivity, environmental compliance and global competitiveness.

About SAC

Standardization Administration of the People's Republic of China (SAC) was established in April 2001 and authorized by the State Council to exercise administrative responsibilities by undertaking unified management, supervision and overall coordination of standardization works in China. SAC represents China to join the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC) and other international and regional standardization organizations. SAC is responsible for organizing the activities of Chinese National Committee for ISO and IEC. SAC approves and organizes the implementation of international cooperation and exchanging projects on standardization.

1. Background

This Working Group Meeting is being convened by UNIDO and SAC for the purpose of contributing to the process of developing an international Management System Standard for Energy through the International Organization for Standardization (ISO). UNIDO initiated a dialogue on the development of an international energy management standard at an expert group meeting on Industrial System Optimization and Energy Management Standards in Industry in March 2007, which included representation from the ISO Secretariat. As the result of that meeting, a request was submitted from the countries represented at the meeting to the ISO Secretariat to consider undertaking work on an international energy management standard. The ISO is in the process of discussing the development of an international Management System Standard for Energy (MSE) and it seems very likely that ISO may commence work on the new MSE during the first half of 2008.

As of March 2007, four countries (Denmark, Sweden, Ireland, United States) had national energy management standards. In addition, China had a draft standard, the Netherlands had an energy management specification, and the European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC) had formed a task force to develop a common standard for the European Union. Since March, additional countries have either substantially completed work on draft national standards (Spain, Thailand) or initiated this process (Korea, Brazil).

In view of the strong international interest in this subject area and its potential impact on industrial energy efficiency worldwide, UNIDO designed and launched a new initiative supporting the development of an ISO Energy Management System Standard while also ensuring that the issues and barriers of government policy makers, industry, and other

concerned stakeholders in developing countries are taken in due consideration in the ISO process.

Within this initiative UNIDO has undertaken two key activities: this international Working Group Meeting and a series of regional studies to identify opportunities and barriers associated with adoption of an ISO MSE in developing countries. The first regional study will be conducted in the South-East Asia region and a first meeting to initiate the development work was held in Thailand in September 2007.

2. Objectives of the Working Group Meeting

The specific objectives of the international Working Group Meeting are:

- (i) To discuss the framework of ISO MSE.
- (ii) To develop a shared understanding of the scope and intent of the ISO MSE
- (iii) To discuss commonalities and differences between existing and draft national energy management system standards
- (iv) To review the scope of the planned UNIDO regional studies, including a proposed survey of industry in a number of emerging economies, and to discuss avenues for integrating the outcomes into the ISO process; and
- (v) To contribute preparatory harmonization work for development of the ISO MSE.

To prepare for this meeting, a gap analysis of the existing national energy management standards will be prepared and sent to all registered participants in advance of the meeting along with the draft survey package to be used for the regional studies. Additionally, a document comparing a proposed MSE to ISO 9000 and 14000 is also being prepared as an input to the meeting.

3. Structure of the Working Group Meeting

The Meeting will be structured in sessions that will take the form of both formal presentations followed by Q&A, as well as interactive roundtable/ working group discussions.

Day 1, Wednesday 9th, is primarily targeted to delegates and experts from developing countries and emerging economies. Session 1 will introduce and highlight the importance of a systems optimization approach in pursuing industrial energy efficiency, outlining how energy management system standards can support the integration of such an approach in corporate business practices. Session 2 will offer the opportunity for an exchange of experiences and information on planned MSE activities between representatives of standards authorities from emerging economies. The afternoon session will present and discuss the regional studies that UNIDO is going to conduct to assess the potential impact of a new ISO management system standard for energy on industry in developing and emerging economies.

Day 2, Thursday 10th, will be opened with an introduction to the ISO Project Committee 242 on Energy Management. The second part of the morning will be devoted to the analysis of the new ISO MSE vis-à-vis ISO 9000 and ISO 14000 management systems. The views of industry and standards authorities on Management System Standards for Energy will be

discussed. The afternoon will start with a panel discussion during which representatives of national standards authorities will exchange ideas and debate how key stakeholders groups and counterparts of developing and emerging economies can actively participate to the development process of the ISO MSE.

The afternoon of Day 2 and the whole Day 3 (Friday 11th) will focus on identifying and discussing issues related to the harmonization of existing and proposed national/ international energy management system standards with a future ISO MSE. This will be the core part of the Meeting and is designed to enable and stimulate the effective interaction of all participants. Presentations from UNIDO's experts and representatives of national and international standard authorities will be combined with thematic working groups. Each group will debate a specific harmonization topic and subsequently report the results of the discussion to the plenary. For each working group a Topic Leader will be identified and a Facilitator assigned.

The Agenda of the meeting can be found in section 7 below.

4. Participants

The participants attending the EGM will be:

- Representatives of national and international standards setting authorities and bodies
- International experts in industrial energy efficiency and management system standards
- Officials of Government energy and industry agencies
- Selected representatives from the private sector and industry associations from China

5. Expected Outputs of the Working Group Meeting

The Meeting is expected to deliver the following outputs:

1. A shared Framework for an ISO MSE
2. Inputs to the refinement of the regional studies being carried out by UNIDO and suggestions for integrating the outcomes into the ISO process
3. A defined process for collaboration and contribution to the ISO standards development process

6. Correspondence and Inquiries

All correspondence and inquiries related to the meeting should be addressed to:

For substantive matters:

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7. Agenda

The agenda of the meeting follows in the next page.

Day 1 – Wednesday, April 9, 2008	
08.15 – 09.00	Registration
Opening Plenary Session	
09.00 – 10.15	<p>Welcoming Remarks.</p> <ul style="list-style-type: none"> ➤ Mr. Sajjad Ajmal, UNIDO Representative and Head UNIDO Regional Office (China, Mongolia, D.P.R. Korea and R.O. Korea), UNIDO ➤ Representative of the National Development and Reform Commission, People’s Republic of China ➤ Mr. Yang Zeshi, Director, Division of Transportation & Energy Resources of Standardization Administration of China (SAC) ➤ Mr. Alain Samné, Technical Group Manager, Engineering, Machinery & Energy, International Organization for Standardization (ISO) ➤ Mr. Zheng Weihua, President, China National Institute of Standardization (CNIS), People’s Republic of China ➤ Mr. Robert Williams, Chief Energy Efficiency Unit, UNIDO
10.15 – 10.45	Coffee break
Session 1: Industrial System Optimization and Energy Management Standards	
10.45 - 11.30	<p>The importance of system approaches to Industrial Energy Efficiency Presenter: Mr. Robert O. Williams, Chief, UNIDO Energy Efficiency and Climate Change Unit</p> <p>Achieving sustainable energy efficiency in industry through a Management System Standard for Energy Presenter: Ms. Aimee McKane, UNIDO Expert and Senior Program Manager Lawrence Berkeley National Laboratory</p>
Session 2: Management Systems Standards in Emerging Economies	
11.30 – 12.30	<p>Status and future developments of Management Systems Standards in Brazil Presenter: Mr Eugenio G. T. De Simone, Director of Standardization, Associação Brasileira de Normas Técnicas, Brazil</p> <p>Status and future developments of Management Systems Standards in China Presenter: Mr. Li Tienan, President, China Standard Certification Center People’s Republic of China</p> <p>Status and future developments of Management Systems Standards in South Africa</p>

Day 1 – Wednesday, April 9, 2008	
	Presenter: Ms. Irma Loots, Manager Systems & Services Standards, South African Bureau of Standards, South Africa
12.30 – 14.00	Lunch break
Session 2: Management Systems Standards in Emerging Economies - continued	
14.00 – 14.45	<p>Status and future developments of Management Systems Standards in Thailand</p> <p>Presenter: Ms. Chaowalee Ratanamungmekha, Director of Standardization Promotion and Development Division, Thai Industrial Standards Institute, Thailand</p> <p>Status and future developments of Management Systems Standards in South Korea</p> <p>Presenter: Prof. Dong Myung Kwon, Korean Agency for Technology and Standards, South Korea</p>
Session 3: UNIDO Regional Survey/Study	
14.45 – 16.30	<p>Assessing potential impact of an ISO Management System Standard for Energy (MSE) on developing and emerging economies' industry – Scope and Methodology of UNIDO planned regional surveys/studies.</p> <p>Presenter: Mr. Marco Matteini, UNIDO Consultant</p> <p>Focus/Working Groups</p> <p><i>Breakout groups will be formed to discuss scope, methodology and proposed study questionnaires. Discussion will be facilitated by UNIDO Experts.</i></p>
16.30 – 17.00	Coffee break
17.00 – 18.00	<p>Discussion of working groups outcomes and next steps</p> <p>Chaired by: Mr. Wayne Perry, UNIDO Expert and Technical Director Kaeser Compressors</p> <p><i>Breakout group leaders to report on the results of their discussions</i></p>
19:30 – 22:00	Welcoming Dinner

Day 2 – Thursday, April 10, 2008	
09.00 – 09.15	Opening Remarks <ul style="list-style-type: none"> ➤ Mr. Robert Williams, Chief Energy Efficiency Unit, UNIDO ➤ Representative of CNIS, People’s Republic of China
09.15 – 09.30	Highlights of Day 1 presentations and discussion. Presenter: Mr. Marco Matteini, UNIDO Consultant
Session 1: Introduction to the ISO Management System Standard for Energy	
09.30 – 10.15	Introduction to the scope and schedule for ISO Project Committee 242 Presenters: Mr. Alain Samné, Technical Group Manager, Engineering, Machinery & Energy, ISO Central Secretariat Mr. Steven Cornish, Director – International Policy, American National Standards Institute (ANSI) and Representative of the ANSI Secretariat for ISO/PC 242 Mr. Eugenio G. T. De Simone, Director of Standardization, Associação Brasileira de Normas Técnicas (ABNT), Brazil
10.15 – 10.45	Coffee break
Session 2: Management System for Energy (MSE) vs. ISO 9000 and ISO 14000	
10.45 - 12.00	Analysis of similarities and differences between management system standards for Energy, ISO 9000 and ISO 14000. Presenter: Mr. Li Tienan, President CSC and Vice Chairman of ISO/TC 176 Standards Authorities perspectives and issues Presenter: Mr. Rob Steele, UNIDO Expert and Former CEO of Standards New Zealand Industry perspectives and issues Presenter: Mr. Wayne Perry, UNIDO Expert and Technical Director Kaeser Compressors
12.00 – 13.30	Lunch break
Session 3: Management System for Energy – What opportunities and challenges for developing and emerging countries	
13:30-14:30	How do developing and emerging economies ensure there is active participation by standards and conformance organizations in the development of an ISO MSE? – Panel Discussion Panelists: Ms. Irma Loots, Manager Systems & Services Standards, South

Day 2 – Thursday, April 10, 2008

	<p>African Bureau of Standards, South Africa</p> <p>Mr. Li Tienan, President, China Standard Certification Center People’s Republic of China</p> <p>Mr. Rob Steele, UNIDO Expert and Former CEO of Standards New Zealand</p> <p>Mr. Alain Samné, Technical Group Manager, Engineering, Machinery & Energy, ISO Central Secretariat</p>
<p>Session 4: Towards an harmonized international Management System for Energy (MSE) – Part 1</p>	
<p>14.30 – 16:00</p>	<p>Highlights from Gap Analysis of Existing and Proposed National and International Energy Management Standards – Methodology, Commonalities, Key Differences</p> <p>Presenters: Dr. William Meffert, Georgia Institute of Technology</p> <p>Dr. Mario de Renzio, Chairman of joint CEN/CENELEC BT Task Force 189 "Energy Management" - European Committee for Electro-technical Standardization (CENELEC)</p> <p>Open discussion</p> <p>Moderator: Ms. Aimee McKane, UNIDO Expert and Senior Program Manager Lawrence Berkeley National Laboratory</p>
<p>16:00-16:30</p>	<p>Coffee break</p>
<p>16:30 – 18.00</p>	<p>Developing a Framework for an ISO Management System for Energy – Purpose, Intended audience, Scope, Guidance and Auditing - Facilitated discussion</p> <p>Facilitators: Ms. Aimee McKane, UNIDO Expert and Senior Program Manager Lawrence Berkeley National Laboratory</p> <p>Mr. Wayne Perry, UNIDO Expert and Technical Director, Kaeser Compressors</p> <p>Mr. Rob Steele, UNIDO Expert and Former CEO of Standards New Zealand</p> <p>Mr. Erik Gudbjerg, Director Lokalenergi, Denmark</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Framework for Day 3 breakout group discussions defined. • Topic-breakout group leaders identified. • Breakout groups formed w/leaders and facilitators
<p>19:30 – 22:00</p>	<p>Dinner</p>

Day 3 – Friday, April 11, 2008

Session 1: Towards an harmonized international Management System for Energy (MSE) – Part 2

09.00 – 10.30 **Bridging the harmonization gaps – Review discussion of agreed topics with an emphasis on resolving differences.**
Topic Leaders identified on Day 2 will lead discussion of corresponding breakout groups.
Facilitators: Ms. Aimee McKane, UNIDO Expert and Senior Program Manager, Lawrence Berkeley National Laboratory
Mr. Wayne Perry, UNIDO Expert and Technical Director, Kaeser Compressors
Mr. Rob Steele, UNIDO Expert and Former CEO of Standards New Zealand
Mr. Erik Gudbjerg, Director Lokalenergi, Denmark

10.45 – 11.15 Coffee break

Session 2: National Energy Management Standards – Implementation Experience

11.15 - 12.30 **Learning from National Best Practices in Implementation– Panel/Dialogue Discussion**
This session will include a panel on national and international best practices in the implementation of energy management standards
Panelists: Mr. Ronald Vermeeren, Program Consultant, Senter Novem, The Netherlands
Experience with Energy Management Standards in the Netherlands Long Term Agreements.
Mr. Martin R. Fry, British Standards Institution, United Kingdom
UK experience with energy management standards and accreditations.
Mr. Sang Ku Park, Policy Development Department, Korea Energy Management Corporation, South Korea
Energy Savings through Partnership scheme.
Mr. Akira Ishihara, Managing Director, Energy Conservation Center, Japan
Energy Conservation Policy, Law and Management Concept in Japan
Mr. James Quinn, Industrial Technologies Program, US Department of Energy, United States of America
Certification of U.S. Industrial Plants for Energy Efficiency

Day 3 – Friday, April 11, 2008	
12.30 – 14.00	Lunch break
Session 3: Developing a Framework for an ISO Management System Standard for Energy	
14.00- 15:30	Report on Results of Breakout Groups Discussion Presentations: Topic Leaders with Facilitators
15.30 – 16.00	Coffee break
16.00 – 17.00	Completing a Draft Framework for an ISO Management System Standard for Energy – Summary Discussion Facilitator: Ms. Aimee McKane, UNIDO Expert and Senior Program Manager Lawrence Berkeley National Laboratory
Session 4: Way Forward and Closure of the Meeting	
17.00 – 17.30	Discussion of next steps and conclusion of the Meeting Mr. Robert O. Williams, Chief, UNIDO Energy Efficiency Unit Ms. Aimee McKane, UNIDO Expert & Senior Program Manager at Lawrence Berkeley National Laboratory Mr. Yang Zeshi, Director, Division of Transportation & Energy Resources, Standardization Administration of China Mr. Li Tienan, President, China Standard Certification Center Mr. Alain Samné, Technical Group Manager, Engineering, Machinery & Energy, ISO Central Secretariat

BASIC INFORMATION FOR PARTICIPANTS

DATE AND VENUE

The Working Group Meeting will be held 9-11 April 2008, at the Headquarter of China National Institute of Standardization (CNIS), No. 4 Zhichun Road, Haidian District, Beijing 100088, China.

REQUESTS FOR REGISTRATION SHOULD BE ADDRESSED TO:

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LIST OF PARTICIPANTS AND PRESENTATION COPIES

A list of participants will be available on the first day of the meeting. The organizers intend to distribute to the participants, copies of all the presentations, as well as to make all material available on the UNIDO Website.

AGENDA AND DOCUMENTATION

Participants are requested to notify the organizers of any change in their particulars or their wish to participate, so that the records for the final list of participants may be kept up-to-date and accurate.

REGISTRATION

Registration and issuance of badges will be issued *only* for those participants whose names have been previously communicated to the organizers.

PREPARED PRESENTATIONS

To facilitate the work of the organisers, the invited resource persons/ speakers are requested to submit an electronic copy of their presentation (either as an MSN Word or PowerPoint file) to the organisers by 14 March 2008.

SEMINAR LANGUAGE

The Seminar will be conducted in English.

ADDITIONAL INFORMATION

VISAS

Most of country's participants need a visa to attend the Beijing meeting. In order to get a visa, the participants will have to receive a formal invitation to the meeting from SAC. Participants who have not submitted yet to UNIDO the visa form sent with the first invitation to the meeting are kindly requested to do that as soon as possible.

HOTEL

UNIDO and SAC would recommend participants to stay at the Park Plaza Beijing Science Park Hotel (www.parkplaza.com/beijingcn_sciencepark). Participants to the meeting would be entitled to special discounted rates. UNIDO and SAC, supported by CNIS, would be pleased to assist you with room reservation.