



Asia-Pacific
Economic Cooperation



6th Conference on Standards and Conformance

(CTI 13/2006T Project)

September 5-6, 2006
Furama Resort, Da Nang city, Vietnam

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Foreword

This booklet is a collection of all papers which were presented and submitted by SCSC members and invited speakers for the 6th Conference on Standards and Conformance to be held on September 5-6, 2006 at the Furama Resort in Da Nang city of Vietnam.

Since 1996, the conference on standards and conformance has been held by the Subcommittee for Standards and Conformance in every two years. As this conference is a forum where people from different organizations like government, non government institutions private sector and business community to join in, this will allow the opportunity to exchange knowledge and experiences particularly related to Standards and Conformance based on dialogue arising from papers and panel discussions. A better and strong understanding of all these activities specially that are taking part on the SCSC and other International Fora will promote the use of the practices and successful experiences among member economies and specially for private sector community.

In October 2003, the EC approved its proposal for a massive overhaul of EU chemicals regulation, so-called REACH, which would be applicable to approximately 30,000 existing and new chemicals and chemical products. The concern is that REACH introduces an approach that is more complex and burdensome than necessary, which could disrupt international trade and adversely affect innovation. Its potential impact is exceptionally wide ranging. The Commission's impact assessment notes the textile, pharmaceutical, electronics; auto and advanced materials markets could all be affected.

Individually and collectively we need to be proactive in identifying and assessing the impact of these prospective regulations on our stakeholders and making our views known to relevant European authorities. APEC economies need to share information early in the process on their prospective concerns and questions. APEC economies have been active in expressing concerns with the Commission proposal through written comment and discussions (individually and collectively) and at meetings of the WTO (i.e., the TBT Committee and in the recent trade review of Europe).

The 6th Conference on Standards and Conformance was organized successfully by the host with a support fund of APEC-TILF (Trade and Investment Liberalization and Facilitation) program, CTI-13/2006T project. Attending this conference, there were about 300 participants among them more than 80 coming from public sector, 120 from the private one and other 100 from overseas including the 16 SCSC representatives and speakers from 9 APEC member economies and 2 invited speakers from EU, 3 ABAC representatives. In total, there were 22 papers received and 21 papers presented. The main outcomes of the conference can be listed as follows:

- To achieve a strong conceptual framework regarding to implication of the EU environmental directives on trade.
- To explore current state and challenges for the future for these activities (specially of SCSC).
- To highlight the interdependence of the standards and conformance network elements specially their importance to decrease technical barriers to trade and to promote more trade flows within the APEC region.
- To implement the APEC Leaders' instruction that "We welcomed the inputs from our business community, including ABAC's resolve for expanding trade, and we share its

view on the critical importance of trade facilitation. We look forward to the continued participation of ABAC as we implement the Santiago Initiative.”

- To promote the transfer of knowledge and expertise from the developed countries to developing countries.

I am really pleased to have these outcomes of the conference. Taking this opportunity and on behalf of the host – The Directorate for Standards and Quality of Vietnam, I deeply appreciate APEC Secretariat’ strong support and close cooperation in organizing the event. My deep appreciation also would like to go to all SCSC members in contributing to the success of the conference.

Ha Noi, November 7, 2006

Dr. Ngo Quy Viet
Project Overseer/Director General
Directorate for Standards and Quality



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/000

Document List

Purpose: Information
Submitted by: APEC Secretariat



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

Document List

| Doc. No. | Title | Submitted by |
|-------------------------|--|---|
| 2006/SOM3/SCSC/CONF/000 | Document List | APEC Secretariat |
| 2006/SOM3/SCSC/CONF/001 | Final Program | Viet Nam |
| 2006/SOM3/SCSC/CONF/002 | The Role of Voluntary Sector Mutual Recognition Arrangements (MRAs) / Multilateral Mutual Recognition Arrangements (MLAs) in Supporting Regulatory Decisions | Helen Liddy, APLAC |
| 2006/SOM3/SCSC/CONF/003 | Mechanisms for the Acceptance of Conformity Results in the APEC Region for Trade Facilitation - Views from Electronics and IT Industry Sector | Toshiyuki Kajiya, Chair, IECEE Japanese National Committee and Vice-chair, Conformity Assessment System Committee of JEITA |
| 2006/SOM3/SCSC/CONF/004 | A Review of the New Zealand Standards and Conformance Infrastructure | Sirma Karapeeva, Senior Policy Analyst, International Technical and Regulatory Coordination, Ministry of Economic Development, New Zealand |
| 2006/SOM3/SCSC/CONF/005 | Building Up the Vietnam Standards and Conformance Infrastructure via Law on Standards and Technical Regulations | Ho Tat Thang, Deputy Director General, Directorate for Standards and Quality, Vietnam |
| 2006/SOM3/SCSC/CONF/006 | International Standardization Process – Japan’s Experience in Electronic and Electrical Areas | Setsuo Harada, Member of IEC Standardization Management Board (SMB) and Director, Standards & Partnership Department, Sony Corporation, Japan |
| 2006/SOM3/SCSC/CONF/007 | APEC Informal Network Activities in the Promotion of Performance Concept in Buildings | Mike Syme, Greg Foliente, John Carson, CSIRO Sustainable Ecosystem, Australia |
| 2006/SOM3/SCSC/CONF/008 | ISO DTR 28682 - World Report for ITS Standards (WRITSS) - A Joint APEC-ISO Study of Progress to Develop and Deploy ITS Standards | Donggeun Choi, Project Editor, WRITSS, Standards Analyst, KSA, Korea |
| 2006/SOM3/SCSC/CONF/009 | Implications for the APEC Region of New Deliverables from ISO and IEC | John Henry, Director, International and Standardization Policy, Standards Australia |

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| 2006/SOM3/SCSC/CONF/010 | Standards Education - Now and Future | Man-Han Hwang, Director, Korean Standards Association, Korea |
| 2006/SOM3/SCSC/CONF/011 | Thailand's Experience and Views on Standards Education | Rampaipan Nakasatis, Director of Standards Bureau 1, Thai Industrial Standards Institute, Thailand |
| 2006/SOM3/SCSC/CONF/012 | Japan's Experience and Views on Standards Education | Mitsuo Matsumoto, METI, Japan |
| 2006/SOM3/SCSC/CONF/013 | Outcomes of the EU-Asia-Link Project on Standards Education | Wilfried Hesser and Wenke Siedersleben, EU-Asia Link Project Coordination, Helmut Schmidt-University, Hamburg Germany |
| 2006/SOM3/SCSC/CONF/014 | Environmental Regulations are they a Barrier to Trade | Richard Collyer, The Chamber of Commerce for Bedfordshire, United Kingdom |
| 2006/SOM3/SCSC/CONF/015 | Strategy to Deal with EU Environmental Legislation - Focusing on the Key Points and Strengthening Coordination Among APEC Members | Wang Yuan, The General Administration for Quality Supervision, Inspection and Quarantine (AQSIQ), China |
| 2006/SOM3/SCSC/CONF/016 | A Risk Assessment of European Environmental Regulations and Retailer Requirements - Potential Impact on the Wine Industry | Tony Battaglone, Director, International & Regulatory Affairs, Winemakers Federation of Australia |
| 2006/SOM3/SCSC/CONF/017 | Manufacturers' View on RoHS-like Regulations | David Ling, Regulatory Policy and Strategy Manager Worldwide Technical Regulations, United States |
| 2006/SOM3/SCSC/CONF/018 | Product Related Environmental Regulations in Korea and Responses by Korean Electronic Companies to the Regulations | Kun-Mo Lee, Eco-product Research Institute, Korea |
| 2006/SOM3/SCSC/CONF/019 | EU Environmental Regulations – International Standardization and Japanese Business's View | Koichi Mori, Fujitsu Limited, Chairman of IEC TC111, Japan |
| 2006/SOM3/SCSC/CONF/020 | APEC SCSC Trade Facilitation Task Force (TFTF) | Suzanne Troje, Director, Technical Barriers to Trade Office of the U.S. Trade Representative (USTR), United States |
| 2006/SOM3/SCSC/CONF/021 | Priorities for Standards and | Reiko Takahashi, TOMY |

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| | Conformance in APEC Region - Views from Business: Importance of Active Consideration for People with Disabilities | Company Limited, Japan |
| 2006/SOM3/SCSC/CONF/022 | Importance of Metrology and Testing Areas to Technical Infrastructure of APEC Standards and Conformance | Duong Xuan Chung, Centre for Consultancy and Development on Metrological Technology, Vietnam |
| 2006/SOM3/SCSC/CONF/023 | Making FTAs Work - A Business Perspective | Michael Crouch, Australian Member ABAC, Australia |
| 2006/SOM3/SCSC/CONF/024 | Case Study - Lessons from the Sardines – Do WTO Rules Create a Level Playing Field for Developing Countries? | Mario Sandoval-Tupayachi, Head of Peruvian Standardization and Accreditation Bodies, Peru |



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CON/001

Final program

Purpose: Information
Submitted by: Vietnam



**Sub-Committee on Standards and Conformance
Furama Resort, Da Nang, Viet Nam
5-6 September 2006**

6th Conference on Standards and Conformance
APEC Sub-Committee on Standards and Conformance (SCSC)
Furama Resort, Da Nang, Viet Nam
5-6 September 2006

FINAL PROGRAM

Tuesday 5th September 2006

- | | |
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| 08:00 - 09:00 | Accreditation |
| 09:00 - 09:15 | Inauguration |
| 09:15 - 10:45 | Session I: Standards and Conformity Systems |
| 09:15 - 09:35 | <i>The Role of Voluntary Sector MRAs/MLAs in Supporting Regulatory Decisions</i> |
| | <i>Speaker: Dr. Helen Liddy, Secretary of APLAC</i> |
| 09:35 - 09:55 | <i>Mechanisms for the Acceptance of Conformity Results In the APEC Region for Trade Facilitation-Views from Electronics & IT Industry Sector</i> |
| | <i>Speaker: Mr. Toshiyuki Kajiya , Chair of IECEE, Japan National Committee, Matsushita Electric Industrial Co., Ltd, Japan</i> |
| 09:55 - 10:15 | <i>A Review of the New Zealand Standards and Conformance Infrastructure</i> |
| | <i>Speaker: Ms. Sirma Karapeeva, Senior Policy Analyst, International Technical and Regulatory Coordination, Ministry of Economic Development, New Zealand</i> |
| 10:15 - 10:45 | Coffee Break |
| 10:45 - 12:00 | Session I: Standards and Conformity Systems (Cont.) |
| 10:45 - 11:05 | <i>Building up the Vietnam Standards and Conformance Infrastructure via Law on Standards and Technical Regulations</i> |
| | <i>Speaker: Dr. Ho Tat Thang, Deputy Director General, Directorate for Standards and Quality (STAMEQ), Viet Nam</i> |
| 11:05 - 11:30 | Q & A Chaired by Mr. Matsumoto Mitsuo, International Affairs Office Technical Regulations, Standards and Conformity Assessment Policy Unit, Ministry of Economy, Trade and Industry (METI), Japan |

- 11:30 - 13:30 Lunch
- 13:30 - 15:30 Session II: Enhancing the role of APEC in the International Standardization Process
- 13:30 - 13: 50 ***International Standardization Process- Japan Experience in Electronic and Electrical Areas***
- Speaker: Mr. Setsuo Harada, Director, Standards & Partnership Department, Sony Corporation, Japan*
- 13:50 - 14:10 ***APEC Informal Network Activities in The Promotion of Performance Concept in Buildings***
- Speaker: Mr. Mike Syme, Mr. Greg Foliente and Mr. John Carson, CSIRO Sustainable Ecosystem, Australia*
- 14: 10 - 14:30 ***ISO DTR 28682- World Report for ITS Standards (WRITSS)-A joint APEC-ISO Study of Progress to Develop and Deploy ITS Standards***
- Speaker: Mr. Donggeun Choi, Standards Analyst, Korean Standards Association, Korea*
- 14:30 - 15: 00 Q & A Chaired by Mr. Rob Steel, CEO of Standards New Zealand, New Zealand
- 15:00 - 15:30 Coffee Break
- 15:30 - 17:30 Session III: New International Standards that could affect APEC Economies & Standard Education
- 15:30 - 15:50 ***Implications for the APEC Region of New Deliverables from ISO and IEC***
- Speaker: Mr. John Henry, Director, International and Standardization Policy, Standards Australia, Australia*
- 15:50 - 16:10 ***Standards Education – Now and Future***
- Speaker: Mr. Manhan Hwang, Director, Korean Standards Association, Korea*
- 16:10 - 16:30 ***Thailand's Experience and View on Standardization Education***
- Speaker: Ms. Rampaipan Nakasatis, Director of Standards Bureau 1, Thai Industrial Standards Institute*
- 16:30 - 16:50 ***Japan's Experience and Views on Standards Education***

*Speaker: Mr. Matsumoto Mitsuo, International Affairs Office
Technical Regulations, Standards and Conformity Assessment Policy
Unit, Ministry of Economy, Trade & Industry (METI, Japan)*

16:50 - 17:10 ***Outcomes of the EU-Asia Links Project on Standards Education***

*Speaker: Prof. W. Hesser, Team Leader of EU- Asia link Project,
Universität der Bundeswehr, Hamburg, Department of Standardization
and Technical Drawing, Germany*

17:10 - 17:30 Q & A Chaired by Mr. Ivan Donaldson, General Manager, Australian
Building Codes Office (ABCB), Australia

Wednesday 6th September 2006

09:00 - 10:30 Session IV: Product Related Environmental Regulations of EU and
the Impacts on Trade

09:00 - 09:20 ***Environmental Regulations: Are They A Barriers to Trade?***

*Speaker: Mr. Richard Collyer, Operations Director, Chamber of
Commerce (Bedfordshire) Ltd., UK*

09:20 - 09:40 ***Strategy to Deal with EU Environmental Legislation - Focusing on
the Key Point and Strengthening Coordination Among APEC
Members***

*Speaker: Mr. Wang Yuan, The General Administration for Quality
Supervision, Inspection and Quarantine (AQSIQ), China*

09:40 - 10:00 ***A Risk Assessment of European Environmental Regulations and
Retailer Requirements - potential impact on the wine industry***

*Speaker: Mr. Tony Battaglione, Director, International & Regulatory
Affairs, Winemakers Federation of Australia, Australia*

10:00 - 10:30 Coffee Break

10:30 - 10:50 ***A Manufacturer's View on the RoHS-Like Regulations
(including EU, Japan, Korea, China, US)***

Speaker: Mr. David Ling, Hewlett Packard Co., Ltd., USA

10:50 - 11:10 ***Product Related Environmental Regulations in Korea and by the
Korean Electronic Companies to the Regulation***

*Speaker: Dr. Kun-mo LEE, Centre for Ecodesign and LCA,
Ajou University, Korea*

- 11:10 - 11:30 ***EU Environmental Regulations- International Standardization and Japanese Business's View***
- Speaker: Mr. Koichi MORI - Director, Standardization Policy and Promotion, Public Policy and Business Development Group, Fujitsu Limited, Japan*
- 11:30 – 11:50 ***TFTF/SCSC Interests: Trade Implications of the Eup Directive.***
- Speaker: Dr. Kun-mo Lee on behalf of Ms. Suzanne Troje, Director, Technical Trade Barriers Office of the United States Trade Representatives*
- 11:50 - 12:30 Q & A Chaired by Prof. Kun-mo Lee, Ajou University, Korea
- 12:30 - 14:30 Lunch
- 14:30- 16:30 Session V: ABAC Dialogue/ Priorities in Standards and Conformance Assessment - Business's view
- 14:30 - 14:50 ***Importance of Active Consideration for People with Disabilities***
- Speaker: Ms. Reiko Takahashi , Japan ABAC Representative and Senior Project Manager, Common- use Products Promotion Department, TOMY Company Ltd., Japan*
- 14:50 – 15:10 ***Importance of Metrology and Testing Areas to Technical Infrastructure of APEC Standards and Conformance***
- Speaker: Mr. Duong Xuan Chung, Viet Nam ABAC Representative and Director, Centre for Consultant and Development on Metrological Technology (CDMT), Viet Nam.*
- 15:10 - 15:40 Coffee Break
- 15:40 - 16:00 ***Making FTAs Work - The Importance of Standards Harmonisation***
- Speaker: Mr. Michael Crouch, Australia ABAC Representative and AO Executive / Chairman Zip Industries (Aust) Pty Ltd*
- 16:00 - 16:30 Dialogue Moderated by Mr. Michael Crouch, AO Executive/Chairman Zip Industries (Aust) Pty Ltd., Australia and on behalf of ABAC Chair
- 16:30 -16:40 Conclusions and Closing (2006 SCSC Chair)

Opening speech

*by Mr. Pham Ngoc Tran
Deputy Director General of STAMEQ*

SCSC Delegates,
Speakers,
Ladies and Gentlemen,

On behalf of the Directorate for Standards and Conformance, may I have a big pleasure to welcome all of you to the 6th Conference on Standards and Conformance to be held in Da Nang, Viet Nam.

This conference is held in every two years. It is a forum for exchanging information, practices related to standards and conformance, TBT/WTO.

As you may know well, international commerce, exports and imports would be impossible for many industries if different countries had different standards for the same product. International standards for products would result in the same standard set for the same product internationally, a fall in production costs and, an increase in competition between manufacturers therefore lowering prices for consumers.

Where different countries have standards for the same products with different requirements, manufacturers in other countries face increased costs if they wish to export to a country with different standards. This is called "technical barriers to trade". If all countries agree to adopt the same standard for the same product, the cost of production falls and competition between manufacturers in different countries increases, making it possible for consumers to get lower prices.

Customers and users need to be assured that products and services conform to the same standard internationally. Conformity assessment is the process to bring about that assurance. So conformity assessment provides benefits for manufacturers and service providers, consumers and government regulators, as well as for international trade in general.

For conscientious manufacturers and service providers, having their products assessed and certified as conforming to a particular standard allows them to distinguish themselves from less reputable suppliers.

Consumers benefit from conformity assessment because it provides them with a basis for selecting products or services.

Regulators benefit from conformity assessment which gives them a means of enforcing governmental health, safety and environmental legislation.

Harmonizing conformity assessment procedures around the world also has far-reaching benefits for international trade in general. Agreements among nations or regions on the mutual

acceptability of requirements, assessment methods, inspection or test results, etc., can all help to reduce or remove so-called technical barriers to trade.

However, the above situation is not achievable in all markets or products, therefore there is a need for the existence of conformity assessment procedures. Additionally, the risk that the consumer is willing to take with the chance to purchase a noncompliant product will depend on different factors such as price, safety issues, and the feasibility of returning the product. This implies that further work in standards and conformance should be done.

This conference is a continuous effort that our SCSC members are making to reduce or wipe off the technical barriers to trade in all forms. With 5 sessions including a dialogue between SCSC and ABAC, the conference would provide us with a good opportunity to update on the latest developments on standards and conformity system in the members, to confirm the role of APEC in the international standardization process and enhance the awareness of standards via education ... Those themes, that will be presented and discussed, may show us a wide picture on the existing alternatives on this matter. Recognizing that via the national/regional regulations, a new form of technical barriers to trade may be existing and sometimes not so easy to understand or identify, this conference will spend more time and efforts to discuss the recent EC environmental regulations. A crosscutting concern is how the current and future APEC activities, including SCSC can fit better in the business needs and expectation, a special session has been designed to make the SCSC-ABAC dialogue possible. Also, inviting the business people in this SCSC conference through ABAC dialogue is considered to be one of the most useful tools to receive evaluation or reaction from the business community toward the Product Related Environmental Regulations in EU.

With all of these, I expect that this two days conference will be a success and will provide material for further SCSC work. May I wish all of you a good health and hope you will have a chance to visit and explore more our Da Nang city and the ancient capital Hue - the well known tourist places in the central part of Vietnam. Thank you for your attention.

Session I: Standards and Conformity Systems



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/002

The Role of Voluntary Sector Mutual Recognition Arrangements (MRAs) / Multilateral Mutual Recognition Arrangements (MLAs) in Supporting Regulatory Decisions

Submitted by: Helen Liddy, APLAC



6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006

The Role of Voluntary Sector MRAs/MLAs in Supporting Regulatory Decisions

(Dr) Helen Liddy
APLAC Secretary

Regulators are responsible for protecting the health and safety of their communities, for products and services provided both domestically and in exporting economies. There is a need to consider the level of protection that is appropriate for various products and services, and whether all economies use equivalent measures to protect their communities. There is, therefore, also a need to examine the processes used by individual regulators in different economies to accept products and services in their domestic markets. If an economy uses more complicated processes than other economies for approval, the question arises as to whether such processes are reasonable or whether they constitute a technical barrier to trade.

Regulators also need a mechanism to assure compliance of product and services with their own technical regulations. In other words, they need confidence that testing, inspection and certification in their own economies are done competently. They also need confidence that testing, inspection and certification in economies that export to their economies are done competently. Mutual Recognition Arrangements (MRAs) or Multilateral Mutual Recognition Arrangements (MLAs) - both phrases are synonymous – provide an efficient mechanism to provide the assurance to regulators.

This paper presents the advantage to APEC regulators of the use of the well-established APLAC (Asia Pacific Laboratory Accreditation Cooperation) MRA (covers testing, calibration and inspection) and PAC (Pacific Accreditation Cooperation) MLA (for the purposes of this paper, covers product certification).

The current status of the APLAC MRA is:

| | |
|--------------------|-----------------------------------|
| Total Signatories: | 24 |
| Total Economies: | 17 (16 APEC economies plus India) |
| Testing: | 24 |
| Calibration: | 20 |
| Inspection: | 10 |

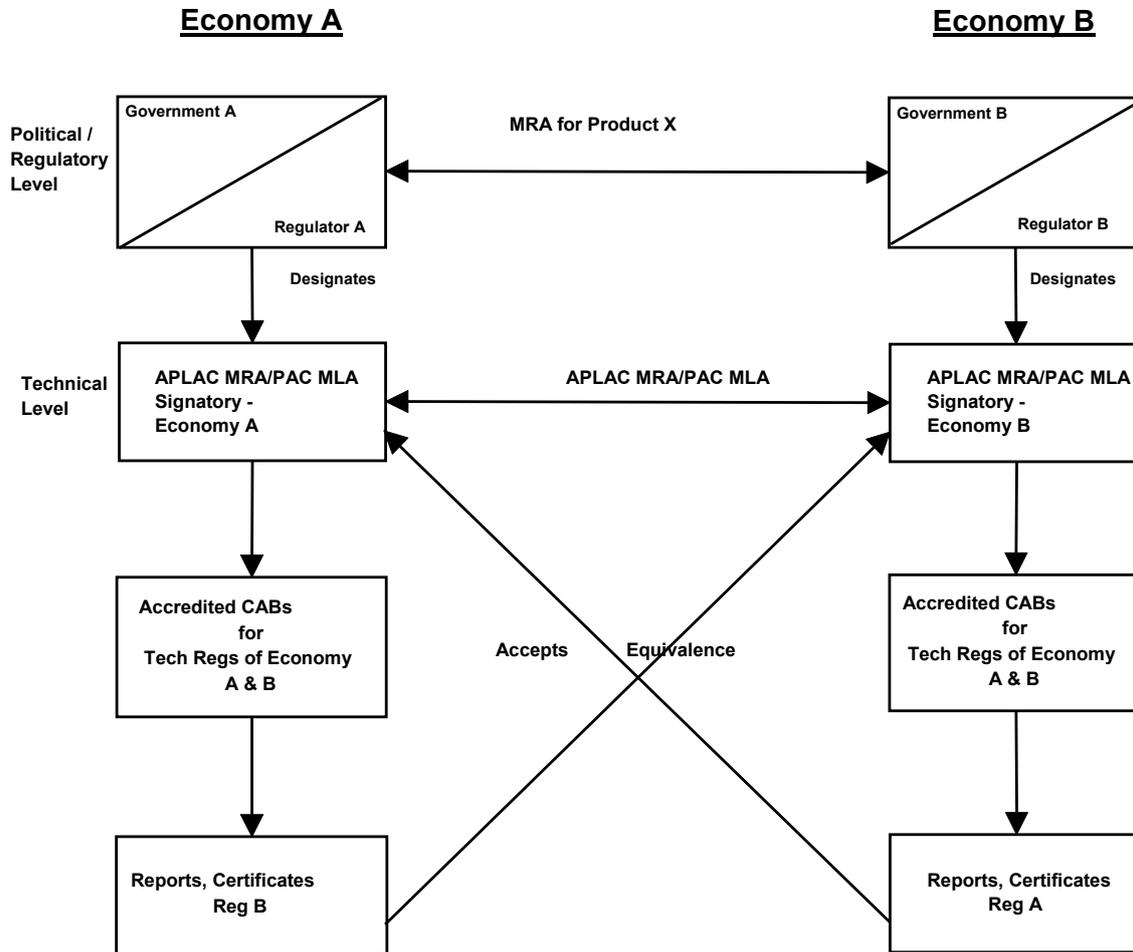
The current status of the PAC MLA for product certification is:

| | |
|--------------------|---|
| Total Signatories: | 3 |
| Total Economies: | 4 |

The APLAC MRA and PAC MLA are thus well-placed to support, in particular, the current APEC MRAs, covering food, electrical and electronic equipment, and telecommunications. For acceptance of test, inspection and certification reports by regulators, APEC has already recognised the APLAC MRA and PAC MLA:

1. APLAC and PAC are two of the five Specialist Regional Bodies (SRBs) recognised by the APEC Sub-Committee on Standards and Conformance (SCSC).
2. The APEC Electrical and Electronic Equipment MRA includes reference to use of the APLAC MRA (clause 14.5) and PAC MLA (clause 20.5) as mechanisms to demonstrate that accreditation of relevant laboratories and certification bodies, respectively, has been done by a competent accreditation body complying with ISO/IEC Guide 58 or ISO/IEC Guide 65 (both replaced in 2004 by ISO/IEC 17011).
3. Clause 2.3.1 in each of Appendices B and C of the APEC MRA for Conformity Assessment of Telecommunications Equipment provide for a Designating Authority in an exporting economy to appoint an accreditation body that has entered into an MRA/MLA to accredit Conformity Assessment Bodies (laboratories, certification bodies) under the TEL MRA procedures.

The figure below shows how government-to-government mutual recognition agreements are supported by voluntary sector MRAs/MLAs.



The primary purpose of the APLAC MRA and PAC MLA is to ensure that the accredited conformity assessment bodies (CABs) of a signatory to the MRA/MLA are operating at the same standard as the accredited CABs of the other signatories, so that reports and certificates issued by the CABs in one economy are accepted as equivalent in the economies of the other signatories. In other words, the aim is:

one accreditation – one test/inspection/certification – accepted everywhere

ISO/IEC 17000 defines accreditation as:

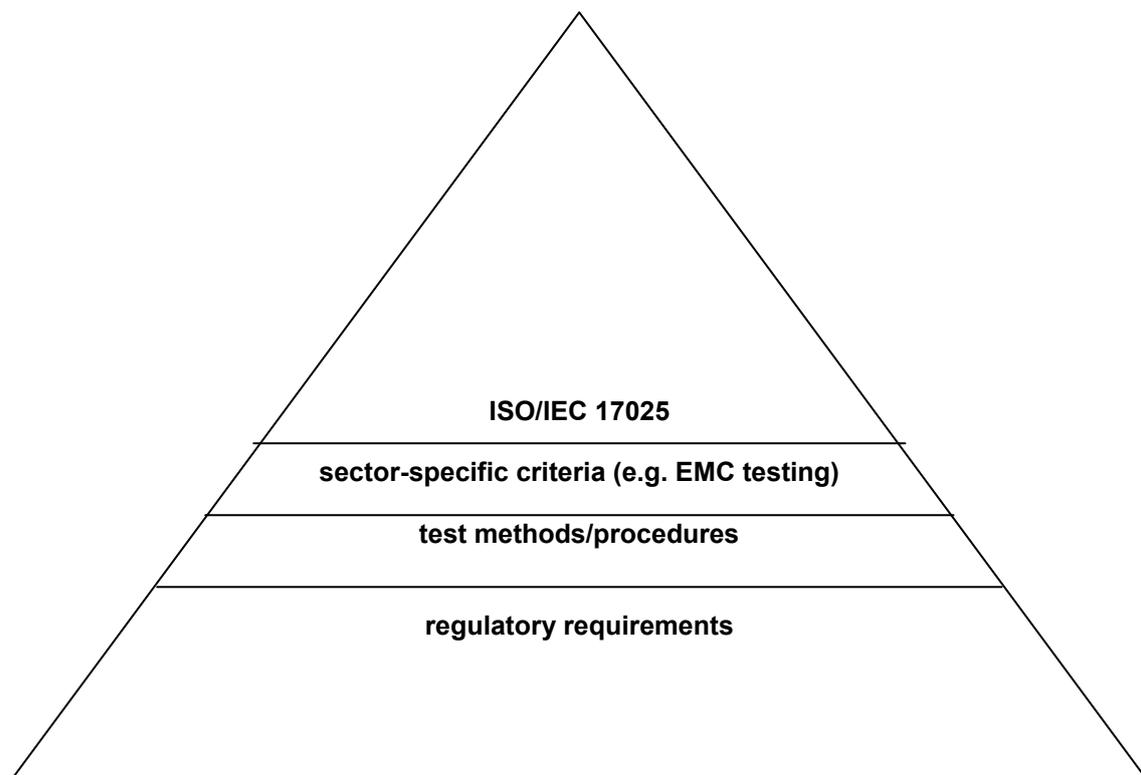
third-party attestation related to a conformity assessment body conveying formal documentation of its competence to carry out specific conformity assessment tasks

For accreditation of laboratories, inspection bodies and product certifiers the key criteria documents are:

- ISO/IEC 17011 - Conformity assessment – General requirements for accreditation bodies accrediting conformity assessment bodies
- ISO/IEC 17025 - General requirements for the competence of testing and calibration laboratories
- ISO/IEC 17020 - General criteria for the operation of various types of bodies performing inspection
- ISO/IEC Guide 65 - General requirements for bodies operating product certification systems

The general requirements/criteria are usually underpinned by supplementary sector-specific criteria, e.g. for EMC testing laboratories, and by the technical requirements of specific methods or procedures for which the CAB is accredited. For accreditation to meet regulatory requirements there will be regulator-specific requirements as well, e.g. reporting formats, labelling requirements.

The hierarchy of accreditation requirements is described in the figure below, specifically for a testing laboratory but the same principle applies for other types of conformity assessment bodies.



A signatory to the APLAC MRA or PAC MLA has to be able to demonstrate to a peer evaluation team that, in meeting the requirements of ISO/IEC 17011, it has ensured that it has taken proper account of the accreditation hierarchy in accrediting its conformity assessment bodies.

Acceptance of reports or certificates from accredited CABs demands mutual confidence in the competence of those CABs. This confidence cannot be legislated. Regulator confidence can be enhanced by such measures as peer evaluations and transparency.

The APLAC MRA and PAC MLA are built upon a peer evaluation process. Each applicant is evaluated against ISO/IEC 10711 and accreditation cooperation-specific procedures (e.g. APLAC MR 001; PAC-DOC-010) by a team of peer evaluators. Each signatory is subject to periodic re-evaluation to ensure ongoing compliance with the relevant procedures. Within the APLAC MRA process, an individual accreditation body may nominate areas of specific trade or other interest within its scope of operation for the evaluation team to examine, e.g. telecommunications, food safety, electrical safety. Individual accreditation bodies may also choose to invite their domestic regulators to participate as observers in the evaluation process.

The basic operational information of both APLAC and PAC and, in particular, information about the APLAC MRA and PAC MLA is available to all interested parties and can easily be accessed from the organisations' web sites: www.aplac.org; www.apec-pac.org. Provision of this information to all interested parties, including regulators, enables increased understanding of the MRA/MLA. APLAC and PAC participation in the meetings of APEC SCSC also enhances transparency.

In the last few years APLAC has undertaken several initiatives in the APEC region aimed at developing a better understanding of the needs of regulators by APLAC, and vice versa.

A workshop was held for APEC telecommunications regulators in the margins of an APEC TEL meeting. The workshop provided an opportunity to identify the specific needs of individual regulators and to explain how APLAC's practices and the implementation of the APLAC MRA could be strengthened to provide even greater confidence. A similar workshop was held for various US regulators in the margins of an APLAC meeting in Washington DC.

As part of each annual APLAC meeting a half-day seminar is held for the various regulators in the host economy. The next such seminar will be held in Taipei, Chinese Taipei on 11 September 2006. APLAC has found these seminars have been invaluable for the two-way exchange of information, and as a means of confidence building.

Apart from these workshops and seminars, APLAC undertook a series of promotional visits to regulators in 6 APEC economies, to explain in detail the implementation of the APLAC MRA and its relevance to regulators' needs. There were two common misunderstandings that needed to be clarified in discussion with the regulators:

1. a laboratory in an exporting economy would be accredited for its competence to test against the standards and/or regulations of the importing economy, i.e. the exporting economy was not seeking to impose its domestic regulatory requirements on foreign regulators;
2. the accredited testing in the exporting economy would not replace the regulatory function of the regulators in the importing country (or even in the exporting economy), but could be used by the regulators to facilitate acceptance of imported regulated product, i.e. it was necessary to distinguish between acceptance by a

regulator of test reports from a foreign laboratory, accredited by an APLAC MRA signatory, and the regulatory decision made by the regulator.

In other words, the APLAC MRA (for testing and inspection) and the PAC MLA (for product certification) are tools available for use by the regulator to assist in regulatory decisions.

Regulators need confidence in the test reports and product certifications used to confirm their regulatory decisions, both pre-market and post-market. They need to have access to competent conformity assessment bodies to judge, with confidence, the compliance or otherwise of regulated products.

While some regulators have their own facilities to conduct testing and other forms of conformity assessment in their own economy, few have the resources and infrastructure to evaluate the competence of foreign conformity assessment bodies. Accreditation of their own conformity assessment bodies by a competent accreditation body provides regulators with an independent assurance that their own conformity assessment bodies meet international standards. Similarly, use of competent foreign accreditation bodies should provide confidence that such conformity assessment bodies have also been thoroughly evaluated to test or certify competently to the importing country's technical requirements. Use of accreditation bodies that meet the requirements for competent operation, (that is, signatories to the APLAC MRA and PAC MLA), is an additional assurance for regulators and other users.

Regulators in a number of economies have already agreed to use the APLAC MRA and PAC MLA as the basis for their regulatory decisions. Also, a number of APEC economies' regulators, including those in my own home economy, Australia, have for many years successfully used MRAs between its national accreditation bodies and foreign accreditation bodies, to facilitate their regulatory approvals and to reduce technical barriers to trade.

APLAC and PAC recognise that there are additional activities that they can undertake to provide even greater confidence amongst individual APEC regulators wishing to use their MRA/MLA as the technical underpinning for APEC-related regulations. We look forward to continuing dialogue with APEC regulators and the evolution of even greater use of the APLAC MRA ad PAC MLA within APEC.

NOTE: The author would like to acknowledge with thanks the assistance of PAC, and in particular of the PAC Chair, Ms Elva Nilsen, and PAC Secretary, Ms Belinda Mort, in preparing this paper.



The Role of Voluntary Sector MRAs in Supporting Regulatory Decisions

Helen Liddy
APLAC Secretary

1



Voluntary Sector MRAs/MLAs

- APEC region
 - APLAC MRA for testing, calibration, inspection
 - 24 signatories; 16 APEC economies
 - PAC MLA for QMS, EMS, product certification
 - 3 signatories; 4 economies for product
- Globally
 - ILAC Arrangement for testing and calibration
 - 54 signatories; 46 economies
 - IAF MLA for QMS, EMS, product certification
 - 23 signatories; 24 economies for product

2



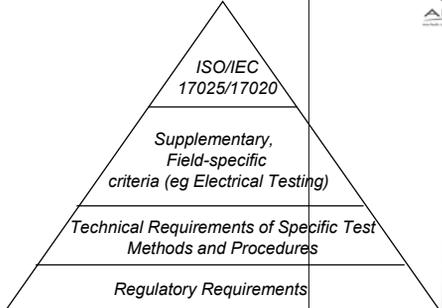
APLAC and PAC MRA/MLA in APEC

- APLAC and PAC are 2 of 5 Specialist Regional Bodies (SRBs) recognised by APEC
- APEC EE MRA refers to APLAC MRA (testing) and PAC MLA (product)
- APEC TEL MRA refers to accreditation body that has entered into an MRA/MLA

3



Accreditation Hierarchy of Criteria



- 1 General technical competence and systems compliance criteria
- 2 Additional field-specific criteria, eg for emc testing laboratories
- 3 Additional test, calibration, inspection method criteria
- 4 Additional, regulator-specific criteria (eg reporting formats, labelling etc)



APLAC & PAC- Primary Objective

- Acceptance of test, calibration and inspection reports; product certificates amongst all signatories' economies
 - demands mutual confidence in technical competence
- Confidence cannot be legislated

5



Accreditation

- Procedure by which authoritative body gives formal recognition that a body is competent to carry out specific tasks

Key words

 - authoritative
 - competent
 - specific tasks

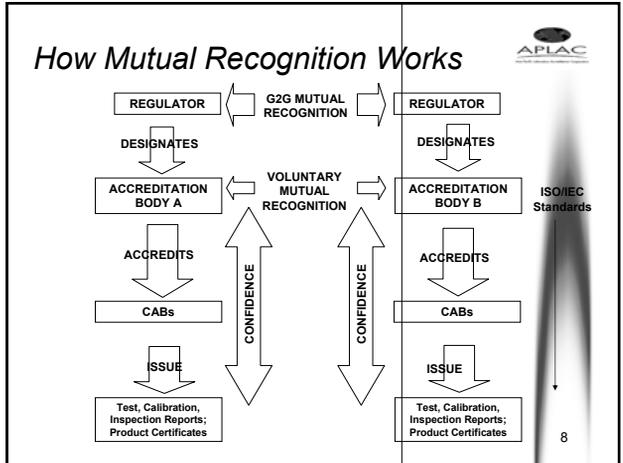
6



Accreditation ctd

- Technical competence
- Integrity
- Transparency (as defined by WTO TBT)
- Fairness
- Scope of accreditation
 - products
 - types of test parameters types of inspections; matrices
 - test specification; test method

7





APLAC MRA and PAC MLA

- Facility accredited by one MRA/MLA partner has equivalent competence to facility accredited by other partners
- **Each signatory acknowledges equivalence of all other signatories**
- Signatories demonstrate compliance with ISO/IEC 17011; peer evaluation process
- Re-evaluation every 4 years maximum
 - shorter interval for various causes

9



Understanding Regulator Needs

- Dialogue
- Seminars
- Observation of peer evaluations
- Confidence building

10



MRA/MLA and Regulatory Needs

- Accreditation to meet the standards & regulations of importing economy
- Accreditation does not replace regulatory function, even in domestic situation
- Distinguish between
 - Acceptance by regulator of test reports from foreign CAB
 - Regulatory decision made by regulator

11



Summary

- Regulators need confidence in test reports and product certificates
- Regulators need access to competent CABs
- Accreditation and the APLAC and PAC MRA/MLA are tools to assist regulatory decisions, especially related to imported product

12

Thanks

- Input from APLAC colleagues
- PAC colleagues, especially the Chair, Ms Elva Nilsen
- Any questions?



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/003

Mechanisms for the Acceptance of Conformity Results in the APEC Region for Trade Facilitation - Views from Electronics and IT Industry Sector

Submitted by: Toshiyuki Kajiya, Chair, IECEE Japanese National
Committee and Vice-chair, Conformity Assessment System Committee
of JEITA



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

Mechanisms for the Acceptance of Conformity Results in the APEC Region for Trade Facilitation
- Views from Electronics & IT Industry Sector -

5 September 2006

Toshiyuki Kajiya

Chair, IECEE Japanese National Committee
Vice-chair, Conformity Assessment System Committee of JEITA
delegated from
Matsushita Electric Industrial Co., Ltd.

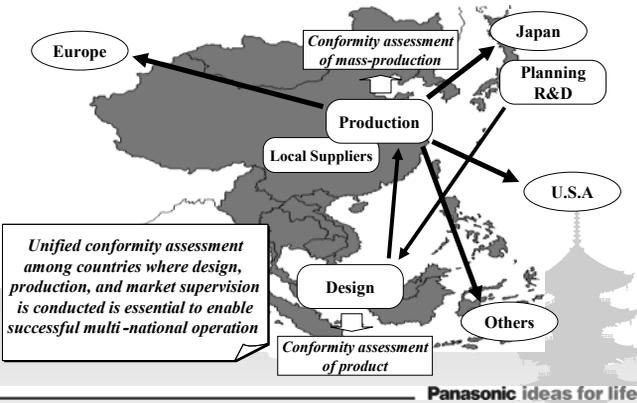
Basic Data on Conformity Assessment

Example: Safety requirement for TV broadcasting receivers

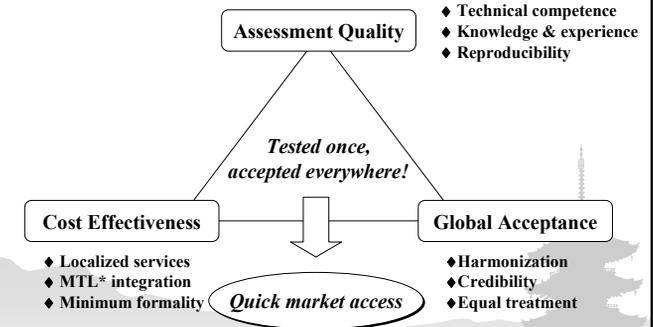
- ▶ Among 74 countries/regions stipulating regulatory requirement;
 - All countries/regions has transposed, or has made reference to, the IEC safety standard for their conformity assessment
 - Countries/regions implementing mandatory certifications prior to product marketing;
 - 32 (CIS, Middle-East & Far-East Asia, etc.)
 - Countries/regions implementing manufacturer's/supplier's self verification system (SDoC);
 - 42 (EU, Eastern Europe, Australia, New Zealand, etc.)

Product design conformity to IEC standard is the essential tool for worldwide one-stop testing !

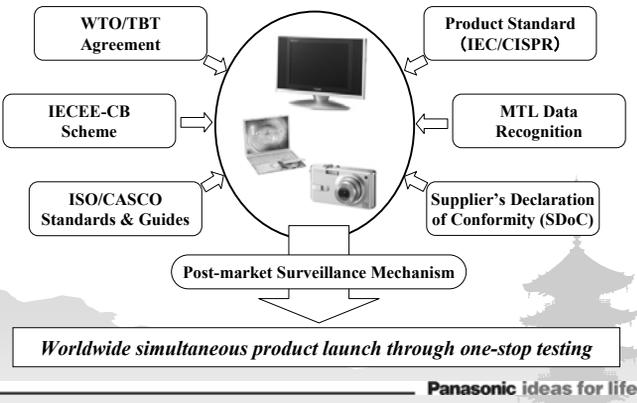
Typical Example of Multi-national Operation



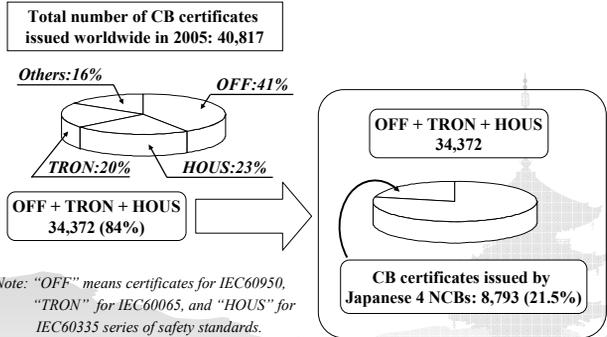
Three Essential Elements of Conformity Assessment

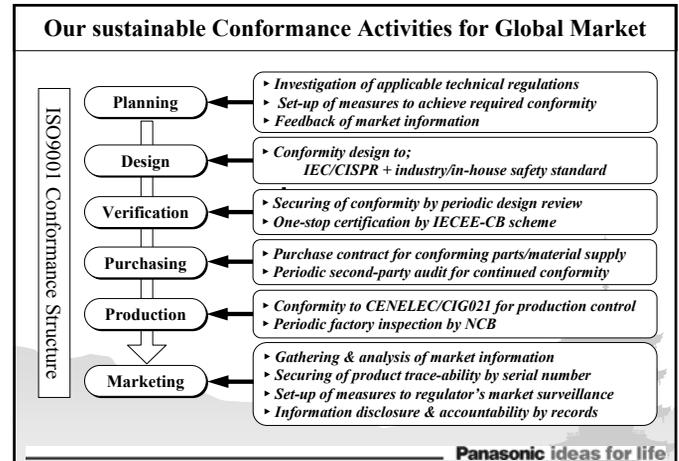
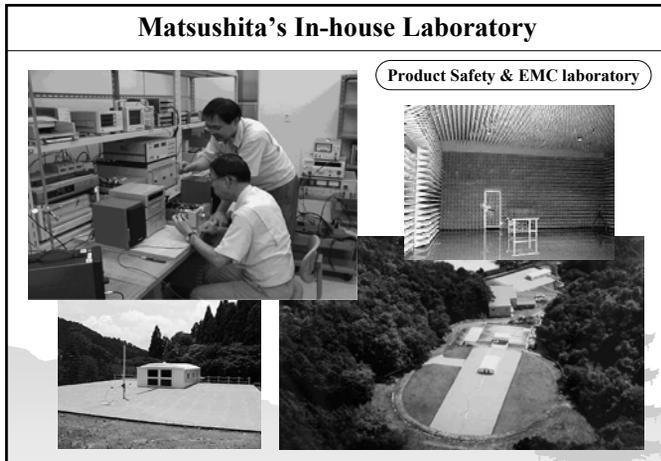
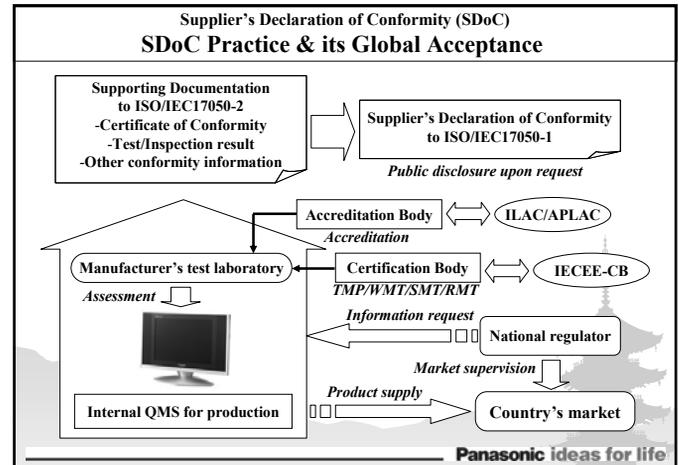
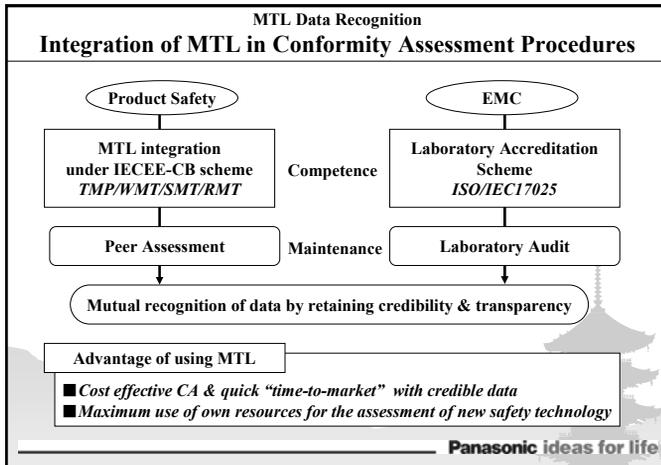


Various Tools Used for Conformity Assessment



Our Contribution to IECEE-CB Scheme





Summary – Our Expectation for Trade Facilitation

In order to realize "one standard, one test, accepted everywhere"

- ▶ **To national regulators;**
 - Regulatory reform aiming at "Good Regulatory Practice", with shared responsibility among regulator, manufacturer, CAB, and consumer
 - National transposition of international standards and schemes into the technical regulations, so as to satisfy its objectives
 - Minimum regulator's intervention prior to product marketing based on the result of risk assessment, with maximum post-market supervising authority
 - Active promotion of Supplier's Declaration of Conformity (SDoC) as means of cost-effective conformity assessment
- ▶ **To national SDOs;**
 - Speed-up of national transposition process of international standard with minimum national deviations
 - International contribution to standardization work appropriate for proper conformity assessment

Panasonic ideas for life

APEC Member's Participation to International Framework

| Country/Region | WTO (Nov/04) | ISO (July/06) (Corr. M) | IEC (March/06) | IECEE (Jan/06) | Signatories of APLAC-MRA |
|------------------|--------------|----------------------------|----------------|----------------|--------------------------|
| Brunei | ● | | | | |
| Indonesia | ● | ● | ● | ● | KAN |
| Malaysia | ● | ● | ● | ● | DSM |
| Philippines | ● | ● | (Suspended) | | BPSLAS |
| Singapore | ● | ● | ● | ● | SAC |
| Thailand | ● | ● | ● | ● | DMSC, TLAS |
| Viet Nam | ● | ● | (Ass. M) | | BOA |
| Japan | ● | ● | ● | ● | JAB, IA Japan, VLAC |
| Korea | ● | ● | ● | ● | KOLAS |
| China | ● | | ● | ● | CNAS |
| Chinese Taipei | ● | | | | TAF |
| Hong Kong, China | ● | (Corr. M) | | | HKAS |
| Mexico | ● | | ● | ● | EMA |
| Papua New Guinea | ● | (Corr. M) | | | |
| Australia | ● | | ● | ● | NATA |
| New Zealand | ● | | ● | ● | IANZ |
| U.S.A | ● | | ● | ● | A2LA, IAS, NVLAP |
| Canada | ● | | ● | ● | CAEL, SCC |
| Peru | ● | (Corr. M) | | | |
| Chile | ● | | | | |
| Russia | | ● | ● | ● | |

*Standards are of no use if
not used...*

ご静聴ありがとうございました

Thank you very much for your attention

謝謝大家

Vielen Dank für Ihre Aufmerksamkeit

Merci beaucoup

Le doy muchas gracias



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Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/004

A Review of the New Zealand Standards and Conformance Infrastructure

Submitted by: Sirma Karapeeva, Senior Policy Analyst, International
Technical and Regulatory Coordination, Ministry of Economic
Development, New Zealand



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

**STANDARDS, ACCREDITATION AND
MEASUREMENT:
SUPPORTING OUR ECONOMY**

**A Review of the New Zealand Standards and
Conformance Infrastructure**

**Sirma Karapeeva
September 2006**



Agenda

- The standards and conformance infrastructure bodies
- The government's objectives for the infrastructure and how the infrastructure contributes to achieving those objectives
- Context and objectives of the Review
- Key issues
- Key options
- Next steps



The Standards and Conformance Infrastructure

- Five infrastructure bodies:
 - Standards Council
 - Testing Laboratory Registration Council
 - Joint Accreditation System of Australia and New Zealand (JAS-ANZ)
 - Measurement Standards Laboratory
 - Measurement and Product Safety Service
- Regulators also have a role



The Importance of Standards and Conformance

- Government's objectives for the infrastructure:
 - Risks to health, safety and the environment are managed
 - Domestic economic development is facilitated
 - International trade is facilitated
- How S+C contributes:
 - Internationally aligned economy
 - Supports good quality regulation
 - Supports a Single Economic Market with Australia
 - Facilitates innovation



Context of the Review

- Review commenced in 2005
 - Part 1 – examine international best practice
 - Part 2 – assess strengths & weaknesses of infrastructure
 - Part 3 – investigation & analysis of issues raised in Parts 1&2, release of discussion document
- Infrastructure is sound – may be some room for improvement
- Review fits within context of Economic Transformation agenda and Review of Regulatory Frameworks



Objectives of the Review

- Evaluate the infrastructure against NZ's specific requirements and international trends
- Evaluate how the infrastructure can improve the competitiveness of NZ suppliers
- Identify other issues that need to be addressed to enhance the contribution of the infrastructure



Key Common Issues

- Governance and accountability
- Alignment with government goals and objectives
- Provision of quality information to regulators and businesses

Key Specific Issues

- Standardization: use and development of standards
- Accreditation: competition for inspection body accreditation
- Measurement: capacity to provide services
- Conformity Assessment: gaps in service provision
- Regulation: use of the infrastructure by regulators

Key options

- Governance, accountability and funding of the infrastructure
- Alignment of the infrastructure with government goals
- Information on, and understanding of, the infrastructure by regulators and business
- Use of the infrastructure to support regulation
- Issues specific to each infrastructure body

Process from here

- Discussion document launched 8 August 2006
- Submissions close 24 November 2006
- Report back to Cabinet by 30 March 2007
- Further information is available on:
www.med.govt.nz/sc-tbt/infr/review/

STANDARDS, ACCREDITATION AND MEASUREMENT:

SUPPORTING OUR ECONOMY

Thank you for your attention



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/005

Building Up the Vietnam Standards and Conformance Infrastructure via Law on Standards and Technical Regulations

Submitted by: Ho Tat Thang, Deputy Director General, Directorate for
Standards and Quality



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

**BUILDING UP THE VIETNAM
STANDARDS AND
CONFORMANCE
INFRASTRUCTURE VIA LAW ON
STANDARDS AND TECHNICAL
REGULATIONS**

DR: HO TAT THANG
DEPUTY DIRECTOR GENERAL OF
DIRECTORATE FOR STANDARDS AND QUALITY
9.2006

CONFORMITY ASSESSMENT

- To define the subject of standards and technical regulations conform with technical characters and administrative requirements specified in relevant standards and technical regulations

“Law on Standards and Technical regulations”

CONFORMITY ASSESSMENT

- Testing.
- Calibration.
- Verification.
- Standards and Technical Regulations certification of conformity.
- Standards and Technical Regulations declaration of conformity.
- Accreditation.

**PRINCIPLE FOR STANDARDS
AND TECHNICAL REGULATIONS
DEVELOPMENT**

- To ensure non-discrimination treatment.
- To ensure not create unnecessary obstacles to production, business and trade.
- To ensure the publicity, transparency.
- To ensure the consensus and the public's participation
- Harmonizing with international standards

SYSTEM OF STANDARDS

- National Standards – TCVN
- Organization's Standards – TCCS

**SYSTEM OF TECHNICAL
REGULATIONS**

- National technical regulations – QCVN
- Local Technical Regulation – QCDP

PRICIPLES OF STANDARDS AND TECHNICAL REGULATIONS APPLICATION

- Standards shall be applied on the voluntary basic
- Technical Regulations shall be applied mandatorily

METHOD OF CONFORMITY ASSESSMENT

- Standards conformity assessment: Voluntary.
- Technical Regulations conformity assessment: Mandatory

REQUIREMENTS OF STANDARDS AND TECHNICAL REGULATIONS FOR CONFORMITY ASSESSMENT

- Prescribing assessable characters and specification.
- Be testable by testing laboratory

CONFORMITY CERTIFICATION BODIES

Conformity Certification bodies are technical service activities.

- To have enough ability conforming with international standards.
- To have quality management system.
- To register field of activity at STAMEQ.

ACCREDITATION

- Testing Laboratory: ISO/IEC 17025:2005.
- Calibration laboratory : ISO/IEC 17025:2005.
- Certification organization : ISO/IEC 62/66 Regulation.
- Inspection body: ISO/IEC 17020: 1998

THE LAW ON STANDARDS AND TECHNICAL REGULATIONS – 2006

CONFORMING WITH TBT/
WTO AGREEMENT

Session II:
**Enhancing the role of APEC in the
International Standardization Process**



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/006

International Standardization Process – Japan’s Experience in Electronic and Electrical Areas

Submitted by: Setsuo Harada, Member of IEC Standardization
Management Board (SMB) and Director, Standards & Partnership
Department, Sony Corporation



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

**International Standardization Process
Japan Experience in Electronic and Electrical Areas**

"Why" is only the word which exists in any language.
It is the source of development.

By Setsuo Harada (Mr.)
Member of IEC Standardization Management Board (SMB)
Board of Directors of ITSCJ (The mirror committee of JTC1)

Director
Standards & Partnership Department
Sony Corporation (Headquarters)

5 September 2006

1. Participation in ISO standards setting activities

ISO officers

President of ISO

Mr. Tanaka (METI OB)

Council (C) board member

Mr. Takeda (METI OB)

Technical Management Board (TMB) member

Mr. Wakai (METI OB)

ISO TC mirror committees are formed under the umbrella of Japanese Standards Association (JSA) and industrial bodies (domestic SDOs). Private company members participate in the ISO TC mirror committees through JSA or industrial bodies. The work of C and TMB is mainly driven by METI and JSA.

2. Participation in IEC standards setting activities

IEC officers

Immediate past president of IEC and IEC ExCo member

Mr. Takayanagi (Toshiba)

Council Board (CB) member

Mr. Miki (Panasonic), 15 countries

Standardization Management Board (SMB) member

Mr. Harada (Sony), 15 countries

SMB alternate

Mr. Matsumoto (METI)

Conformity Assessment Board (CAB) member

Mr. Onimaru (NEC), 12 countries

CAB alternate

Mr. Ishii (JET)

IEC TC mirror committees are formed under the umbrella of industrial bodies. Private company members participate in the IEC TC mirror committees through the industrial bodies (domestic SDOs). The work of CB, SMB, and CAB is mainly driven by IEC Activities Promotion Committee (IEC-APC) and its private member companies.

**3. Participation in IEC standards setting activities
JISC representatives**

Japanese Industrial Standards Committee (JISC) is the Japanese National Body for ISO and IEC. The office of JISC is in Ministry of Economy, Trade and Industry (METI)

Member body

Japanese Industrial Standards Committee (JISC) at METI

JISC Secretary General

Mr. Matsumoto (Director General, METI)

JISC Chairman

Mr. Okamura (Chairman of Toshiba)

JISC Co-chairman

Mr. Masada (University professor)

**4. Participation in IEC standards setting activities
regarding Technical/Sub Committees (TCs/SCs)**

There are 91 TCs and 79 SCs at IEC.

Japanese Secretaries of IEC TCs and SCs (7 TCs and 6 SCs)

TC35, TC49, TC51, TC90, TC91, TC100, and TC110

SC3C, SC36C, SC47A, SC86B, SISPR/B, and CISPR/I

Japanese Chairmen of IEC TCs and SCs (4 TCs and 3 SCs)

TC93, TC105, TC110, and TC111

SC3C, SC47D, and SC61B

**5. Participation in IEC standards setting activities
regarding Sector Boards (SBs)**

There are 3 IEC sector boards (SBs).

SB1: for transmission and distribution of electricity

Mr. Ikeda (Chairman, Toshiba),

Messrs Goda (Mitsubishi) and Okamoto (TEPCO)

SB3: for industrial automation systems

Messrs Fukuda (University professor)

and Fujita (IDEC<Toshiba>)

SB4: for infrastructure of communication networks

Mr. Arai (NEC)

6. Participation in IEC standards setting activities regarding IEC Advisory Committee members

There are 3 IEC advisory committees.

ACOS: Advisory Committee On Safety
Mr. Sakashita (SECJ)

ACEC: Advisory Committee on Electromagnetic Compatibility
Mr. Tokuda (University Professor)

ACEA: Advisory Committee on Environmental Aspects
Mr. Sato (Ricoh)

7. Participation in IEC standards setting activities regarding IEC conformity assessment scheme

There are 3 types of IEC conformity assessment groups.

IECQ: IEC quality assessment system
Mr. Shiono (RCJ) for IECQ-CECC (MC) member

IECEE: IEC system for conformity testing to standards for safety or electrical equipment
METI member for IECEE

IECEX: IEC scheme for certification to standards for explosive atmospheres
None for IECEX (ExMC)

8. Participation in IEC standards setting activities regarding IEC Management Advisory Committees (MACs)

There are 4 IEC management advisory committees (MACs).

PACT: President's advisory committee on future technologies
Messrs Fujisawa (Hitachi) and Koezuka (Mitsubishi)

MC: Marketing committee
None

SFC: Sales policy committee
Mr. Ueno (JSA)

CDF: Finance committee
Mr. Togo (JETRO Geneva)

9. IEC Regional Centres

Besides the IEC Central Office in Geneva, there will be 3 IEC regional centres.

IEC-APRC: IEC Asia-Pacific regional centre
Singapore

IEC-ReCNA: IEC regional centre for North America
The USA

IEC-???: Planned in South America
Brazil

10. Three Aspects of International Standards

We must understand the three aspects of international standards and conformance.

(1) Political aspect
for governments and standards managers

(2) Technological aspect
for standards workers

(3) Commercial aspect
for business persons

Setting standards is a complicated work. We must understand also the three types of persons, who are involved in international standardization. Coordination work between the three types of aspects and also of the persons (entities) is required with the understanding of one another: for a balance among governing power, technology, and money (businesses).

11. History of Industrial Development of Asian Member Countries

Are they developed or under developed? There are three stages along with the industrial development stages.

(1) Stage 1 (A trading battle between governments, i.e. countries)
Developing countries

for political aspect only
(2) Stage 2 (A trading battle between privatized companies)
Developed countries

for political and technological aspects
(3) Stage 3 (A trading battle between regions)
Fully developed countries
for political, technological, and commercial aspects

Any country takes the same steps in its industrialization. First, it is necessary to understand at which stage you are. Do you need to move now to the next stage?

12. Detail of the Three Stages for Industrialization of a Country

In Europe, where international standardization started about 100 years ago, there are a few developing countries today except for those in Eastern Europe.

(1) Developing stage (for political aspect only)

There are only standards managers working in the government. On the other hand, there are almost no standards workers and business persons in private sectors.

(2) Developed stage (for political and technological aspects)

There are standards managers and workers from the private sectors working with the government officials.

(3) Fully developed stage (for political, technological, and commercial aspects)

There are business persons who are deeply involved in standardization work. There are also a number of standards managers and workers, who are active in standards development, from the private sectors. The government helps them develop the international standards for their businesses.

13. The Real Meaning of International Standards

We must understand the two sides (barriers or tools) of international standards

Today, international standards exist for selling goods and services overseas, i.e. for international trading. According to WTO/TBT, standards can **eliminate barriers to trade**. But, they can also **create barriers to trade**. In the battle field of international trading businesses, the rule makers will be the winners.

Ensure compliance with WTO/TBT code. Yes, but how to?

(1) Standards are barriers to trade

for the followers in international standardization process.

(2) Standards are tools for trade

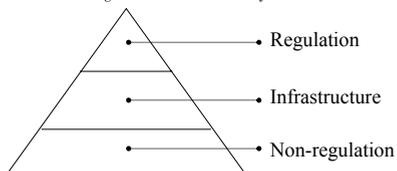
for the leaders in international standardization process.

14. Standards Pyramid

There are cases where one standard is required, and also where several common set of standards of the same kind are required. The required number of the standards, which are similar but different, varies from the regulation-like standards to social infrastructure, and to the interest of individuals.

(1) There is a case where one standard makes businesses efficient but this may create a trouble in trading businesses.

(2) There is a case where a few common standards can remove a trouble in trading businesses but this may make them inefficient.



15. Understanding the Difference among Regions and Countries

Only the people, who have been in a country, can understand that country.

(1) Smartcards as a commutation pass

Some thousands of people may die in a congested railroad station in the morning of Tokyo if the transaction time of commuter passes exceeds a certain time period.

(2) 100 VAC as a commercial power supply voltage

Some tens of people die a year in France, where 200 VAC is supplied, when replacing light bulbs at home. What happens, if it is 200 VAC, in Japan: a wet and rainy country where Tatami (Japanese carpet) is commonly used in a house?

Compared with European Union, Asian countries are still a minor group in the standardization world. Speak loud what you think about the standards in the world of international standardization.

Standards cannot kill mankind.

16. Existing Standards and New Standards

The existing social-infrastructure-related standards are difficult to change. We are better to think about the standards of only the future while aligning the existing standards as many as and as much as possible with the international standards.

(1) For existing standards

Align existing domestic standards with existing international standards.

(2) For new standards

Develop new international standards and then adopt them as domestic standards.

Japan already finished alignment of most domestic standards (JIS) to international ones.

17. Two Sides of International Standards (1/3)

Today, products are not often used as stand-alone equipment. They are widely used for services. Technological development reduces the number of product standards. We must think about the infrastructures related system standards such as data interface, communication system, safety, environment, security, etc. in the world of standardization. The following explains an example of recording media.

(1) Video tape formats

Not compatible because of the size and shape of the recording media. The user exchanges the contents by using the media.

(2) Compact disc formats

Any disc can be used if the size is the same, and the player has a playback function of all disc formats.

(3) PCMCIA card slot formats

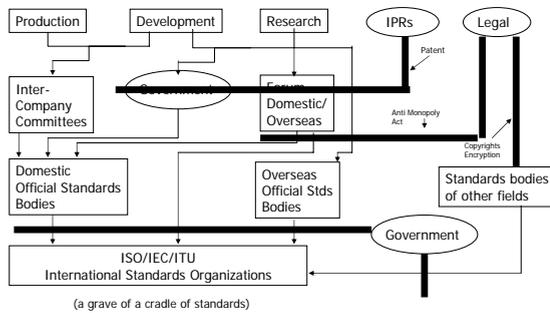
Any card-type media (either HDDs or ICs) can be used if they are applicable to the same slot format.

(4) Contact-less memory card formats

Any card can be used if they are electrically compatible. The user exchanges the contents by using a communication network.

17. Two Sides of International Standards (2/3)

The Face and the Back of International Standards Setting



17. Two Sides of International Standards (3/3)

We must understand the two sides (ad-hoc or standing) of the committee activity regarding international standards setting.

- (1) **De facto standardization** Used to make profits maximum: ad-hoc committees, widely recognized, failure blamed, easy to find the standards workers who do not work.
- (2) **De jure standardization** Used to make losses minimum: standing committees, not well recognized, failure praised, difficult to find the standards workers who do not work

To keep the position of membership in a technical committee is important, even if it is not an active technical committee.

- Change yourself from the follower to the leader only when necessary.
- Change the international standards from barriers to tools.
- Be inactive in a committee with an active attitude.

18. International Standards Organizations

There are several key international standards development organizations (SDOs) in the world. We must understand the characteristics of such organizations.

- (1) ISO with CEN
- (2) IEC with CENELEC
- (3) ISO/IEC JTC1 with Ema International
- (4) ITU with ETSI

Who develops the standard: particular national bodies or general national bodies?

Who develops the standard: general national bodies or particular private companies?

The standardization process is not always and not necessarily transparent. Every business person wants to change standards development process from "not-transparent" to "transparent."

19. Regulatory Standards

Standards can be regarded as international laws when referenced by some codes.

- (1) **Agreements are international laws for the members**
 - WTO/TBT agreement
 - WTO/GP agreement

Any rights differing from one country to another are not international laws but national ones.

- (2) **Intellectual property rights**
 - Copyrights (of standards documents, standards software, or video/audio/text contents)
 - Security technology

- (3) **Others**
 - Safety, environment, or security issues when referenced by law-like standards such as EU Directives.

20. Standardization Strategy for the Agreements and Laws

If there are no agreements or laws, you are free in international trading businesses. International standards can be regarded as international laws of international trading businesses. Any agreements or laws are created by human beings, i.e. changeable.

- (1) **WTO TBT/GP agreement**
Move fast and you will win. What market do you foresee?
- (2) **Antitrust/Antimonopoly act**
Be ready but not yet start standardization. When do you start?
- (3) **Intellectual property rights**
Use a technology of your own. Or, think about an alliance with some major competitors who owns the relevant patents.
- (4) **Copyrights/Encryption**
It is just an outcome of compromise. Encryption may be a tag on your forehead. Anybody can read it. Never try to be perfect.

21. Difference between Europe and Asia

Is it difficult to establish a business cooperation among Asian countries?

Tools: Religion->Thoughts/Money->Economy/Language->Culture

- (1) **European countries**
There is almost one union in Europe in religion and economy. There is also almost one union in Europe in culture, and this will make English a common EU language in the very far future. There are boundaries between countries in Europe but they exist only on a map of Europe, not in economy or standardization.

- (2) **Asian countries**
There are some tens of Asian countries each different in religion and economy. There are also boundaries (some of them are physical) between countries. The Asian member countries are significantly different in culture, and its physical boundaries make communication between the countries difficult.

What can we do now?

22. Destroying Asia's Physical Boundaries **There is no such boundaries in Europe.**

There are seas, mountains, and economic differences as barriers to common understanding; the last one is attackable.

A standards worker who represents the industry needs financial support for the traveling of standardization work so that he/she can participate in the discussion of standards development.

An example of Japan Electronics and Information Technology Industries Association (JEITA) for standardization in IEC

- (1) There are some hundred private companies who are members of JEITA.
- (2) About 50 major companies are the members of the Committee of IEC Activities Promotion (CieCAP) of JEITA.
- (3) The members of the CieCAP pay for their annual membership fee to support the IEC standardization work by JEITA including the financial support for the travel expense of standards workers.

Support is a job of the industry & government, not of a company.

23. An Ideal Standards Setting Team

The following principle applies in standardization, to companies and also to governments.

(1) Strategic work required for government officials

- Distinguish the committee members from the negotiators.
- Make yourself being involved in suggestions, determinations, and negotiations process.
- Set the place where the people concerned can exchange their views.

(2) Routine work required for standards managers

- Education to understand standards setting work.
- Creation of a database of standards workers.
- Collection of reports of standards committees.
- Approval of participation in and secession from standards organizations.
- Management of the membership fees of SDOs.
- Appointment of the members of standards setting committees.
- Coordination among stakeholders for membership or interests.

24. Conclusion

To benefit Asian countries from international standardization:

- Understand the importance of international standards.

It can be a tool for Asian countries to accelerate the industrial development, or it can be a weapon for some countries who want to control the industry of Asian countries.

- Join more actively in international standards setting work.

Otherwise, Asian countries cannot know what is going on in the world of standardization. Use the international standards as a tool for industrialization.

- Need a standards leader in Asian countries.

To change the idea into reality, Asian countries need a leader who promotes the standardization activity of Asian countries with the understanding of the politics, technologies, and businesses regarding international standardization.

- Do you want to be used by international standards? or
- Do you want to use international standards?

It is a question of being passive or active in the work of international standardization.

END

Thank you for listening.

Although, it is very difficult to understand the real meaning of international standardization in relation to the businesses of Asian countries, you must understand that international standards are of value to international trading businesses.



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/007

APEC Informal Network Activities in the Promotion of Performance Concept in Buildings

Submitted by: Mike Syme, Greg Foliente, John Carson, CSIRO
Sustainable Ecosystem, Australia



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

6th Conference on Standards and Conformance
5th - 6th September 2006

APEC Informal Network Activities in the Promotion of Performance Concept in Buildings

Mike Syme¹, Greg Foliente¹ and John Carson²

¹*CSIRO Sustainable Ecosystems*, ²*Consultant*

ABSTRACT

This paper discusses APEC Informal Network Activities in the promotion of performance concept in building. At present, the Network includes Australia, China, Japan, Thailand, the Philippines, Vietnam, Indonesia and Singapore. Its members include government officials, researchers, academics and engineering professionals. It is an informal forum for discussion of issues of mutual interest to promote understanding. Its first meeting was held in Australia in 2005, where the regulatory systems of member economies were discussed. Its second meeting is held in conjunction with this Conference and the discussion topic will be the approval processes being used in member economies for imported building construction products.

CONTENT

- 1. INTRODUCTION**
- 2. DESCRIPTION OF NETWORK**
- 3. OPERATION OF NETWORK**
- 4. ACTIVITIES OF NETWORK**
- 5. CONCLUSION**

1. INTRODUCTION

- An international network was originally created to promote the performance concept in buildings.
- The Australian Government Overseas Aid Program AusAID provided some funding that enabled the Network to become an APEC support activity.
- Details on the formation of this Informal Network were submitted to the second meeting of the Sub-Committee on Standards and Conformance (SCSC) on the 8-9 September 2005 held in Gyeongju, Korea.
- The purpose of this presentation is to describe the current activities of the Network to date and how they can be used to support APEC.

2. DESCRIPTION OF THE NETWORK

- Membership of the Network is open to all APEC economies. AusAID funding helped to facilitate the participation of some South East Asian economies in the Network.
- The purpose of the Network is to generate better understanding among the economies on issues of mutual interest.
- Membership includes government officials, researchers, academics and engineering professionals. At present, the Network includes delegates from Australia, China, Japan, Thailand, the Philippines, Vietnam, Indonesia and Singapore. Members from Australia, Japan and Singapore are self-funded.
- The principles of the Network are to facilitate understanding through discussion and survey reports in a friendly informal atmosphere without any obligation and with full respect for each economy's sovereignty.

3. OPERATION OF THE NETWORK

- The Network operates by holding meetings in conjunction with other related international events but also having its own discussion group sessions independent of the main event. Discussions are open and relate to detailed technical issues.
- It conducts surveys on issues of common interest and distributes outcomes to all members. This improves the understanding of how each economy operates.

4. ACTIVITIES OF THE NETWORK

- Details on the formation of this Informal Network were submitted to the second meeting of the SCSC on the 8-9 September 2005 held in Gyeongju, Korea (Doc. No 025).
- At the first meeting, held in 2005, the delegates attended the Australian Building Codes Board (ABCB) Building Australia's Future Conference and the Inter-jurisdictional Regulation Collaboration Committee (IRCC) 2nd Global Policy Summit on Sustainability, where issues concerning performance, energy and access were discussed. This participation was made possible with generous funding assistance from ABCB. Prior to these conferences, the Network conducted a survey on the overall regulatory system of each of the participating economies. The results of that survey were explained and discussed at the network meetings held in conjunction with the Conferences.
- Details of the first meeting were reported to the meeting of the SCSC 23-24 February 2006 held in Ha Noi, Vietnam (Doc. No 018).
- The second meeting of the Network will be held in conjunction with the 4th Conference on Good Regulatory Practices, Monday 4th September 2006 and the 6th Conference on Standards and Conformance, Tuesday 5th September 2006 being held in Da Nang, Vietnam. Prior to these conferences the Network conducted a survey on the approval process of each economy for imported building construction products. The results of this survey will be explained and discussed at its network meeting and will, of course, be reported to the SCSC in due course.

5. CONCLUSION

The Informal Network is an effective way of promoting better understanding of the participating economies on any issue of mutual concern. This will form the foundation for any future collaboration between the participating economies.

APEC Informal Network Activities in the Promotion of Performance Concept in Buildings

Mike Syme , Greg Foliente and John Carson
CSIRO Sustainable Ecosystems

CONTENT

- INTRODUCTION
- DESCRIPTION OF NETWORK
- OPERATION OF NETWORK
- ACTIVITIES OF NETWORK
- CONCLUSION

1. INTRODUCTION

- International network originally created to promote the **performance concept in buildings**
- AusAID – APEC support program provided some funding that enabled the Network to become an **APEC support activity**.

1. INTRODUCTION

- Details on Informal Network submitted to the second meeting of the SCSC on the 8-9 September 2005.
- Purpose of presentation is to describe:
 - current activities of the Network
 - how they can be used to support APEC.

2. DESCRIPTION OF THE NETWORK

- Membership opened to all APEC economies.
- AusAID funding helped to facilitate the participation of some South East Asian economies in the Network.
- Purpose is to generate better understanding among the economies on issues of mutual interest.

2. DESCRIPTION OF THE NETWORK

- **Members:** government officials, researchers, academics and engineering professionals
- **Participating economies:** Australia, China, Japan, Thailand, the Philippines, Vietnam, Indonesia and Singapore.
- **Operating principles:** to facilitate mutual understanding through discussion and survey

3. OPERATION OF THE NETWORK

- Meetings are held in conjunction with other related international events
- Additional network discussion on specific technical issues
- Surveys on issues of common interest and distributes outcomes to all members

4. ACTIVITIES OF THE NETWORK

- First meeting in 2005
- In conjunction with ABCB Building Australia's Future Conference and the IRCC 2nd Global Policy Summit with generous funding assistance from ABCB
- Survey on the overall regulatory system of each of the participating economies

4. ACTIVITIES OF THE NETWORK

- Second meeting in 2006
- In conjunction with APEC 4th Conference on GRP and 6th Conference on S&C
- Survey on the approval processes for imported building construction products

4. ACTIVITIES OF THE NETWORK

- Details on Informal Network submitted to the SCSC meeting in September 2005 (Doc. No 025).
- Details of the first network meeting reported to the SCSC meeting in February 2006 (Doc. No 018).

5. CONCLUSION

- effective way of promoting better understanding of the participating economies
- form the foundation for any future collaboration

Thank you for your attention



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/008

ISO DTR 28682 - World Report for ITS Standards (WRITSS) - A Joint APEC-ISO Study of Progress to Develop and Deploy ITS Standards

Submitted by: Donggeun Choi, Project Editor, WRITSS, Standards
Analyst, KSA



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**




ISO DTR 28682

World Report for ITS Standards (WRITSS)

- A Joint APEC-ISO Study of progress to develop and deploy ITS Standards -

Sep 5th, 2006
6th SCSC Conference in DaNang, Vietnam

Donggeun Choi
Project Editor, WRITSS
Standards Analyst, KSA



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Contents

- I. WRITSS: Project Overview
- II. Stage I Survey Analysis
- III. Stage II Survey Analysis
- IV. Recommendations
- V. Summary

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I. WRITSS: Project Overview



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ISO/TC204-APEC/TPTWG Collaboration Activities

Regional Gov-Org.



Transportation WG
ITS Experts Group

International SDO



ISO TC204
ITS

ITS Standards Requirements
+
Regional ITS Harmonization
+
Reflect APEC Needs on ISO



collaboration

ITS Standards Developments
+
International ITS Harmonization
+
Reflect Int'l Needs on ISO

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ISO/TC204-APEC/TPTWG Collaboration Activities

- ◎ **Category A Liaison with APEC (ITSEG)**
- ◎ **1st Joint Workshop**
 - Oct 2002 in Chicago, USA
 - Common Understanding of each group
- ◎ **2nd Joint Workshop**
 - May 2004 in Vancouver, Canada
 - Discussion on Public Transport/Freight
- ◎ **1st Joint Project: World Report for ITS Standards (WRITSS)**
 - To Improve awareness and Exchange Information
 - To Recommend ITS Standardization Strategy/Policy
 - Target Period: 2005 March ~ 2006 April

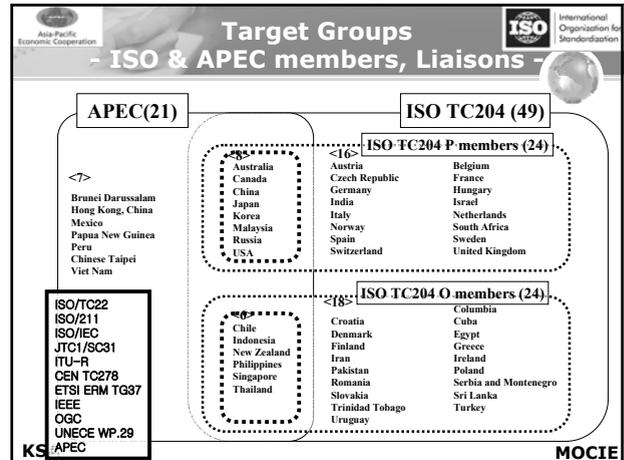
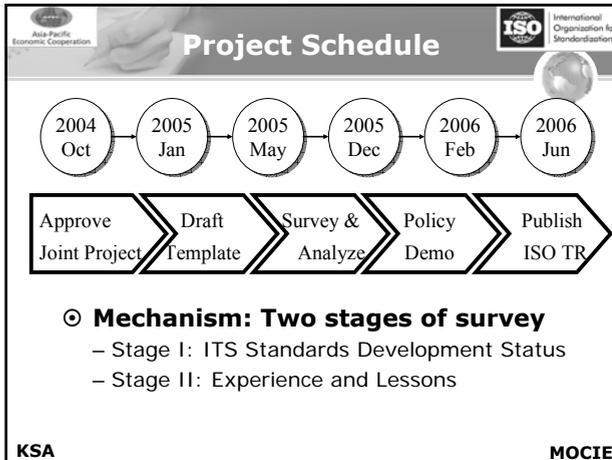
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What is WRITSS for?

- ◎ **Information**
 - ITS standards Policy
 - ITS standards development status worldwide
 - SDOs, List of Standards, Facts Sheets
 - Application/deployment of ITS standards
- ◎ **Observations and Recommendations**
 - Identifying common needs on ITS standards developments, implementations and strategy
 - Identifying recommendations and action items to improve ITS Standards activities
 - What lessons learned from the experience?
 - How to improve ITS standards development and deployment?

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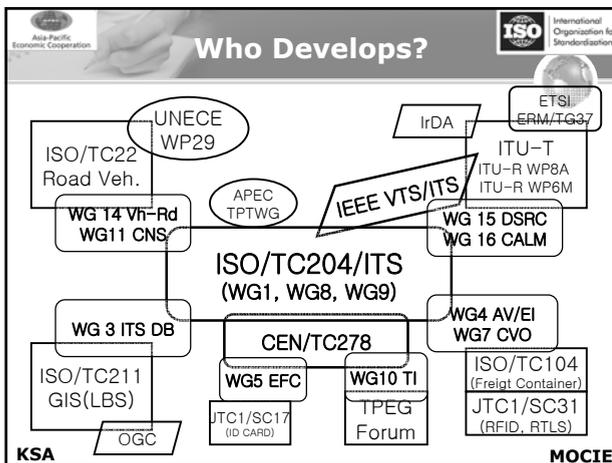


Key Questions

Q. How could you help somebody (or group) use the ITS standards you developed? (Isn't this the reason why we develop standards?)

- **What kinds of standards are existing in the world??**
 - International and Regional
 - National and association
- **How do you develop your national ITS standards?**
 - Standards development /adoption process
 - National Law, committee, report related to ITS
- **How do I extend possible further questions?**
 - ISO/TC204 domestic committee
 - ITS organization, Government, ITS organizations, SDOs

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Who? Common interest (1)

- **ITS in general**
 - ISO TC204 (International)
 - CEN TC278 (Regional: Europe)
 - IEEE VTS/ITS (I: International but with a heavy emphasis on North America region)
- **Vehicle**
 - ISO TC22 (Vehicle in general): International
 - ISO TC104 (Fleet Management): International
 - ISO TC122 (Fleet Management): International
 - UNECE WP29 (Vehicle in general): International
- **Map database**
 - ISO TC211 (GIS in general): international
 - OGC (GIS in general): international, private consortium

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Who? Common interest (2)

- **Telecommunications**
 - ITU-R WP8A (Broadcasting, TC204 WG10): international
 - ITU-R WP6M (telecommunications): international
 - ETSI ERM TG37(telecommunications): European Union plus 30 other countries
- **Identification**
 - ISO/IEC JTC1/SC17 (smart card identification): international
 - ISO/IEC JTC1/SC31 (RFID, RTLS): international
- **Others**
 - CEN TC278: After Theft, eSafety
 - ISO/IEC JTC1/SC31: RTLS
 - ISO TC8 : Ship and Marine
 - IEC TC9: Electrical Railway Equipment
 - IEEE VTS/ITS: Rail transit

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Any Cooperation?

- **Excellent: CEN TC278**
 - Vienna agreement: Common WG/Items
- **Good: ETSI ERM TG37**
 - Strong cooperation
- **OK: TC22(JWG) and TC211(JTF)**
 - to avoid duplication; solve problems
- **Poor**
 - All the other liaisons: short reports only
 - ITU-R WP6M and WP8A, IEEE: Highly Needed
 - JTC1/SC17(RFID), SC31(RTLS)

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List of ITS (draft) standards

- **International Standards (3 organizations)**

| | Published | Draft/Plan | Total |
|--------------|-----------|------------|-------|
| ISO | 60 | 106 | 1166 |
| ISO/IEC JTC1 | 14 | 22 | 36 |
| ITU-R | 4 | 2 | 6 |
| Sub-Total | 78 | 130 | 208 |

- **Regional Standards (3 organizations)**

| | Published | Draft/Plan | Total |
|---------------|------------|------------|-------|
| CEN/TC278 | 61(39=ISO) | 43(15=ISO) | 104 |
| ETSI/ERM TG37 | 3 | - | 3 |
| IEEE | 20 | 1 | 21 |
| Sub-Total | 84 (39) | 44(15) | 128 |

- **National (11 Economies)**

| | Published | Draft/Plan | Total |
|----------------------|-----------|------------|-------|
| National (ISO/TC204) | 173 | 54 | 227 |
| (33) | (-) | (33) | (33) |
| TS, TR, Guide | 25 | - | 25 |
| Association, etc | 74 | - | 74 |
| Sub-Total | 272 | 54 | 326 |

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How Develop? Different?

<Number of ITS National Standards>

<Adoption Policy of International/Regional Standards>

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Different ITS Environment

- **ITS Law/Act directly related to ITS?**
 - 4/21 or 19%
- **ITS Basic/Master Plan?**
 - 13/21 or 62%
- **ITS Plan Council?**
 - 6/21 or 29%
- **Regular Report on ITS Implementations?**
 - 6/21 or 29%
- **ITS Organizations (e.g. ITS America)?**
 - 18/21 or 86%
- **ITS Standardization Strategy?**
 - 7/21 or 33%
- **ISO/TC204 domestic committee?**
 - 16/21 or 76%
- **Regular ITS Standards Report 20%**
 - 5/21 or 24%

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Different ITS Environment (2)

| No | Economy | APEC | CEN | ISO TC204 | ITS Law | ITS Plan | ITS Council | ITS Report (reg.) | ITS Org. | ITS Std. Strategy | ISO TC204 Domestic Comm. | ITS Stds Report (reg.) |
|----|------------------|------|-----|-----------|---------|----------|-------------|-------------------|----------|-------------------|--------------------------|------------------------|
| 1 | Australia | ✓ | | ✓ | | | | ✓ | ✓ | | | |
| 2 | Canada | ✓ | | ✓ | | | | ✓ | ✓ | | | |
| 3 | China | ✓ | | ✓ | | | | ✓ | ✓ | | | |
| 4 | Hong Kong, China | ✓ | | ✓ | | | | ✓ | ✓ | | N/A | |
| 5 | Japan | ✓ | | ✓ | | | | ✓ | ✓ | | | ✓ |
| 6 | Korea | ✓ | | ✓ | | | | ✓ | ✓ | | | ✓ |
| 7 | Mexico | ✓ | | ✓ | | | | ✓ | ✓ | | N/A | |
| 8 | Peru | ✓ | | ✓ | | | | ✓ | ✓ | | N/A | |
| 9 | Singapore | ✓ | | ✓ | | | | ✓ | ✓ | | N/A | |
| 10 | Taipei, Chinese | ✓ | | ✓ | | | | ✓ | ✓ | | N/A | |
| 11 | USA | ✓ | | ✓ | | | | ✓ | ✓ | | | ✓ |
| 12 | Austria | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| 13 | Czech Rep. | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| 14 | Germany | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| 15 | Hungary | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| 16 | Norway | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| 17 | Slovakia | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| 18 | Sweden | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| 19 | Switzerland | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| 20 | UK | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| 21 | South Africa | ✓ | | ✓ | | | | ✓ | ✓ | | | ✓ |
| 22 | Total | 11 | 9 | 17 | 4 | 13 | 6 | 6 | 19 | 7 | 16 | 5 |
| 23 | APEC | 11 | 0 | 7 | 2 | 8 | 5 | 5 | 10 | 4 | 6 | 3 |
| 24 | European(CEN) | 0 | 9 | 9 | 2 | 5 | 1 | 1 | 6 | 3 | 9 | 2 |

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ISO International Organization for Standardization

TC204 standards adopted

- ⊙ **Total: 33 Standards in four countries**
 - Australia(1), China(7), Japan(7), Korea (18)
- ⊙ **List of the standards**
 - Architecture related, Data Registry
 - Radio Data System -- Traffic Message Channel
 - Adaptive Cruise Control Systems
 - Forward Vehicle Collision Warning System
 - AVI/AEI for Intermodal good transport
 - Data Interfaces between centers
 - ISO 14813-6, 14815, 14816, 14817, 14819-1,2,3, 14827-1,2, 14904, 14907-1, 15075, 15622, 15623, 17261, 17262, 17263, 21214
- ⊙ **Is this satisfying? Disappointing?**
- * **Clarification To be provided for US Cases**

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ISO International Organization for Standardization

IV. Stage II Survey



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ISO International Organization for Standardization

Key Questions

Q. How could you help somebody (or group) use the ITS standards you developed? (Isn't this the reason why we develop standards?)

National Body/HoD (Type A)

- Share your experience/lessons on ITS Standards Development/Implementation by providing:
 - List of projects of ITS standards employed
 - Write up lesson learned template

Convenors and Liaisons (Type B)

- Assist users understand what the standard is about
- Provide test methods (needs) of the standard

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ISO International Organization for Standardization

ITS Standards applied

| Service domain | Numbers |
|--|-----------|
| 1. Traveller Information | 21 |
| 2. Traffic management and operations | 27 |
| 3. Vehicle | 0 |
| 4. Freight transport | 9 |
| 5. Public transport | 5 |
| 6. Emergency | 4 |
| 7. Transport-related electronic payment | 41 |
| 8. Road transport-related personal safety | 3 |
| 9. Weather and environmental conditions monitoring | 6 |
| 10. Disaster response management and coordination | 2 |
| 11. National security | 1 |
| All domains | 2 |

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Lessons Learned (1)

- ⊙ **Keep in mind**
 - the standards development or interoperability issues should be a part of planning process
- ⊙ **Standards implementation**
 - be discussed and accepted by stakeholders and related community in advance.
 - Don't forget to do the marketing

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Lessons Learned (2)

- ⊙ **Identify business case or cost-benefit analysis**
 - For standards implementation or interoperability issues
- ⊙ **Where necessary**
 - mandate development and use of standards
- ⊙ **Consider using common standards**
 - with its neighbouring region to reduce cost and secure interoperability

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Lessons Learned (3)

- ⊙ **Spending one in planning**
 - Save two or plus in implementing and operating ITS systems
- ⊙ **Payment reward systems**
 - A practical solution to improve the accuracy of ITS systems using standards
- ⊙ **Public transport stop numbering standards**
 - facilitate the use of the adoption of computer-based passenger information systems

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Lessons Learned (4)

- ⊙ **International standards are useful**
 - to develop national standards and implement the standards.
 - Note that sometimes need to develop more specifications
- ⊙ **All SDOs should consider**
 - developing conformance test methods and implementation guideline to facilitate the use of their standards.

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V. Recommendations



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APEC, EU, Countries

- ⊙ **Sponsor**
 - Development implementation guideline and conformance requirements of ITS Standards
 - Outreach activities on a regular basis.
- ⊙ **More actively participate in ITS standards activities, particularly ISO TC204.**
- ⊙ **Work to develop**
 - Compendiums and publicity material in a cohesive manner
 - to make it easier for users to understand and adopt ITS Standards.

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SDOs

- ⊙ **Initiative to develop effective means**
 - Teleconferences
 - Video conferencing over the internet
- ⊙ **Re-examine their works**
 - To establish conformance test methods
 - To provide implementation guide

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TC204

- ⊙ **Improve relationships**
 - with IEEE at CS level, and
 - with ITU at working party levels, and
 - with other liaison SDOs in general
- ⊙ **Review and update work program**
 - U-Society/U-City

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TC204 Working Groups

- ⊙ **Re-examine their works**
 - to establish conformance test methods
 - To provide implementation guide
 - To additionally focus on interoperability in the development of Standards
- ⊙ **Have Business case analysis**
 - Earlier and more comprehensive
- ⊙ **Try Broader collaboration**
 - With other WGs, TCs, SDOs

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V. Summary



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Information

- ⊙ **662 ITS related standards worldwide**
- ⊙ **89 Fact sheets of ITS related standards**
- ⊙ **100 List of ITS standards deployed worldwide**
- ⊙ **20 Lessons learned from development or deployment experience of ITS standards**

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Observation and Recommendation

| | |
|---|---|
| <p><Collaboration></p> <ul style="list-style-type: none"> ⊙ Who? <ul style="list-style-type: none"> – SDOs: ISO-IEEE-ITU – TCs: TC204-22-211 – APEC: Harmonization – APEC: TPT-TEL-(SCSC) – Gov: Ministries, Locals ⊙ How? <ul style="list-style-type: none"> – Open Mind – Joint Meeting/Groups – Tele/Web Conference – Strategic/detailed guideline to Embody realistic LIAISON relationship! | <p><Outreach></p> <ul style="list-style-type: none"> ⊙ Provide/Share Info <ul style="list-style-type: none"> – Better Website – Standardized Report – Publicity material – Best Practice Workshop ⊙ Assist Users <ul style="list-style-type: none"> – Implementation Guide – Conformance Test – Training/Education <p><U-Society></p> <ul style="list-style-type: none"> – with ITS standards to realize u-Society/u-City |
|---|---|

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Thank You!



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**Session III:
New International Standards
that could affect APEC Economies &
Standard Education**



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/009

Implications for the APEC Region of New Deliverables from ISO and IEC

Submitted by: John Henry, Director, International and Standardization
Policy, Standards Australia



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

6th Conference on Standards and Conformance September 2006

Implications for the APEC Region of New Deliverables from ISO and IEC

John Henry
Director- International and Standardization Policy
Standards Australia

Some new deliverables

- Social responsibility
- Environmental aspects of electrotechnical products
- Societal security
- Supply chain security management
- Food safety management
- Risk management

Some themes

- Need for International Standards to address current world issues such as natural disasters and the threat of terrorism
- Concerns about the proliferation of certifiable management systems standards
- Move by ISO and IEC into non-traditional 'public policy' areas
- Horizontal standards that don't fit easily with traditional industry-based committee structures

ISO 26000 *Social Responsibility*

- Being developed in a working group rather than in a technical committee
- Each members country nominates representatives from six different stakeholder groups – over 300 participants at each meeting
- Meetings held in Brazil, Thailand and Portugal - next meeting in Sydney in January 2007 (APEC workshop)
- Still a long way from a committee draft - principles being resolved

ISO 26000 *Social Responsibility* (2)

- Mandate to produce an International Standard that provides guidance, not requirements
- Standard will rely on existing UN and ILO conventions rather than creating new benchmarks
- Will deal with how an organization selects and implements its chosen aspects of SR
- Scope seems to be growing and more than one document has been suggested

ISO 26000 *Social Responsibility* (3)

- Potential benefits include allowing suppliers operating in developing countries to demonstrate internationally that they are following SR principles
- For suppliers in developed countries could add costs for implementing systems without any great social gains
- Certification providers are already planning programs despite the 'guidance' status

IEC/TC 111 Environmental Standardization
for Electrical and Electronic Products and
Systems

- Originated in Europe to support RoHS and EuP Directives
- Japanese chairman, Italian secretary
- Standards under development deal with how to measure and report levels of substances, not the limits
- Environmentally conscious design has many applications, satisfying EuP is just one use

IEC/TC 111 (2)

- Provides an opportunity for APEC economy involvement in setting the technical details
- Will have application to other national requirements on hazardous substances; but some of the analytical methods are very sophisticated
- Europe is still driving the agenda for environmental aspects of products sold on the world market
- Proposal for a management system standard for hazardous substances put forward by IEC CAB, but rejected

ISO/PAS 28000 *Security Management
System for the Supply Chain*

- Similar to ISO 14001
- Developed in TC 8 *Ships and Marine Technology*
- Supported by specific International Standards for maritime facility security assessments and custody in supply chain security
- Developed to address concerns about contraband goods and people smuggling in shipping containers

ISO/PAS 28000 (2)

- Container standards were one of the great successes of ISO leading to massive savings in the logistics industry
- Certification is envisaged, but costs will be spread over large operations
- Should be either cost neutral or positive if it facilitates international collaboration and reduces theft of goods
- A more generic application to the supply chain as a whole may have different impacts

ISO 22000:2005 *Food safety management
systems - Requirements for any organization
in the food chain*

- Focussed on applying food safety management principles at the enterprise level, much like GMP or ISO 9001
- A major opportunity for suppliers of third-party certification services
- Not particularly SME friendly
- Regulatory bodies may still prefer to use HACCP, but ISO 22000 would represent one way of meeting those obligations

ISO/TC 223 Societal security

- Committee was recently taken over by Sweden and re-launched with a new title and scope
- Aimed at crisis management and business continuity, especially in times of natural disasters
- It's still very early and the actual Standards projects have yet to be defined
- Potentially of considerable benefit in APEC economies preparing to deal with future natural disasters

ISO 25700 General guidelines for principles and implementation of risk management

- Being developed in a working group under ISO/TMB, led by Australia/Japan
- Not just safety risks but can include financial and operational risks
- A generic Standard that may require further guidance in specific applications
- Potentially a way to avoid overly prescriptive requirements in complex situations
- Not intended to be certified

Conclusions

- There are a great many initiatives coming forward through working groups and unlikely committees in ISO
- Often small economies don't have the resources to participate on working groups, but would like to have a say through P membership
- Industry concerns about the need to have multiple third-party certifications
- Some new deliverables are addressing key issues in the APEC region

Conclusions (2)

- From a trade perspective, WTO technical barriers to trade agreement views technical regulations based on International Standards as not being TBTs
- Assumption that standards deal with the utility of goods
- Questions about International Standards that deal with unincorporated production and processing methods (PPMs), like social responsibility?

Conclusions (3)

- Some deliverables focus on APEC issues, some on European issues
- International standardization provides an opportunity for this region to have a say in the detail of technical requirements
- APEC needs to speak with more unity if it is to balance European influence
- Regional workshops held in conjunction with standards meetings
- APEC pre-meetings

6th Conference on Standards and Conformance
September 2006

Implications for the Region of New
Deliverables from ISO and IEC

John Henry
Director- International and
Standardization Policy
Standards Australia



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/010

Standards Education - Now and Future

Submitted by: Man-Han Hwang, Director, Korean Standards Association



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

Standard Professionals

BACK TO School

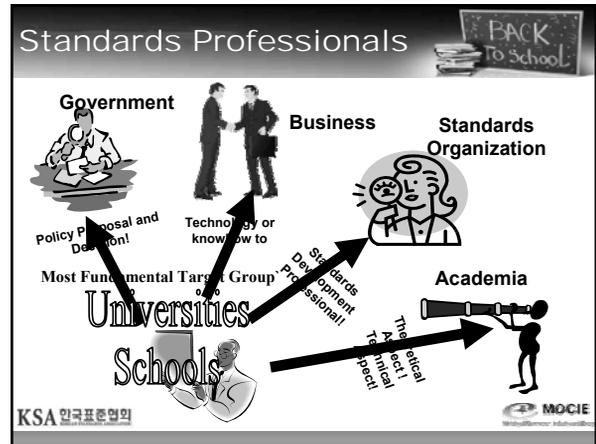
Korean National Standardization Master Plan('06~'10)

4. Enhancing Private Sector standards activities

4-3 Develop human resource for standards activities

- ▶ Educating university students the significance and value of standards
- ▶ Educating company staffs for standardization activities

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Standards Professionals

BACK TO School

nothing BACK TO SCHOOL !!!

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Standards Professionals

BACK TO School

2. Overview of standardization courses in Univ.

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Overseas

BACK TO School

- 1. EU-ASIA Link Project
- 2. Erasmus University
- 3. Delft University of Technology
- 1. Canadian Standards Association
- Queen's University
- Royal Military College
- 1. University of Manchester, etc
- 2. BSI Global
- 1. Catholic University
- 2. Pennsylvania state university

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Overseas

BACK TO School

- 1. KSA - Univ. Program
- Korea University, etc
- China Association for Standardization
- Zhongnan University
- 1. JSA-METI Project
- 2. Osaka University, etc

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Course review

- General**
 - 47 universities in Korea (2006)
 - 2-3 units (30-40 Hours) of training per semester
 - Some as Major, Others as liberal arts
 - Targeted for Junior/Senior Students (but not limited to)
- Textbook**
 - Using Common textbook 'Future Society and Standards'
 - Authors: 14 standards professionals
 - Contents: basic concept, history, development procedures
- Lecture**
 - Lectures: Team-teaching (by the subject, by standards professionals from industries, standards agencies, academic circles and government)
 - Special lectures: based on the needs of the colleges/majors
 - One Field Trip to Research Institutes/Labs/Companies.

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Future society & standards

미래 사회와 표준

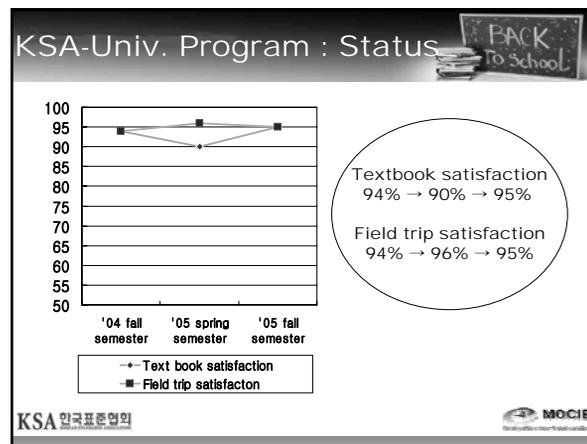
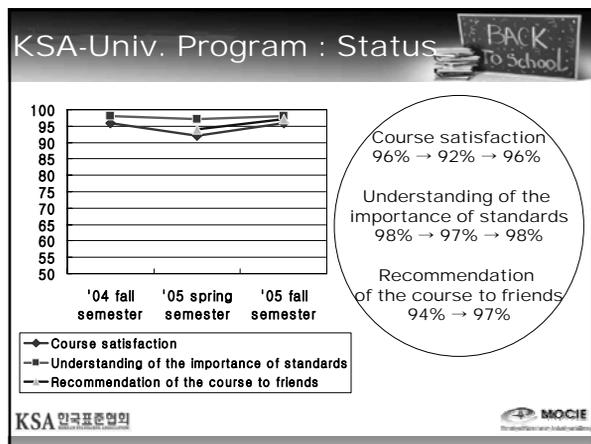
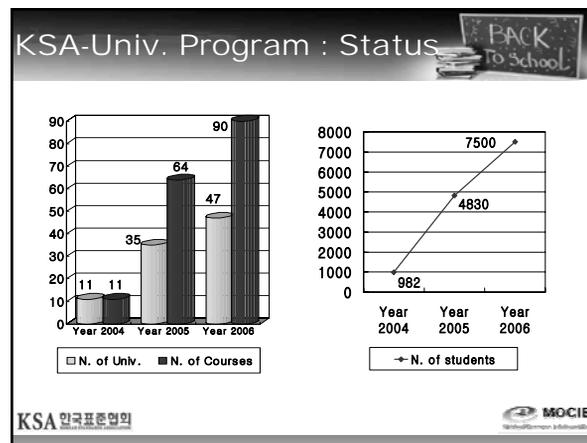
PART 1 : Introduction to Standardization

- Ch1. Standardization Overview
- Ch2. International Standardization
- Ch3. Industrial Standardization in Korea
- Ch4. Company standards and Quality Management

PART 2 : Application of Standardization

- Ch5. Application of company standards
- Ch6. Conformity assessment
- Ch7. Standards & IPR

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Why so popular ?

- Awareness of changing role of standardization
 - Media begins to focus on the value of standardization
 - Company begins to realize the value of standardization
 - That's a valuable investment
- Need of standards education(company survey)
 - standards education in Univ. 85% agreed
 - for global competition 51% agreed



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Why so popular ?

- Desire to learn knowledge demanded by industries
 - The unemployment of crisis
- Satisfying students curiosity
 - various opinions on standardization from all different fields
 - job-related lectures, even English presentations
- Government & Standards Organization's support
 - capable standards expert pool
 - administrative & financial support



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3. Further needs of industries & universities

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Industries

- Lack of Human resources for standardization activities
 - Prepared employees required (at least know what standards are & why they are so valuable in 21st.)
 - Major related technology & English speaking & negotiation skills needed. (Theory + Practical knowledge)

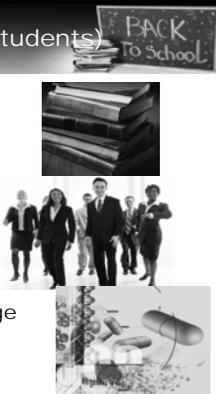
Be a Multi-Player !!
Be a battle-ready person !!



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Universities (Professors & students)

- Various need of curriculum (major related contents)
 - Need more teaching materials
 - Need more lecturers
 - Need more practical knowledge



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4. Future Plan In Korea

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Industries



- Meeting with top executives & HRD department
 - value of strategic standardization
 - importance of standards professionals



- Find out what companies need
 - creation of content that easily integrates into the school curriculum
 - provide well-prepared human resources
 - standards strategy manager



- Communicate with students
 - chance to advertise companies
 - capable experts participating in the course

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Universities (Professors & students)



- Educating faculties
 - by regular programs or workshops during vacation
 - general knowledge of the textbook and teaching skill



- Textbook
 - Inter-disciplinary, multi-aspects
 - strategic standardization strategy(from product planning)
 - case studies



- Teaching materials
 - creation of tools and content for lectures
 - such as standards materials and discussion guides
 - develop major different issues(key topics)

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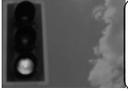
Universities (Professors & students)



- Outreach to academia
 - recognition and participation of academia in standardization activities



- ① Pilot programs with selected engineering schools
 - business, law, environmental studies and engineering technology in both 2~4 year programs
- ② Graduate school programs(standards strategy manager)



- Enhancing the course as a required in engineering
 - ABEEK, etc

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University evaluation

- Universities
 - running the course more than 2 semesters
- Factors
 - interim assessment report(40%)
 - observation of the class(30%)
 - total evaluation(30%)
- Criteria
 - ability to run the courses(capable faculties)
 - target group of students & number of students
 - evaluation of students & lecturers
 - course curriculum, etc.

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5. Proposed Project In APEC SCSC

- Strategic Standards Education Program -

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Project Overview

- Proposing Economy: Korea
- Co-Sponsoring Economies (6)
 - Indonesia, Japan, Singapore, Thailand, USA, Vietnam
- Time Plan: Three Phases Projects
 - Mar 2007 to Aug 2010 (42 months)
- Proposed Budget for 2007: 253,060 USD
 - APEC TILF Funding: 125,060 USD
 - Korean Government: 128,000 USD
 - (Final Budget to be decided in BMC II in Oct 2006)

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Project Objectives

- The purpose of this project is:
 - To develop education model on standards and conformance to increase public awareness mainly in higher education systems and to build capacity in a more strategic and comprehensive manner.
- The key objectives or expected outcomes will include:
 - 1) Case Studies (Phase I)
 - 2) Strategic Model curricula (Phase I)
 - 3) Standards Education Textbooks (Phase II)
 - 4) Teaching manuals (Phase II)
 - 5) Implementation guideline (Phase III)
 - 6) Pilot Implementation (6-8 economies, Phase III)
 - 7) Lesson Book (after pilot implementation, Phase III)

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Project Strategies

| Phase I (2007-) | Phase II (2008-) | Phase III (2009-) |
|---|---|--|
| Case Study Curricula | Textbooks Manual | Pilot School Guideline |
| <ul style="list-style-type: none"> ➢ Advisory Groups ➢ Workshops ➢ Reference Collection ➢ Case Studies ➢ Curricula Development | <ul style="list-style-type: none"> ➢ Meetings and Workshops ➢ Writing/Consulting ➢ Textbook Development ➢ Teaching Manual Development | <ul style="list-style-type: none"> ➢ Meetings ➢ Teachers' Workshop ➢ Implementation Guideline ➢ Pilot Schools ➢ Lesson Book |

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Project Schedule

- Jul 2006 SCSC approval
- Sep 2006 CTI approval
- Oct 2006 BMC approval
- Nov 2006 MM approval
- Mar 2007 Phase I start
 - Project Advisory Group
 - Research (Case Study)
 - Model Curricula Development

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Successful project only with Cooperation

Standards education

➔

" Cooperation "

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Thank you for your attention

Man-Han Hwang
Korean Standards Association

KSA 한국표준협회 MOCIE



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/011

Thailand's Experience and Views on Standards Education

Submitted by: Rampaipan Nakasatis, Director of Standards Bureau 1,
Thai Industrial Standards Institute



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

Thailand's Experience and view on Standardization Education

Ms. Rampaipan Nakasatis
Director, Standards Bureau 1
Thai Industrial Standards Institute
Thailand

The Project on Integrating Standardization in Education (January 2003-2007)

- **The Thai Industrial Standards Institute (TISI)**
(The Standardization Promotion and Development Division)
- **The Office of The Basic Education Commission (OBEC)**

Objectives

- **To give knowledge on standardization to teachers.**
- **To raise awareness in the importance of standardization in students so that they can apply to their daily lives and also pass it on to their families and community.**

3

Target Groups

- **Teachers**
- **Students**
in Secondary Schools

Time Frame

- January 2003-2007

Budget

- Thai Industrial Standards Institute

Project Activities

- **Development of training program for teachers in integrating standardization in living , profession and technology**
- **Preparation of manuals for teachers and students and training documents/materials**
- **Training of selected teachers of secondary schools**
- **Supervision of the trained teachers**
- **Organizing supplementary activities for students**
- **Annual evaluation**

6

Training of teachers

Subject

- Knowledge on standardization
- Integration of standardization in living , occupation and technology
- Integration of standardization in classroom
- Introduction of teaching media

7

Training of Teachers

| Year | No. of Trained Teachers | No. of Schools | No. of Students Participating |
|-------|-------------------------|----------------|-------------------------------|
| 2003 | 610 | 595 | 91,500 |
| 2004 | 693 | 680 | 195,450 |
| 2005 | 662 | 620 | 99,300 |
| 2006 | 389 | 307 | 58,350 |
| Total | 2,354 | 2,202 | 444,600 |

8

Supplementary Activities for Students

- Roving seminars under the project “The new generation gives importance to standards”
- Contests ;
 - Model of Industrial Products
 - Painting
 - Costume
 - Slogan
- Exercise on how to apply standardization to their daily lives

9

Model of Industrial Products Contest



Painting contest





Evaluation of the Project

- **Trained teachers** have satisfactorily integrated the knowledge in standardization in the vocational and technological course for secondary school student.
- **Students** have found the teaching method fairly successful.

14

Recommendations for sustainable development

1. **Trained teachers** should pass on their knowledge in standardization to the next generation
2. **Supervision of the trained teachers** should be continued

15

Recommendations for sustainable development

3. **Progress and problems** should be reported regularly
4. **Learning centres** should be established to update the knowledge and information on standardization

16

Thank you very much

17



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/012

Japan's Experience and Views on Standards Education

Submitted by: Mitsuo Matsumoto, METI, Japan



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

Japan's Experience and Views on Standards Education

6th Conference on Standards and Conformance
APEC SCSC2
Da Nang, Viet Nam
5-6 September 2006

Mitsuo Matsumoto
METI, Japan

1

Contents

1. Survey on Standards Education
2. Project on Standards Education
3. Results of 2005 Activities
4. Plan for 2006 Activities
5. Challenges in the Project

2

Survey on Standards Education - Background -

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- For private sectors, it is necessary to understand and use standards from the perspective of technological competition and reinforcement of industry infrastructures

3

Survey on Standards Education - Purpose of Questionnaire -

- To survey on the current situations and needs concerning standards education
- To make use of the results and opinions for the development of teaching materials on standardization

4

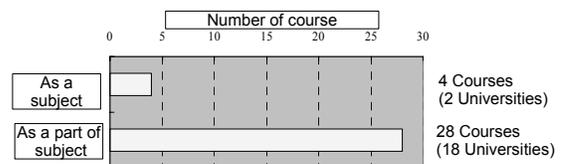
Survey on Standards Education - Results of Questionnaire -

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5

Survey on Standards Education - Results of Questionnaire -

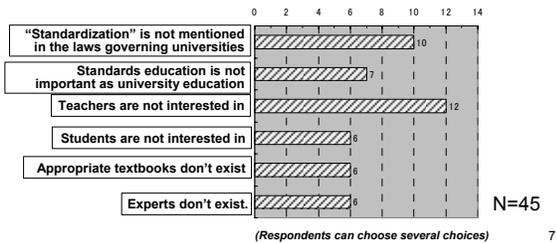
Question A-1:
Is standards education carried out in your university?



6

Survey on Standards Education - Results of Questionnaire -

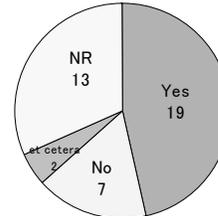
Question A-6:
What is the main reason that standards education has not been carried out in your university so far?



7

Survey on Standards Education - Results of Questionnaire -

Question A-7:
Do you think that the recommendation by relevant ministries is needed?



8

Survey on Standards Education - Summary of Results of Questionnaire -

- Most of universities are carrying out standards education as a part of subject
- Main factors not carrying out standards education are the lack of interest, textbooks, teachers and system
- Recommendation by relevant ministries seems to be effective to start on standards education

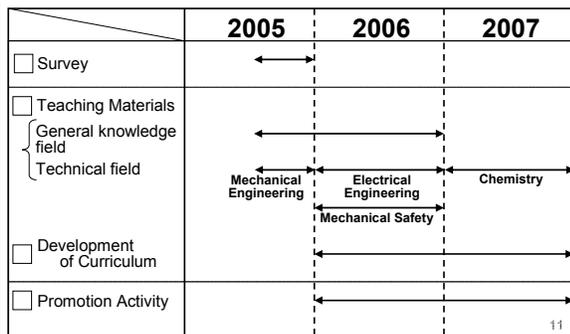
9

Project on Standards Education - Outline -

- **Target people:**
University students, Company employees
- **Purpose:**
 - Enlarge human resources for more active participation in the international standardization activities
 - Promotion of importance of standardization
- **Main contents of the Project:**
Development of teaching materials and programs for standards education

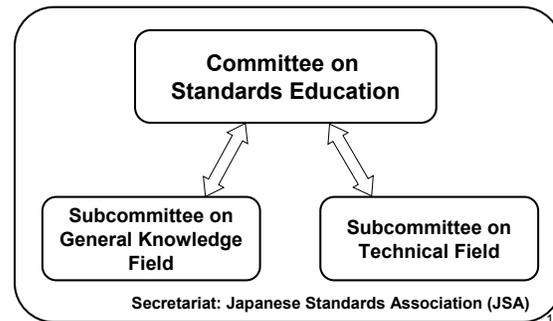
10

Project on Standards Education - Time Schedule -



11

Project on Standards Education - Committee on Standards Education -

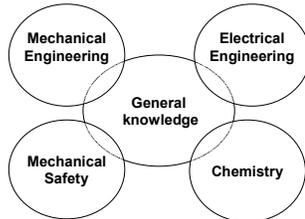


12

Project on Standards Education - Development of Teaching Material -

1. Teaching material consists of two fields

- General knowledge field
- Technical field



13

Project on Standards Education - Development of Teaching Material -

2. Pair of lecture material and reference material are developed

(Lecture material)

(Reference material)

1 JIS Mark Scheme Page 3

1.1 What is "JIS Mark" ?
When products satisfy all requirements of JIS, a JIS Mark is affixed on products.

Example

- Stationery (Notebook, Scale etc.)
- Electric household appliances (Air conditioner, Drier, Lamp etc.)

Page 3
1 JISマーク制度
1.1 「JISマーク」とは
私たちのまわりにはたくさんの製品があふれている。その製品一つひとつにはいろいろな表示がなされている。製品の名称や型番、そして性能や品質の表示などである。「JISマーク」はその表示の一つである。
乾電池や使い捨てカイロなどの日用品だけでなく、ノートなどの文房具から冷蔵庫、エアコンなどの家電製品にいたるまで、いろいろな製品、ものによっては包装に、「JISマーク」が付けられている。「JISマーク」とは、「JIS」という規格を満たした製品に表示されるマークである。
資料
経済産業省 産業技術環境局 認証課「JISマーク」について你知道ですか？
(標準化ジャーナル Vol.35 2005.6)

14

Project on Standards Education - Example of Technical Field -

(Lecture material)

(Reference material)

3 Bearing Parts in Automobile

Page 7
国産車が軸受の需要分野を示す。自動車用としての需要が多い。また輸出されているものも多くが自動車用として使用されている。これらの主要な需要分野における種類は、大量生産品が圧倒的に多い。7ページのスライドに自動車に使用されている部品を示す。

Page 8
軸がり軸受産業と軸がり軸受の国際性は、このスライドに示された通りであり、規格の役割と重要性がよく理解できる。

15

Project on Standards Education - Contents of General Knowledge Field -

1. Basics of standardization (2)
2. Standardization in Japan
 - 2.1 Policy on national standardization (2)
 - 2.2 Policy on international standardization (1)
 - 2.3 Company standardization and TQM (1)
3. International standardization
 - 3.1 Basics of international standardization (3)
 - 3.2 How to develop/use international standards (3)
 - 3.3 Trend of international standardization (4)

16

Project on Standards Education - Contents of Technical Field (Mech. Eng.) -

1. Legal responsibility in standards
2. Regulation for automobile design and manufacture
3. Quality assurance for automobile fuel
4. Drawing and standard
5. Machine element and standard
6. Performance evaluation of machine element and standard
7. Machine material and standard
8. Mechanical measurement and standard
9. Design information model and standard
10. Product development and standard
11. Product cost and standard
12. Standardization of interface
13. International standard concerning automobile safety

17

Results of 2005 Activities

- **Development of Teaching Material:**
 - General knowledge field (total: 16 modules)
 - About 20 percent of completion*
 - Technical field (Mech. Eng.) (total: 13 modules)
 - Completed*
- **Survey on Standards Education:**
 - Questionnaire in Japan
 - Survey on Standards Education Activities in Korea

18

Plan for 2006 Activities

- **Development of Teaching Material:**
 - General knowledge field (total: 16 modules)
To be completed
 - Technical field for Elec. Eng. and Mech. Safety
To be completed
 - Trial and improvement in the Mech. Eng. field
- **Development of curriculum for actual class**
- **Promotion of teaching materials and programs to universities and private companies**

19

Challenges in the Project

- **Promotion of “Standardization” as an important subject in university curricula and industrial activities**
- **Secure enough number of qualified lecturers for standards education**
- **Qualification system for experts in standards education**

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Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/013

Outcomes of the EU-Asia-Link Project on Standards Education

Submitted by: Wilfried Hesser, Wenke Siedersleben, EU-Asia Link
Project Coordination, Helmut Schmidt-University, Hamburg Germany



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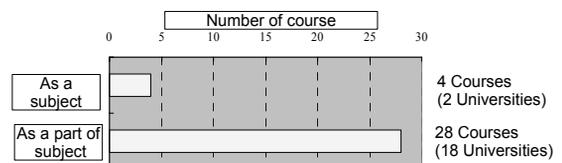
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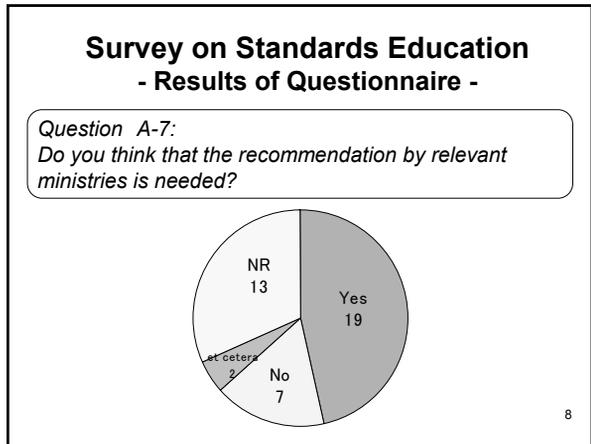
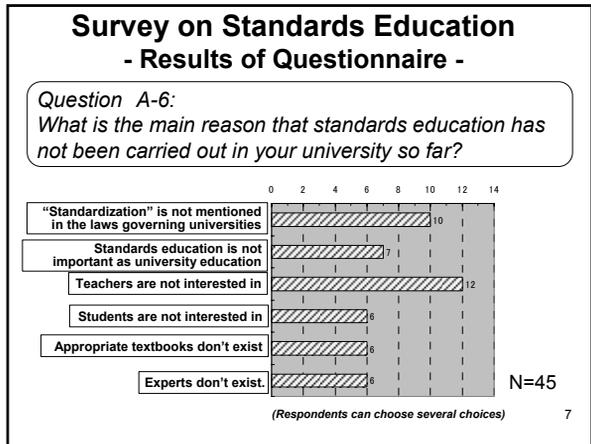
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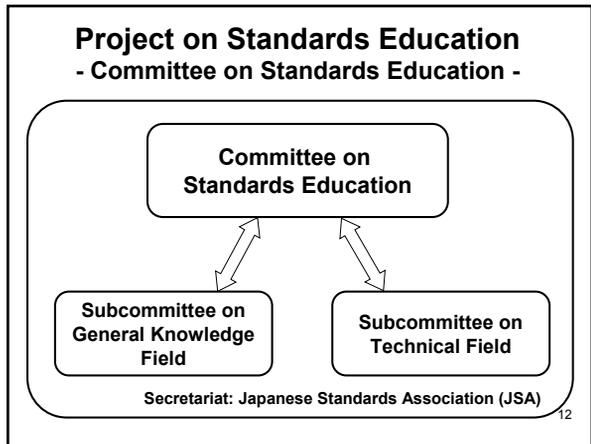


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Project on Standards Education - Time Schedule -

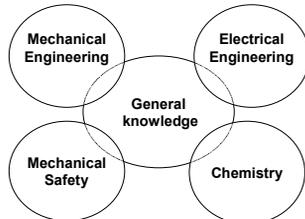
| | 2005 | 2006 | 2007 |
|---------------------------|------------------------|---|-----------|
| Survey | ←→ | | |
| Teaching Materials | ←→ | | |
| General knowledge field | ←→ | | |
| Technical field | Mechanical Engineering | Electrical Engineering Mechanical Safety | Chemistry |
| Development of Curriculum | ←→ | | |
| Promotion Activity | ←→ | | |



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(Reference material)

1 JIS Mark Scheme Page 3

1.1 What is "JIS Mark" ?
When products satisfy all requirements of JIS, a JIS Mark is affixed on products.

Example

- Stationery (Notebook, Scale etc.)
- Electric household appliances (Air conditioner, Drier, Lamp etc.)

Page 3
1 「JISマーク制度」
1.1 「JISマーク」とは
私たちのまわりにはたくさんの製品があふれている。その製品一つひとつにはいろいろな表示がなされている。製品の名称や型名、そして性能や品質の表示などである。「JISマーク」はその表示の一つである。
乾電池や使い捨てカイロなどの日用品だけでなく、ノートなどの文房具から冷蔵庫、エアコンなどの家電製品にいたるまで、いろいろな製品、ものによっては包装に、「JISマーク」が付けられている。「JISマーク」とは、「JIS」という規格を満たした製品に表示されるマークである。
資料
経済産業省 産業技術機構 認証課「JISマーク」について你知道ですか？
(標準化ジャーナル Vol.35 2005.6)

14

Project on Standards Education - Example of Technical Field -

(Lecture material)

(Reference material)

3 Bearing Parts in Automobile

Page 7
国産車が円輸入の需要分野を示す。自動車用としての需要が多い。また輸出されているものも多岐にわたる。これらの主要な需要分野における種類は、大量生産品が圧倒的に多い。7ページのスライドに自動車に使用されている部品を示す。

Page 8
転がり軸受産業と転がり軸受の国際性は、このスライドに示された通りであり、規格の役割と重要性がよく理解できる。

15

Project on Standards Education - Contents of General Knowledge Field -

1. Basics of standardization (2)
2. Standardization in Japan
 - 2.1 Policy on national standardization (2)
 - 2.2 Policy on international standardization (1)
 - 2.3 Company standardization and TQM (1)
3. International standardization
 - 3.1 Basics of international standardization (3)
 - 3.2 How to develop/use international standards (3)
 - 3.3 Trend of international standardization (4)

16

Project on Standards Education - Contents of Technical Field (Mech. Eng.) -

1. Legal responsibility in standards
2. Regulation for automobile design and manufacture
3. Quality assurance for automobile fuel
4. Drawing and standard
5. Machine element and standard
6. Performance evaluation of machine element and standard
7. Machine material and standard
8. Mechanical measurement and standard
9. Design information model and standard
10. Product development and standard
11. Product cost and standard
12. Standardization of interface
13. International standard concerning automobile safety

17

Results of 2005 Activities

- **Development of Teaching Material:**
 - General knowledge field (total: 16 modules)
 - About 20 percent of completion
 - Technical field (Mech. Eng.) (total: 13 modules)
 - Completed
- **Survey on Standards Education:**
 - Questionnaire in Japan
 - Survey on Standards Education Activities in Korea

18

Plan for 2006 Activities

- **Development of Teaching Material:**
 - General knowledge field (total: 16 modules)
To be completed
 - Technical field for Elec. Eng. and Mech. Safety
To be completed
 - Trial and improvement in the Mech. Eng. field
- **Development of curriculum for actual class**
- **Promotion of teaching materials and programs to universities and private companies**

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Challenges in the Project

- **Promotion of “Standardization” as an important subject in university curricula and industrial activities**
- **Secure enough number of qualified lecturers for standards education**
- **Qualification system for experts in standards education**

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**Session IV:
Product Related Environmental
Regulations of EU and the Impacts
on Trade**



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/014

Environmental Regulations are they a Barrier to Trade

Submitted by: Richard Collyer, The Chamber of Commerce for
Bedfordshire



6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006

ENVIRONMENTAL REGULATIONS ARE THEY A BARRIER TO TRADE.

Introduction

The subject that I have been asked to discuss is ' Environmental Regulations are they a Barrier to Trade'. Standards and regulations themselves are not barriers to trade; they should simply be a baseline, which everybody can agree to. They are or should be quite general statements of good practice that can be adapted to suit local needs. These locally defined minimum requirements will need to be interpreted; This is where it all goes wrong and somebody, usual a committee or working group decides that the standard should be interpreted ' in this way ', often adding a little bit to the draft (then the consultant becomes involved) and often another layer of complexity gets added to the interpretation of the regulations.

The potential problems

So if these are the potential problems, the questions that need to be considered in the next ten or twenty minutes are how can this cycle be broken or disrupted and how can standards and regulations be refocused and made to come back to their original objective ?

Or perhaps, I have overstated the case and there is no problem with the interpretation of the standards and regulations. If this is true it is the standards and regulations themselves that are wrong and the way they are written and approved and the way are comments received that needs to be updated.

The evidence

Is there any evidence to support either of these views ? At this time I should perhaps make it clear that I don't work for either a Standards Body a Consultancy or a Regulatory Authority. I actually work for a Chamber of Commerce, whose role it is to lobby on behalf of industry to prevent over regulation. But I was a Deputy Director in the British Standards Institute and I do believe in the importance of Standards and defined regulations. Without them elements of consumer protection are put at risk and many of the things we take for granted could be lost; ATM machines all use standard size cards, Cars have minimum safety standards for safety features like Seat belts and basic components and there are numerous other examples.

But are there too many standards and regulations ? If there are do they cause more confusion ? Could over standardization and regulation be stifling business growth and creating barriers to trade in developing countries?

The European Union has more than 260 items of environmental legislation based on existing regulations and standards and has recognized the need to simplify and streamline the requirements of environmental regulations thereby reducing the burdens for businesses.

What action is being taken ?

A group of national experts were given the task of developing national simplification programmes and reducing the administrative burdens on businesses that are subject to

environmental regulation. They started a project called the BEST project in 2004 to identify practical examples that have been taken to successfully reduce the burdens on businesses.

The final report of the BEST project group was published in May 2006, it described;

- 76 examples of actions that could be taken to streamline and simplify environmental regulations
- 26 examples of best practice actions which could be used to reduce the administrative burdens on businesses
- a number of recommendations to the EU Commission on how a national simplification programme to reduce the administrative burden on businesses who are subject to environmental regulations could be developed.

A summary of the recommendations

Within the scope of this short paper it is not possible to give a detailed description of all the recommendations and conclusions that are presented by the experts who prepared the BEST projects final report.

The recommendations that the expert group made are presented to consider strategic issues and then structured to address individual aspects of the regulation (permitting, monitoring, and inspection). They also give some specific recommendations that relate to IT tools, risk based regulations and compliance issues / assistance.

These recommendations are summarised in this short paper and hopefully through that summary, they will suggest some answers to the question ‘ How should environmental regulations be used’ ?. It is through compliance issues that potential barriers to trade are most likely to be identified and overcome.

The main focus of this paper is on the recommendations that relate to compliance issues. They are;

- That the compliance information needs of businesses especially SMEs must be identified so initiatives which would help businesses to meet these needs can be pursued.
- Opportunities to make use of existing European Compliance Assistance programmes and initiatives across all areas of regulatory activity should be examined.
- There should be adequate start-up and routine funding made available for compliance assistance tools, to ensure their long term sustainability and that they remain up-to date and comprehensive.

Other key recommendations made in the BEST report are listed in the following bullet point headings;

- **The institutional framework.** The recommendations that were made under this heading, included bringing together the institutional responsibilities to create a one-stop- shop. A detailed study should be undertaken to identify what is required and how it can be delivered so an analysis of the burdens on businesses can be

developed and used to simplify the existing procedures, based on their cost to businesses

- **The simplification of the permit schemes.** Obtaining permits can involve several administrative procedures that can be complex and costly. Where possible the different permit application procedures should be brought together into one unified scheme, improving permit management procedures that facilitate the use of IT tools.
- **The simplification of monitoring or reporting.** It was recommended that the European Commission should examine ways of harmonising monitoring procedures and reporting requirements and ensure that business are not asked to provide unnecessary information. Wherever possible IT tools should replace paper-based system and IT systems should be regularly updated.
- **The simplification of the inspection process.** It was recommended that inspection procedures should be better targeted and simplified. More combined inspections should be used to reduce the number of inspections and the amount of time which business have to spend preparing for inspections. Again more use should be made of IT tools that support inspection processes.
- **The use of IT tools and electronic systems.** IT system should not be regarded as an end in themselves but they should support the process of issuing permits, monitoring and be an aid to compliance. The opportunities and benefits of using IT tools should be explored.
- **The risk based and incentive approach.** Risk based approaches should be used to focus the efforts of regulation on activities that pose the greatest risks to health or the environment. This is not a new approach but there have been some new initiatives and risk based regulation forms an integral part of the industry permit system in some countries. More consideration of transparent risk based regulations is recommended so that resources can be focused where they are most needed.

Conclusion

Some of the existing EU regulations are too complex and there is still some duplication and confusion, making compliance difficult and costly and yes the existing regulations can become barriers to trade. The EU is aware of this and has taken a significant first step towards simplifying the existing procedures and processes.

Environmental Regulations are they a Barrier to Trade

Presented by Richard Collyer
The Chamber of Commerce for
Bedfordshire



Environmental Regulations are they a Barrier to Trade

Introduction:

- Standards and Regulations themselves are not barriers to trade
- But there interpretation can be as vested interests become involved



Environmental Regulations are they a Barrier to Trade

The potential problems:

- Is it the interpretation of the standard regulation or
- The process of writing and approving then that needs to be amended



Environmental Regulations are they a Barrier to Trade

The questions :

- Are there to many standards / regulations ?
- Are standards stifling business growth ?
- The evidence:
- The EU has more than 261 items of environmental legislation based standards and regulations



Environmental Regulations are they a Barrier to Trade

What actions is being taken:

- The BEST project started in 2004 and presents its final report May 2006

The BEST report presented:

- 76 examples of actions which could be taken
- 26 examples of best practice
- Recommending new approaches to National Simplification Programmes and the EU Commission



Environmental Regulations are they a Barrier to Trade

The recommendations in the BEST report covered:

- The institutional framework
- The simplification of permit schemes
- The simplification of monitoring or reporting
- The simplification of inspection
- The use of IT tools and electronic system
- The risk based and incentive approaches
- Compliance, assistance and support



Environmental Regulations are they a Barrier to Trade

Conclusion :

Existing regulations can be barriers to trade
but simplification should make it easier to
comply with EU regulations

Thank you for listening





Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/015

Strategy to Deal with EU Environmental Legislation - Focusing on the Key Points and Strengthening Coordination Among APEC Members

Submitted by: Wang Yuan, The General Administration for Quality
Supervision, Inspection and Quarantine (AQSIQ), China



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

Strategy to deal with EU environmental legislation

— focusing on the key point and strengthening coordination among APEC members

WANG YUAN

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Da Nang city, Vietnam 6th September 2006

Strategy to deal with EU environmental legislation P.1

Strategy to deal with EU environmental legislation P.2

Strategy to deal with EU environmental legislation P.3

Sampling Procedure for Determination of Levels of Regulated Substances in EEE

Linkman: *He Chonghui*

E-mail: hechonghui@163.com

Strategy to deal with EU environmental legislation P.4

TOPICS

- ◆ Introduction of China scheme
- ◆ To be improved from French proposal
- ◆ Suggestions from other sides

Strategy to deal with EU environmental legislation P.5

Background of China Sampling Scheme

- ◆ technical support of RoHS and other related regulations
- ◆ Interface with IEC62321
- ◆ Analysis of a finished product
- ◆ Balance between risk and efficiency

Scope

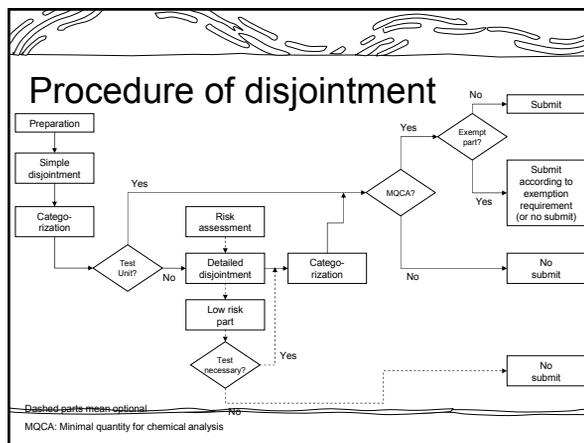
- ◆ Technical specification for general requirements of sample disjointment
- ◆ Particular requirements specified by concerned TCs

Principles

- ◆ Requirements of conformity assessment
- ◆ Requirements of chemical analysis Efficiency
 - i. Avoid unnecessary analysis work
 - ii. Focus on samples that can be disjoint using regular tools
- ◆ Balance between industry and environment

Key Points

- ◆ Non-homogeneous test unit
- ◆ MQCA: Minimal Quantity for Chemical Analysis
- ◆ minimal size and area
- ◆ Risk analysis



Key Steps

- ◆ Simple disjointment
- ◆ Detailed disjointment
- ◆ Risk assessment
- ◆ Categorization
- ◆ Exemptions
- ◆ Coating and Plating

Determination of Lead, Cadmium in Electro technical Products by Atomic Fluorescence Spectrometry (AFS)

Linkman: *Chen Jianguo*

E-mail: chenjg@nbcicq.gov.cn

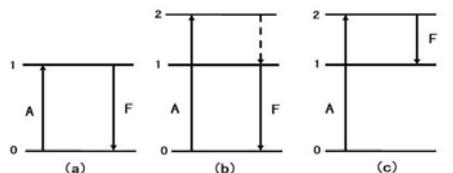
Strategy to deal with EU environmental legislation P.12

Background and Rational

- ◆ Determination of mercury in EEE by AFS: Chapter 11 of IEC 62321/1CD.
- ◆ In analytical chemistry AFS has used in determination of Pb and Cd successfully.
- ◆ Merits of AFS:
 - ◇ More sensitive, Lower detection limit ;
 - ◇ Great linear working range;
 - ◇ Lower spectral interferences;
 - ◇ Simple instrument structure;
 - ◇ Low cost and friendly to use .

Strategy to deal with EU environmental legislation P.13

Principle of AFS



(a) resonance, (b) stepwise, (c) direct line

Strategy to deal with EU environmental legislation P.14



Figure of simple single element nondispersive AFS instrument

Strategy to deal with EU environmental legislation P.15

Sample digestion

| Material | Digestion Mode |
|-------------------------|--|
| Polymer and Electronics | Microwave digestion; Pressure pot digestion |
| Metal | Acid digestion |

Strategy to deal with EU environmental legislation P.16

Hydride Generation Condition

| Experimental | Lead (Pb) | Cadmium (Cd) |
|----------------------------------|---|----------------------------------|
| Medium | 1.5% HCl | 1.0% HCl |
| Shelter reagent for metal matrix | 0.4% oxalic acid – 0.4%KSCN – 0.04% o- phenanthroline | 2%thiourea – 2%ascorbic acid |
| Reduce reagent | 0.2%KOH – 1.5% KBH ₄ – 1.0% KFe(CN) ₆ | 0.2% KOH – 3.0% KBH ₄ |

Strategy to deal with EU environmental legislation P.17

Detection Limit (μ g/L)

| Material | Lead | Cadmium |
|-----------|------|---------|
| Polymer | 0.5 | 0.03 |
| Aluminium | 0.5 | 0.03 |
| Copper | 2.5 | / |
| Iron | 2.0 | 1.5 |
| Zinc | 0.9 | 0.06 |

Strategy to deal with EU environmental legislation P.18

Test Results for Reference samples (1)

| Sample materials | Reference samples | Pb, mg/kg | | Cd, mg/kg | |
|--------------------|-------------------|-----------|--------|-----------|--------|
| | | Certified | Tested | Certified | Tested |
| Polyethylene | PV EC680 | 108 | 106 | 141 | 127 |
| | PV EC681 | 13.8 | 14.1 | 21.7 | 25.2 |
| Polyvinyl chloride | PLX PVC2 | 90.2 | 93.9 | 33.2 | 37.0 |
| | PLX PVC3 | 828 | 867 | 84.7 | 76.4 |

Strategy to deal with EU environmental legislation P.19

Test Results for Reference samples (2)

| Sample materials | Reference samples | Pb, mg/kg | | Cd, mg/kg | |
|------------------|-------------------|-----------|--------|-----------|--------|
| | | Certified | Tested | Certified | Tested |
| Aluminum alloy | E823 | 290 | 294 | 100 | 90 |
| | E821 | 22 | / | 38 | 39 |
| Brass | SY03 | 5910 | 5600 | / | / |
| | SY16 | 500 | 514 | / | / |

Strategy to deal with EU environmental legislation P.20

Test Results for Reference samples (3)

| Sample materials | Reference samples | Pb, mg/kg | | Cd, mg/kg | |
|------------------|-------------------|-----------|--------|-----------|--------|
| | | Certified | Tested | Certified | Tested |
| Stainless steel | GSB 68004 | 220 | 227 | / | / |
| Low alloy steel | YSBS 11278 | 60 | 64 | / | / |
| | YSBS 11280 | 190 | 215 | / | / |
| Zinc alloy | ZZnAID6-4 | 92 | 86 | 56 | 57 |

Strategy to deal with EU environmental legislation P.21

Comparative Tests

| Samples | Pb, mg/kg | | Cd, mg/kg | |
|----------------------|-----------|-------|-----------|------|
| | ICP-AES | AFS | ICP-AES | AFS |
| Plastics powder | 999 | 974 | 127 | 135 |
| Polypropylene-1 | 260 | 259 | 3.50 | 3.25 |
| Polypropylene-2 | 443 | 459 | 47.0 | 47.0 |
| Polyvinyl chloride-1 | 380 | 375 | 22.5 | 24.5 |
| Polyvinyl chloride-2 | 467 | 480 | 48.0 | 49.0 |
| Copper-1 | 1.11% | 1.05% | / | / |
| Copper-2 | 800 | 823 | / | / |

Strategy to deal with EU environmental legislation P.22

Repeatability (Inner Lab)

| Sample materials | Samples | Lead (n = 11) | | Cadmium (n = 11) | |
|------------------|---------------------------|-----------------|--------|--------------------|--------|
| | | Average, mg/kg | RSD(%) | Average, mg/kg | RSD(%) |
| Polymer | Polypropylene-2 | 459 | 5.0 | 46.9 | 5.3 |
| | Polyvinyl chloride-2 | 480 | 3.5 | 48.5 | 10.2 |
| Aluminium | Aluminium Alloy E823 | 294 | 3.6 | 89.7 | 3.0 |
| Copper | Brass SY03 | 514 | 5.0 | / | / |
| | Brass SY16 | 5620 | 3.4 | / | / |
| Iron | Stainless steel GSB 68004 | 217 | 5.6 | / | / |
| Zinc | Zinc Alloy ZZnAID6-4 | 85.8 | 9.9 | 58.3 | 5.2 |

Strategy to deal with EU environmental legislation P.23

Repeatability and Reproducibility (Eight Labs)

| Samples | Lead | | | Cadmium | | |
|-----------------|--------------|----|----|--------------|----|----|
| | Level, mg/kg | r | R | Level, mg/kg | r | R |
| Polyethylene | 104 | 10 | 21 | 136 | 21 | 29 |
| Aluminium Alloy | 292 | 22 | 41 | 96 | 4 | 27 |
| Brass | 520 | 22 | 85 | / | / | / |
| Stainless Steel | 224 | 14 | 17 | / | / | / |
| Zinc Alloy | 92 | 5 | 21 | 55 | 5 | 11 |

Proposals

◆ Add relative contents about determinations of lead and cadmium by AFS to chapter 12, 13 and 14.

◆ Add a new chapter between 10 and 11, "Determination of Hexavalent Chromium by AFS"

Procedures of compliance assessment for determination of levels of regulated substances in EEE

Linkman: *Xing Weibin*

E-mail: xingwb@gmail.com

Background

◆ To satisfy the worldwide legislation on the restriction of the use of certain hazardous substances from many countries or regions (EU, US, China, Japan, Korea and etc.);

◆ To avoid unnecessary barrier to international trade activities;

Background

◆ To meet great demand of the whole supply chain of the industry on the certificate of conformity based on compliance assessment for determination of levels of the regulated substances in EEE.

◇ convenient to use and exchange

◇ easy to understand

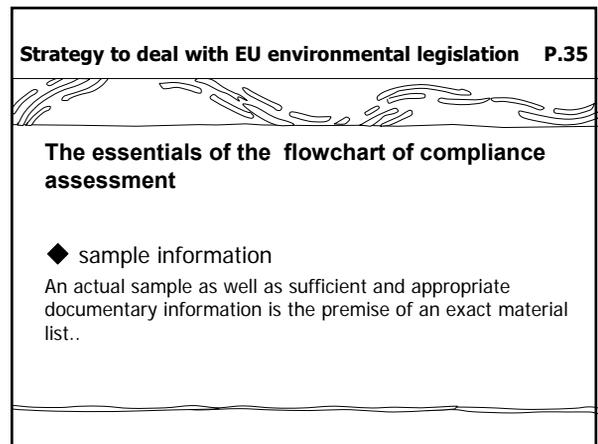
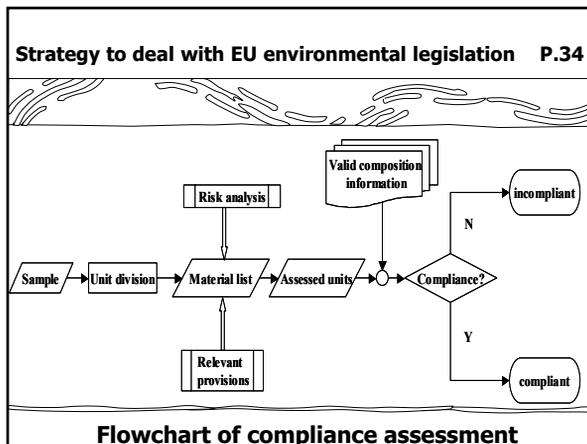
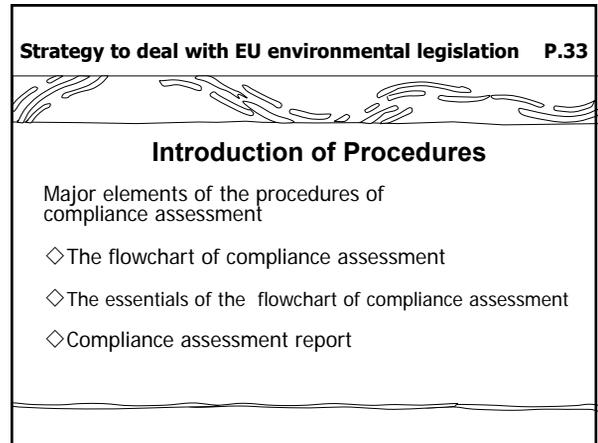
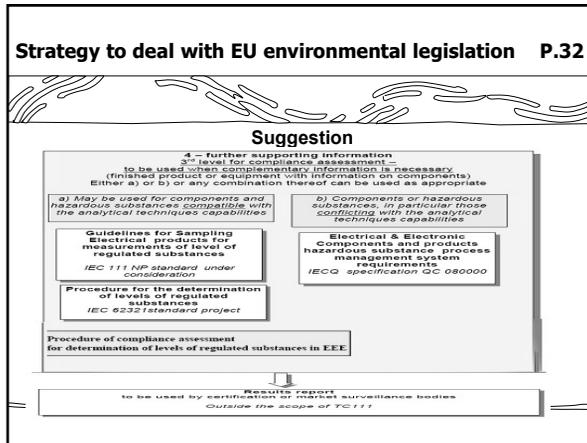
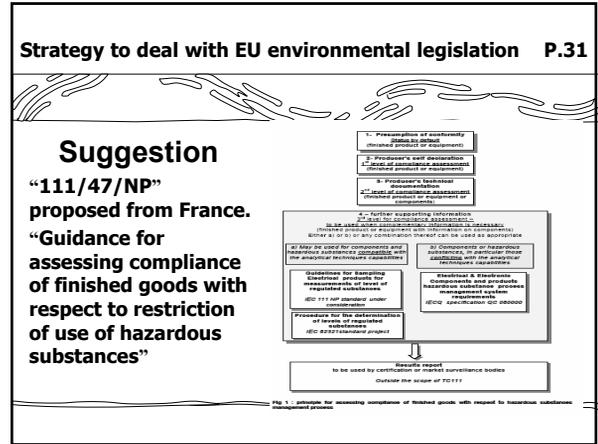
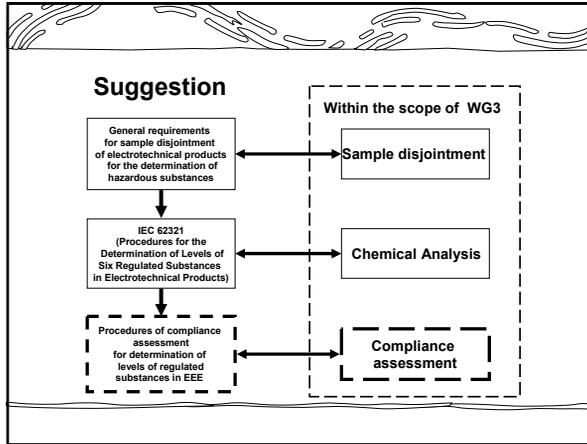
Background

◆ Two routes of implementation to comply with the requirements of the RoHS directive :

◇ Control concentration of the regulated substances in raw and processed materials or use alternative materials from the beginning of the supply chain (suitable for manufacturers and suppliers).

Background

◇ Decision by disassembling the finished product to test units, Chemical analysis of them and Compliance assessment of the results (suitable for NGOs, governments, etc).



Strategy to deal with EU environmental legislation P.36

The essentials of the flowchart of compliance assessment

◆ unit division

To obtain accurately a unit list of the sample after disjointment according to relevant technical specification of disjointment and the sample information.

Strategy to deal with EU environmental legislation P.37

The essentials of the flowchart of compliance assessment

◆ risk analysis

To improve the assessment efficiency prominently, the units might be identified and judged based on

- ◇ Related material science,
- ◇ Production process,
- ◇ Historical experience,
- ◇ Non-destructive tests such as XRF.

Strategy to deal with EU environmental legislation P.38

The essentials of the flowchart of compliance assessment

◆ Composition information

- ◇ types of composition information
 - △ test reports
 - △ sub-compliance assessment reports
 - △ material declaration
 - △ self declaration

Strategy to deal with EU environmental legislation P.39

The essentials of the flowchart of compliance assessment

◆ Composition information

- ◇ Validity of composition information, for example
 - △ based appropriate standards, i.e. testing standards, material declaration standards and compliance assessment standards.
 - △ validity of unit division
 - △ qualification of the bodies issuing documentary evidences
 - △ completeness of composition information

Strategy to deal with EU environmental legislation P.40

Compliance assessment report

- ◆ Name and address of assessment body and the entrusted signature;
- ◆ Assessment date;
- ◆ Unique identification of the assessment report as well as page numbers;
- ◆ Evaluation result of each unit and its basis;
- ◆ Material list;
- ◆ Standards and instruments used for disjointment, chemical analysis and assessment;
- ◆ Name of relevant provisions;
- ◆ Sample information and disjointment information

Strategy to deal with EU environmental legislation P.41

Proposal

China would like to propose an NP to TC111 on technical specifications of compliance assessment in the near future and volunteers to make its contribution.

Thank you
for your attention!



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/016

A Risk Assessment of European Environmental Regulations and Retailer Requirements - Potential Impact on the Wine Industry

Submitted by: Tony Battaglione, Director, International & Regulatory Affairs, Winemakers Federation of Australia



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

A Risk Assessment of European Environmental Regulations and Retailer Requirements - potential impact on the wine industry

Tony Battaglione¹ & Amy Russell²

**Paper presented to the 6th Conference on Standards and Conformance
APEC Sub-Committee on Standards and Conformance (SCSC)
Da Nang, Viet Nam
5-6 September 2006**

Introduction

The Australian Wine Industry Stewardship (AWIS) project is an initiative of the Winemakers' Federation of Australia, with funding support provided by the Australian Government Department of Agriculture, Fisheries and Forestry. The vision of AWIS is that by 2007, the world will recognise and value the Australian wine industry's environmental stewardship credentials.

A major output of AWIS to date has been a Customer Review of overseas markets to identify emerging trends in environmental assurances. The Customer Review for the European market, including the UK, has been drafted and has yielded some definitive results. The Review was undertaken through face to face discussion with key figures in the European Union, supported by desktop analysis of relevant documentation.

This review has been used by a number of producing countries and international bodies to justify the need for concerted action by the world wine producers to ensure that their production methods meet key principles of environmental sustainability.

One of these, the International Federation of Wine and Spirits (FIVS)³ - a world-wide organization designed to represent all sectors of the wine, spirits and beer industries has now developed a set of principles for wine industry producers to meet that will satisfy the Corporate Social Responsibility objectives of retailers and meet European Union requirements.

In this paper, we identify that the wine industry is susceptible to a number of different environmental assurance requirements. In particular, viticulture needs to contend with generic agricultural standards that are already evident in international markets. The Customer Review has identified those documents and strategies that are indicative of the overall direction that environmental assurances are taking, in addition to more tangible audit standards and indicators that are already active in the marketplace. The Review goes on to identify the future directions of environmental assurance in the European Union, and therefore the issues that the global wine industry will need to contend with. The global industry response to the issues raised in this report is then outlined.

¹ Director, International & Regulatory Affairs, Winemakers Federation of Australia, Australia and *Chair of FIVS Codex Alimentarius Commission Working Group.*

² *National NRM Coordinator*, Winemakers Federation of Australia, PO Box 2414, Kent Town, SA, 5071.

³ FIVS members include producers, distributors, importers, exporters and trade associations. FIVS interfaces on behalf of its members with many international organizations. FIVS was founded in July 1951 and has its headquarters in Paris, France. Contact details are available at www.fivs.org.

‘Oiling the Chain: Environmental assurances in the European market’

The Customer Review report, titled ‘Oiling the Chain: Environmental assurances in the European market’ is broken into three parts – the trendsetters, the trends and the future direction.

Trendsetters

1. Commission of the European Communities

The European Commission establishes policy direction for European Union Member States, and each Member State is then responsible for developing and implementing enabling legislation. In terms of environmental assurance, the EC has issued four key documents.

The first is ‘Environment 2010: Our Future, Our Choice’ which is the Sixth Environment Action Program of the EC. The program’s four priority areas for urgent action are:

- Climate Change
- Nature and Biodiversity
- Environment and Health and quality of life
- Natural Resources and Waste

The EC has also adopted a Sustainable Development Strategy, which is being reviewed this year.

From the Main Threats identified in the Strategy, one can infer that the environmental issues of concern to the EC are greenhouse gases and climate change, biodiversity, waste management and soil management. Corporate Social Responsibility also features in the strategy.

The EU Common Agricultural Policy is our third high level document. The CAP acknowledges pollution of the soil, water and air, fragmentation of habitat and loss of biodiversity as important environmental degradation issues arising from inappropriate agricultural practices.

Lastly, the EU has developed an Integrated Product Policy, which highlights the European Commission philosophy of ‘life cycle’ thinking. Consistent with this philosophy, products and services will need to reduce environmental impacts across their product’s life cycle by:

- Re-engineering or reworking products to deliver the same service with less resources;
- Cleaner, more efficient production processes; and
- Shifts in consumption towards goods and services with lower impacts.

2. Government

The second trendsetter influencing environmental assurance requirements are governments. Because the UK is such a key market for non-European wine, the AWIS customer review has focused on domestic policy within the UK. Here we find two key documents: the Draft Food Industry Sustainability Strategy, which applies to food production beyond the farm gate; and the Strategy for Sustainable Food and Farming, which applies to food production inside the farm gate.

The Draft Food Industry Sustainability Strategy emphasises the need for consumers to understand what the baseline and higher level assurance schemes stand for. The Red Tractor scheme is identified as the preferred baseline standard, with higher level assurances including

the Linking Environment and Farming (LEAF) scheme, among others. We will look a little closer at these schemes shortly.

This is a clear indication that the UK government may be able to exert indirect pressure on suppliers of foodstuffs to the UK market to meet their baseline assurance standard by raising consumer awareness of the assurances inferred by the Red Tractor and higher level schemes. The Australian wine industry can avoid adverse impacts of such a move through early adoption of an assurance scheme equivalent to the Red Tractor.

For future reference, the Food Industry Sustainability Strategy also refers to the importance of Corporate Social Responsibility.

The Strategy for Sustainable Food and Farming recognises that, given the global nature of sustainable development, the UK will want to promote the principles contained within the Strategy ‘wherever our food is produced and processed’.

The SSFF specifically identifies the following environmental impacts of agriculture:

- Emissions and climate change;
- Diffuse water pollution;
- Biodiversity;
- Controlled use of pesticides; and
- Waste, including packaging.

While we are discussing Government influences, it is also worth noting the impact of the Organisation for Economic Cooperation and Development, whose 30 member countries include Australia, France, Germany, the UK and US.

The OECD Environmental Outlook strategy (2001) identifies the following as among the most important environmental challenges:

- Climate change;
- Loss of biodiversity;
- Urban air pollution;
- Sustainable management of fisheries, forests and agricultural land;
- Hazardous chemicals in the environment; and
- Groundwater pollution.

3. Retailers

The three principle drivers for any retailer to impose environmental standards were identified as; to reduce Non-Government Organisation (NGO) pressure; to fulfill their CSR objectives; and for marketing purposes. It is considered unlikely that retailers, as a group, will seek to create a single environmental standard or certification scheme solely for wine suppliers. However, it is considered probable that suppliers will need to demonstrate how their products meet the intent behind EU Environmental Directives.

To date, wine has been less subject to environmental regulation than some other commodities. The key reason for this is it is seen as an inherently ‘safe’ product, in general does not use genetically modified organisms, and has not yet been targeted by NGOs. Further, because wine is a non-essential item, the demand for greater environmental assurance is not a high priority.⁴

⁴ The UK Wine Market: An environmental and social analysis for the Australian wine industry’, tnte group, September 2004

Unlike an essential item, if a consumer doesn't support the production method, for environmental or other reasons, they simply won't purchase the product.

Many retailers sell 'own-brand' products in addition to 'producer' or 'name' brands. In a UK wine market survey undertaken by tnte group for the South Australian Wine Industry Association⁵, four out of eight major retailers indicated that they had a supplier program for 'own-brand' products. Supplier programs are evidence of the retailer taking responsibility for the performance of its supply chain, and requesting environmental, amongst other, assurances from supply chain members. Currently, no retailer applies a supplier program to 'producer' or 'name' brand items, however this is expected to change in the future. In the survey, one retailer stated that their supplier codes could extend to wine producers within five to six years.

When presented with a list of 23 social and environmental indicators and asked to rank by importance, the highest priority environmental issues identified by retailers in the survey were:

- Integrated Pest Management (IPM);
- Sustainable use of raw materials; and
- Contribution to biodiversity enhancement.

Despite their absence from the tnte group survey, Tesco is the most likely major UK retailer that could begin to demand stricter supplier standards. They intend to have all suppliers complying with their 'Nature's Choice' program by the end of 2007.

With all existing schemes, retailers do not consider that consumers will pay a higher price for a product just because it has an 'environmental' label. The value to the producer therefore, must come from being able to obtain contracts and make sales to the retailer.⁶ In continental Europe, food and drink companies and retailers do not use environmental performance as a point of differentiation as it is not seen as providing either increased sales or attracting higher prices.

The major retailers have differing positions on agro-chemicals. Most have taken a position of minimizing the use in products supplied and some have provided lists of allowable Maximum Residue Limits (MRLs) to suppliers. This is currently applied mostly to fresh product. The requirement of different MRLs by individual retailers that differ to the new harmonized system that will come into force in Europe could provide an impediment to trade. This would provide a similar problem to that currently seen in Canada where Canadian retailer LCBO has different MRLs to those set down in Federal Regulations.

4. Consumer & Pressure Groups

Some of the big British retailers are becoming increasingly discontented with the NGOs and are moving away from 'knee jerk' reactions in response to NGO lobbying. Retailers are well aware that NGOs are not 'consumers'.⁷

Who is missing from our list of Trendsetters? Consumers! There is no identifiable consumer demand for 'green' products. Research shows that 'price', 'use by date' and 'taste' are the three most dominant factors in consumer thinking, followed by 'appearance'. Wider sustainability issues, such as environmental impact, do not feature highly amongst factors affecting consumer choice.⁸

⁵ 'The UK Wine Market: An environmental and social analysis for the Australian wine industry', tnte group, September 2004

⁶ European Crop Protection Association

⁷ European Crop Protection Association

⁸ Draft Food Industry Sustainability Strategy, (April 2005), The Office of Lord Whitty, Minister for Food, Farming and Sustainable Energy

Trends

The AWIS Customer Review has identified three key trends in emerging environmental assurances in Europe: EU Directives; Corporate Social Responsibility, and; Certification Schemes.

1. EU Directives

- Emission Trading Scheme

This Directive is currently being reviewed, including the evaluation of the impact of extending the ETS to include refrigerants. Australian industry needs to be aware of the impact of refrigerants on our environmental footprint. It should also be noted that Greenpeace have an initiative to remove all current refrigerants and return to ammonia.

Transport is currently not included in the EU ETS, but it is expected that it will be recognised in the review. From an Australian perspective, it is important to look at shipping from Australia and transport within Australia to quantify the environmental impact. This also ties in closely with the 'food miles' debate that is raging in some circles.

- Integrated Pollution Prevention & Control

The key objective of IPPC is to encourage waste best practice in approximately 400 food companies covered by its requirements. These companies must operate in a way that avoids waste, using best available techniques. The regulatory regime is particularly rigorous. Where waste is unavoidable, the regime requires that it is recovered or, if technically and economically impossible, that it is disposed of while avoiding or reducing environmental impact. This Directive has no direct impact on Australian producers but outlines elements of waste policy that retailers in the EU may draw on in developing their own supplier guidelines.

- Packaging & Packaging Waste

The 'Essential Requirements' of this Directive are:

- Packaging weight and volume should be the minimum needed for safety and acceptance of the packed product;
- Noxious and other hazardous constituents of packaging should have minimum impact on the environment at the end of the product's life; and
- Packaging should be suitable for material recycling, energy recovery or composting, or for reuse if reuse is intended.

- Waste Framework

This Directive is also currently being reviewed, including determining when a given output is a product or a resource and not a waste. This has important economic and environmental consequences for the food and wine industry.

- Habitat

The Habitat Directive concerns the conservation of natural habitats and of wild fauna and flora. The preservation, protection and improvement of the quality of the environment is an 'essential

objective of general interest' to the European Community. The Directive refers to the establishment of *Natura 2000*, a coherent ecological network of conservation areas.⁹

- Birds

The EU Directive on the conservation of wild birds recognises that the preservation, maintenance or restoration of a sufficient diversity and area of habitats is essential to the conservation of all species of birds.

2. Corporate Social Responsibility

The European Commission has re-stated that Sustainable development is to be the major initiative of the current Commission. The response of retailers and producers to this intention has been to satisfy the requirements of CSR. The UK Government's CSR update, published in 2004, identifies CSR as what companies do voluntarily over and above the minimum legal requirements for social and environmental performance.

The EC's CSR Communication encourages the adoption of the Eco-Management and Audit Scheme and the European Eco-Efficiency Initiative as valuable CSR instruments. The Australian Government has also entered into Eco-Efficiency Agreements similar to those used in the EU. The Eco-Efficiency Agreement with the Australian wine industry was signed in 2002, with commitments now being delivered by the Winemakers' Federation of Australia.

In June 2005, the UK DEFRA produced a consultation draft titled 'Environmental Key Performance Indicators for Business: Reporting Guidelines for UK Business'. The document also identifies environmental Key Performance Indicators for industry sectors and their supplier sectors.

The Significant Direct Key Performance Indicators identified for 'Growing of Crops, Market Gardens and Horticulture' in the UK are, in order of priority:

- Water use and abstraction;
- Greenhouse gases;
- Pesticides and fertilizers;
- Agriculture, which refers to reporting the amount of product harvested; and
- Acid rain, eutrophication and smog precursors.

Although neither these specific issues nor order of priority may be relevant to Australian horticulture, it does flag those issues that the UK market may come to associate with, and therefore seek additional information about, horticultural products such as winegrapes.

3. Certification Schemes

Standards from private industry don't have a legal basis, but may be part of the contract between customer and supplier or a precondition set by the customer before a producer or grower is accepted as a supplier.

There are a number of standards that fall under this category.

- Global Food Safety Initiative (GFSI) & Safe Quality Food 2000 (SQF 2000)

⁹ Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna, European Communities, 1992

Although GFSI and SQF 2000 do not currently consider environmental issues, they are indicative of a possible international retailer-driven framework that could be applied to environmental assurance in the future.

It is important to recognise that, through the GFSI, the retail sector has demonstrated its ability to unite and develop compliance standards that are required of all suppliers to all participating retailers. It is not unrealistic to assume that this same united approach could be applied to the development of environmental assurances that would be enforced by all participating retailers.

- EurepGAP

The Euro-Retailer Produce Working Group (EUREP) has harmonised specifications on agricultural practices by creating the EUREP Good Agricultural Practice (EurepGAP). EurepGAP is a series of standards and procedures for Good Agricultural Practices currently focusing on fresh produce, flowers and ornamentals, and livestock.

While individual retailers may still impose requirements above and beyond EurepGAP, many have agreed to recognise EurepGAP certification as a minimum.

It should be noted that in addition to EurepGAP standards being applied to fruit and vegetables, ornamentals and livestock, a EurepGAP Integrated Farm Assurance (EurepGAP IFA) standard has also been developed. Version 2.0 of the EurepGAP General Regulations – Integrated Farm Assurance was released in March 2005. The standard applies to agricultural production systems. The objectives of EurepGAP IFA include boosting worldwide participation in farm assurance. EurepGAP IFA is supported by retailers including Sainsbury's (UK), McDonalds (Germany) and Somerfield (UK).¹⁰

Since the development of EurepGAP, MexicoGAP, ChileGAP, KenyaGAP and SwissGAP have also emerged. In May 2005, a Memorandum of Understanding on technical cooperation was signed to develop ChinaGAP.¹¹

- British Farm Standard

The UK Assured Food Standards is an independent organisation established to manage the 'Red Tractor' trademark, which indicates compliance with the British Farm Standard.

'Red Tractor' products are produced by an alliance of farmers, processors, retailers and distributors who work cooperatively to maintain and raise standards. The British Farm Standard harmonises several assurance schemes, including the Assured Produce Scheme (APS) that applies to 'fruits, salads and vegetables'.

Growers, who produce under the label of APS, must follow the standards contained in the crop specific protocols that form the basis of the scheme. Upon reading the APS Generic Crop Protocols, it is clear that this scheme is based on the EurepGAP (or vice versa) as there is considerable overlap in criteria.

Following the Curry Commission of Inquiry after the 2001 foot and mouth crisis, the UK SSFF recommended that the Red Tractor should be the baseline standard that all food should attain. The UK government agrees with this position and the Red Tractor logo was subsequently relaunched with clear industry and government support. Non-British products can use the 'Red Tractor' logo if their production conforms to the British Farm Standard.

¹⁰ www.eurep.org/Languages/English/index.html

¹¹ 'Chinese Government signed MOU to develop ChinaGAP', EUREP Media Release 23/05/05

- LEAF – Integrated Farm Management

Linking Environment & Farming (LEAF) is a UK charity established in 1991 to develop and promote Integrated Farm Management. LEAF is one of six national organisations from different EU countries that collectively form the European Initiative for Sustainable Development in Agriculture (EISA). EISA is promoting Integrated Farm Management to the European Commission and other European legislative bodies as a basis for sustainable agriculture across Europe.¹² LEAF's IFM is acknowledged as a higher level assurance scheme in the UK SSFF. The APS audit standard strongly recommends that Red Tractor producers hold a copy of the LEAF Handbook for IFM.

Future Directions

When we talk about the future directions of environmental assurances, the five issues requiring attention are climate change, biodiversity, waste, water and green procurement. Why? These issues appear the most frequently and in the greatest number of EU and Member State policies, strategies, plans and schemes. They appear to be the issues at the forefront of the EU's collective environmental conscience.

1. Climate Change

Australia is a signatory to the Kyoto Protocol but has not ratified the Protocol. Countries that import Australian wine and that have ratified the Protocol could potentially use this point to differentiate local product from Australian product. In response to Australia's resistance to a resumption of commercial whaling, the media reported that Japanese interests attempted to undermine Australia's case by highlighting Australia's unwillingness to ratify the Kyoto Protocol, inferring that Australia's interest in environmental management issues was not genuine. It is something that could potentially be used against Australian industry.

Climate change has not yet attained the high priority status in the Australian wine industry that it holds in EU markets. This could be explained by Australia's small contribution to global greenhouse gas emissions, of which only a fraction could be attributed to the Australian wine industry. However, in a competitive marketplace where perceptions are as influential as fact, the Australian wine industry needs to address this issue to match assurances already being offered in the EU marketplace.

2. Waste

Obviously there is a need to continue to work towards sustainable waste management throughout the supply chain. The wine industry is a major user of packaging and carries substantial obligations, linked to EU rules, to undertake or to pay for recovery and recycling of packaging wastes.

3. Water

The challenge for the wine industry is to reduce its current levels of water use efficiency at all stages of the supply chain and to protect those environments receiving winery wastewater or surface runoff and groundwater infiltration from vineyards. By adopting 'best practice', efficiency gains can be achieved without compromising product quality or integrity.

¹² www.sustainable-agriculture.org/start.htm

4. Biodiversity

The *Natura 2000* network proposed under the EU Habitat Directive mirrors the Australian Government's efforts to establish a 'comprehensive, adequate and representative' National Reserve System in Australia. The Australian wine industry could demonstrate commitment to biodiversity protection measures in the EU by contributing to the equivalent Australian system.

The Australian Government has identified those environments, called 'bioregions', which are currently under-represented in the National Reserve System. These bioregions would benefit from additional 'off-reserve' management, including appropriate management of vegetation remnants located in wine regions. Seven bioregions that are declared 'Very High' priority for the establishment of additional reserves are found in one or more GIs. An additional nine 'High' priority bioregions also coincide with one or more GIs.

A concerted effort by the Australian wine industry to participate in the management of nationally significant biodiversity areas could be marketed as the equivalence of the EU's own endeavours.

5. Green Procurement

Green procurement is primarily an outcome of CSR, and requires businesses and government agencies to take responsibility for the environmental performance of their supply chains. This is done by requesting environmental assurances from supply chain members. For the Australian wine industry, the implications are twofold. Firstly, companies will need to consider their own procurement practices and what types of environmental assurances they should be seeking from their own suppliers. Secondly, as a member of a supply chain with major overseas retailers at the apex, wine companies can expect to be required to meet the environmental assurance requirements of the retailer. Some of these schemes have been profiled already.

The global wine producer response

At an international level, FIVs has developed a unifying set of environmental sustainability principles for adoption by FIVS members. Key to the success of these principles in meeting environmental goals has been to recognise the need for flexibility to enable FIVS members to give priority to addressing environmental issues of significance in their winery/vineyard locations, and to allocate resources according to those priorities. These principles are still in draft form, but will be presented to the next meeting of FIVS in October 2007 for adoption.

Environmental Sustainability Principles

Under the Global Wine Sector Environment Stewardship Program, the wine industry supports the following principles:

1. The selection of appropriate environmental sustainability programs based on the program's ability to satisfy the triple bottom line of economic, environmental and social sustainability. It is acknowledged that the triple bottom line threshold for viability will vary between individual enterprises, and that enterprises will require flexibility in establishing programs that enhance sustainability in their individual operating environments.
2. The identification of environmental sustainability activities using an environmental risk assessment. Priority should be given to risks of significance in individual geographic regions where wineries and vineyards are located.
3. Environmental risk assessment should consider but not be limited to:

- 3.1 Site selection (for new vineyards/wineries);
 - 3.2 Variety selection (for new vineyards);
 - 3.3 Soil condition;
 - 3.4 Water use efficiency;
 - 3.5 Wastewater;
 - 3.6 Agrochemical use;
 - 3.7 Biodiversity;
 - 3.8 Solid waste;
 - 3.9 Energy use;
 - 3.10 Air quality;
 - 3.11 Neighbouring land use; and
 - 3.12 Human Resource Management.
4. A process of planning for environmental sustainability activities, implementation of the activities, assessment of their effectiveness and modification of the activity for application into the future. This process will be ongoing as a means of continuous improvement.
 5. Wine sector environmental sustainability programs should incorporate ‘self-assessment’ and other forms of evaluation to gauge environmental performance.
 6. The improvement of extension and education opportunities about sustainability issues and to build awareness within the global wine sector.
 7. The global wine sector should consider partnerships with both wine industry and natural resource management stakeholders to improve sector sustainability, including the adoption of preferential purchasing policies from suppliers able to demonstrate a similar stewardship ethic.

Adoption of these principles will allow the global wine sector to be responsive to community, regulatory, customer and consumer expectations of environmental sustainability. The global wine sector has long encouraged individual enterprises to adopt appropriate environmental sustainability programs based on the program’s ability to satisfy the triple bottom line of economic, environmental and social sustainability.

International interest is emerging amongst retail and production sectors in achieving efficient and effective approaches to management, reporting and accountability of environmental sustainability in order to maintain and improve the confidence of customers, regulators and shareholders.

The variety of approaches to environmental assurances has generated interest in streamlining and harmonizing approaches to management systems in general. The principles of assurance now applied to safety management of fresh and processed foods are likely to be applied, in some form, to environmental management activities.

The proliferation of environmental assurance approaches poses a concern to the global wine sector in that they may not reflect the challenges and priorities experienced in the wine sector’s geographically diverse production regions and may not allow for inclusion of some the necessary sustainability principles which currently exist in the programs which exists today.

The development of these principles means that the wine sector has opportunity to collaborate with major international customers and governments to optimise an approach to environmental

assurance. It recognizes that many members of FIVS have completed or are in the process of developing wine sector environmental initiatives. These individual programs are important in their ability to operate within their respective regulatory, social, natural resource and biophysical contexts. This will seek to consolidate the wine sector's environmental sustainability principles, whilst enabling countries to apply these principles via the means best suited to their respective operating environments.

Conclusion

It is unlikely that the European Union or indeed any other government will impose regulation that discriminates between domestic wine producers and other producing countries on the basis of environmental production methods. Such public policy aims, including environmental and social standards, while legitimate, could act as restrictive barriers to trade, and would contravene World Trade Organisation rules.¹³ However, governments do have the ability to influence consumers and retailers within their countries, and therefore apply indirect pressures to consumers supplying their domestic markets.

Despite the unlikelihood of Government regulation, retailers are still likely to seek assurances from suppliers that they are meeting certain standards of environmental production and are adopting continuous improvement principles. All the major retailers are concerned about their corporate image and CSR performance. This is a significant driver in seeking environmental assurances from suppliers.

What is therefore critical is for the global wine industry to demonstrate their environmental credentials and present a united front to retailers and regulators. To do this effectively, a common set of outcomes and performance indicators for environmental schemes needs to be established. This will ensure that the global wine industry is able to meet assurance demands from retailers looking to establish or maintain their position as 'good corporate citizens'.

¹³ Draft Food Industry Sustainability Strategy, (April 2005), The Office of Lord Whitty, Minister for Food, Farming and Sustainable Energy



A Risk Assessment of European Environmental Regulations and Retailer Requirements - potential impact on the wine industry

Tony Battaglione
Director, International & Regulatory Affairs
Winemakers Federation of Australia

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Vision

The world will recognise and value the global wine industry's environmental stewardship credentials



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Environmental assurances

- Customer Review (EU) completed
- Viticulture and winemaking
- Policy direction vs tangible assurances
- Key issues on the EU agenda

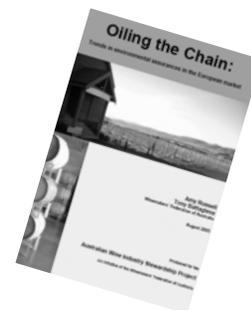
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Customer Review report

Oiling the Chain:
Trends in environmental assurances in the European market

- Trendsetters
- Trends
- Future directions



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Trendsetters

Commission of the European Communities

- Environment 2010: Our future, Our choice
- Sustainable Development Strategy
- EU Common Agricultural Policy
- Integrated Product Policy

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Trendsetters

Governments

- UK Draft Food Industry Sustainability Strategy
- UK Strategy for Sustainable Farming & Food
- OECD



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Trendsetters

Retailers

- Corporate Social Responsibility Report
- 'Own Brand' supplier guidelines
- Company programs/labels



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Trendsetters

Consumer and Pressure Groups

- Environmental NGO's
- Not-for-profits eg WRAP
- Industry peak bodies

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Trendsetters

Who is missing...?

Consumers!

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Trends

- EU Directives
- Corporate Social Responsibility
- Certification schemes

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Trends

EU Directives

- Emission Trading Scheme
- Integrated Pollution Prevention and Control
- Packaging and Packaging Waste
- Waste Framework
- Habitat
- Birds

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EU Directives

Emission Trading Scheme

- Review to evaluate the impact of expanding Scheme to other sectors and gases, including refrigerants
- Transport currently not included in the Scheme but is expected to be recognised in the next iteration of the Directive

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EU Directives

Industrial Pollution Prevention & Control

- Encourage 'waste best practice'
- Companies must operate in a way that avoids waste, recovers waste or disposes while avoiding environmental impact
- Outlines policy elements that retailers are likely to draw for their own supplier guidelines

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EU Directives

Packaging & Packaging Waste

- Essential Requirements
 - Pkg waste & volume should be the minimum needed for safety and acceptance
 - Noxious & other hazardous constituents of pkg should have minimum impact on the environment at the end of the product's life
 - Pkg should be suitable for material recycling, energy recovery or composting, or for reuse if reuse is intended

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EU Directives

Waste Framework

- Under review
- Key to review is deciding when an output is a product/resource instead of waste

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EU Directives

Habitat Directive

- Natura 2000 – coherent ecological network of conservation areas



Birds Directive

- Primarily recognition

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Trends

Corporate Social Responsibility

- Communication from the EC concerning CSR: A business contribution to sustainable development
- EU Eco-Management and Audit Scheme
- UK draft Environmental KPIs for Business: Reporting guidelines for UK business



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Trends

Certification Schemes

- Global Food Safety Initiative & SQF 2000
- EurepGAP – Integrated Farm Assurance
- British Farm Standard – Assured Produce Scheme
- LEAF - Integrated Farm Management



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Future Directions

- Climate Change
- Biodiversity
- Waste
- Water
- Green Procurement

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In conclusion...

- Governments and the WTO
- Retailers will need assurances
- Proactive stance
- Global industry needs to present a united front that has adopted a common set of outcomes and performance indicators

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Global wine producer response

- The global wine sector has long been responsive to community, regulatory, customer and consumer expectations of environmental sustainability.

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Global wine producer response

- FIVS environmental sustainability principles
- Allow individual producers flexibility to address real environmental priorities
- Need to 'walk the talk'.

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- International interest is emerging amongst retail and production sectors in achieving efficient and effective approaches to management, reporting and accountability of environmental sustainability in order to maintain and improve the confidence of customers, regulators and shareholders.

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- This is an international trend, and means that internationally we need to demonstrate that the wine industry meets sustainability objectives.
- This must occur on a wine industry basis and not try and compete between different countries/company's systems

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- FIVS has recognised this and commissioned a study into developing sustainability principles for the wine and spirits industries
- The consultant chosen was one with internationally recognised environmental credentials, Peter Hayes.

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- Develop a unifying set of environmental sustainability principles for adoption by FIVS members
- Facilitate FIVS members in applying the environmental sustainability principles through programs deemed appropriate by individual FIVS member.
- Recognise that different businesses have different environmental priorities/triggers and that one set of key issues does not fit all cases.

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- The Steering Committee has received the final report from Peter Hayes
- Summary of the principles
- Next steps

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Draft FIVS principles for environmental sustainability in the wine and spirits industries

- The selection of appropriate environmental sustainability programs based on the program's ability to satisfy the triple bottom line of economic, environmental and social sustainability.
- Triple bottom line threshold for viability will vary between individual enterprises, and that enterprises will require flexibility in establishing programs that enhance sustainability in their individual operating environments

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Priority should be given to individual risk assessment.

- The identification of environmental sustainability activities using an environmental risk assessment. Priority should be given to risks of significance in individual geographic regions where businesses and vineyards are located.

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Environmental risk assessment should consider but not be limited to:

- 3.1 Site selection (for new vineyards/wineries/distilleries);
- 3.2 Variety selection (for new vineyards);
- 3.3 Soil condition;
- 3.4 Water use efficiency;
- 3.5 Wastewater;
- 3.6 Agrochemical use;
- 3.7 Biodiversity;
- 3.8 Solid waste;
- 3.9 Energy use;
- 3.10 Air quality;
- 3.11 Neighboring land use; and
- 3.12 Human Resource Management.

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Ongoing continuous improvement requires:

- A process of planning for environmental sustainability activities, implementation of the activities, assessment of their effectiveness and modification of the activity for application into the future.

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Sustainability requires education of consumers:

- The improvement of extension and education opportunities about sustainability issues and to build awareness within the global wine and spirits sector.

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Evaluation is essential:

- Wine and spirit sector environmental sustainability programs should incorporate 'self-assessment' and other forms of evaluation to gauge environmental performance

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It requires a partnership approach:

- The global wine and spirits sector should consider partnerships with both industry and natural resource management stakeholders to improve sector sustainability, including the adoption of preferential purchasing policies from suppliers able to demonstrate a similar stewardship ethic.

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Next steps

- FIVS needs to adopt and promote these principles amongst its members.
- FIVS needs to develop an extension strategy to take these principles to the key retailers/consumer groups to demonstrate our sustainability credentials.

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- THANK YOU -

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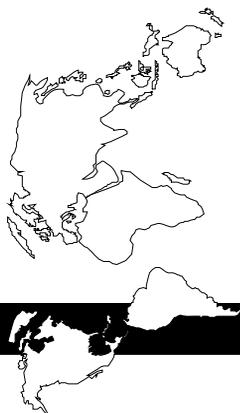
Manufacturers' View on RoHS-like Regulations

Submitted by: David Ling, Regulatory Policy and Strategy Manager
Worldwide Technical Regulations



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

Manufacturers' View on RoHS-like Regulations



David Ling
Regulatory Policy and Strategy Manager
Worldwide Technical Regulations



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RoHS-like regulations

Product Scope

| EU | China | Japan | Korea (draft) |
|---|---|---|--|
| <ol style="list-style-type: none"> 1. Large household appliances 2. Small household appliances 3. IT and telecommunication equipment 4. Consumer equipment 5. Lighting equipment 6. Electrical and electronic tools (with the exception of large-scale stationary industrial tools) 7. Toys, leisure and sports equipment 10. Automatic dispensers <p>#8 medical and #9 control equipment are left off this round. EU is beginning the process for "RoHS 2" and will review previously out-of-scope categories.</p> | <p>Smaller scope than EU</p> <p>"Electronic Information Product"</p> <ul style="list-style-type: none"> -electronic radar products, -electronic communications products, -radio and television products, -computer products, -home electronic products, -electronic instrument measuring products, -specialized electronic products, -electronic components and parts, -electronic applications, -electronic materials, and accessories, -software (the media) and consumables | <p>Smaller scope than EU</p> <ul style="list-style-type: none"> Personal computers (CRT & LCD) Unit-type air conditioners Televisions Microwave ovens Clothes dryers Electric refrigerators Electric washing machines | <p>Different scope than EU</p> <ul style="list-style-type: none"> Electronic Products operated by electricity and magnetic field and automobiles |

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Effective Dates

| EU | China | Japan | Korea (draft) |
|-------------|---|-------------|---------------|
| 2006 July 1 | <p>2007 Mar 01; labeling and information disclosure aspects</p> <p>Rolling dates: for certification requirements tied to the products rolled into the Catalogue</p> | 2006 July 1 | 2007 July 1 |

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Restricted substances and Minimum Concentration Values (MCVs)

| EU | China | Japan | Korea (draft) |
|---|---|------------|---------------|
| <ul style="list-style-type: none"> Lead Mercury Hexavalent chromium Cadmium Polybrominated biphenyls (PBB) Polybrominated diphenyl ethers (PBDE) <p>MCV 0.1% by weight in homogeneous materials, except 0.01% for cadmium</p> | <p>For Catalogue Products</p> <p>Same as EU restricted substances and MCV's, but reserve the right to have different substances and limits in the future</p> <p>Three (3) classifications for materials</p> <ul style="list-style-type: none"> EIP-A – Homogenous materials EIP-B – Surface Platings EIP-C – Small parts the size of a 0805 chip resistor or capacitor | Same as EU | Same as EU |

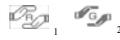
5 7 November 2006

Exemptions

| EU | China | Japan | Korea (draft) |
|--|--|--|---------------|
| <ul style="list-style-type: none"> -decaBDE Exemption -Server exemption -Hexavalent-Chromium -Consumables -Other applications of hazardous materials (28 total at this time. Some positively voted on by the TAC and awaiting final approve. Cr6 falls into this situations.) | <p>Exemptions expected to be written into the "catalog" when that is defined.</p> <p>Or products that need exemptions will not be included in the catalog</p> <p>Expect the same exemptions as those for EU RoHS, decaBDE is excluded in the MCV definitions</p> <p>China reserve the right to have different exemptions in the future</p> | Same as for EU RoHS, plus nine (9) more exemptions | TBD |

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Labeling

| EU | China | Japan | Korea (draft) |
|--|--|---|---------------|
| No RoHS marks mandated. (may have a WEEE mark) | <p>Product Labeling applies to ALL EIP (Electronic information products) except for parts for manufacturing</p> <p>Environmental Protection Period Marking</p>  <p>Toxic and Hazardous Substance table</p> <p>Packaging material content disclosure</p> | <p>JIS Standard C0950 will be mandatory</p> <p>Gives specific guidance on the new labeling and reporting requirements</p> <p>Product labels</p>  <p>Label #2 is optional. EU compliant products can use this mark.</p> <p>Materials table posted on a website for all in scope products sold in Japan.</p> | TBD |

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Testing requirements (pre- and post-)

| EU | China | Japan | Korea (draft) |
|--|--|-------|---------------|
| <p>None mandated for pre-market.</p> <p>Post-market testing for market surveillance purposes</p> <p>Testing at materials-level</p> | <p>For Catalogue products:</p> <p>Commission Test – For monitoring hazardous substance in raw materials or in the production process.</p> <p>Identification Test – For market monitoring and supervision by supervisory authorities.</p> <p>Arbitration Test Method – For settling disputes when parties concerned disagree on analysis and test results.</p> <p>Apply Chinese test standard, until international test standards are published</p> | None | Unknown |

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Supplier verification and supporting documentation

| EU | China | Japan | Korea (draft) |
|---|---|-------|---------------|
| <p>Many companies implement supplier management processes and maintain records of due diligence, such as:</p> <ul style="list-style-type: none"> -Contractual RoHS compliance specifications -Signed supplier letter of conformance -Verification of supplier's compliance processes. May include one or more of the following: <ul style="list-style-type: none"> -New Product Introduction Compliance Check List for RoHS compliance -Audit/verification of supplier's compliance processes -Supplier supporting documentation showing compliance with RoHS and contractual requirements (e.g. this could range from spec drawings to analytical test data) -Documentation retained for a minimum of X years, available upon request by government market surveillance purposes. | | | |
| Sufficient | Additional conformity assessment requirements | None | Unknown |

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Other conformity assessment req'ts

| EU | China | Japa | Korea (draft) |
|------|--|------|------------------------|
| None | <p>For Catalogue Products, some mandatory conformity assessment requirements not yet finalized. Possible requirements include:</p> <ul style="list-style-type: none"> Product samples Submittal of compliance data Product testing by designated labs Certification by designated certification bodies Annual factory inspections by designated certification bodies | None | Certification expected |

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Additional RoHS-like regulations

- California's SB20
 - Same requirements as EU RoHS
 - Scope only products with displays > 4"
 - Effective Date January 1, 2007
- Proposed U.S. State bills:
 - California AB2202 – includes all EU RoHS products
 - Minnesota – Patterned after EU RoHS, ONLY consumer products
 - Several other states looking at RoHS legislation
- Australia conducting survey
- Taiwan voluntary RoHS program
- Argentina WEEE and RoHS bill

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Manufacturers' View

Harmonization & Standardization

- Need harmonization and standardization on
 - Hazardous substance, MCV limits
 - Product scope, including repair and upgrade of older products
 - Exemptions
 - Testing standard that is repeatable and reproducible
 - Markings and labeling
 - Presumption of compliance, backed-up by a supplier's declaration of conformity
- No mandated lead-free solder standards

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AEA Principles Paper

www.aeanet.org/governmentaffairs/gabl_RoHSHarmonizationPrinciples.asp

- Incorporation of Maximum Concentration Values (MCVs) no stricter than necessary
- Harmonization of regulated requirements to facilitate trade of the same RoHS compliant products globally
- Recognition of international analytical testing standards
- Government's Presumption of Conformity and Market Surveillance System
- Avoidance of Country Specific Marking and Labeling Requirements

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Recommended Next Steps

- Initiate a SCSC work program now to cooperate and coordinate for improving transparency and driving toward harmonization and standardization:
 - Conduct a survey to know which APEC member economies plan to develop and establish RoHS-like regulations by 2011-2.
 - Develop strategies for harmonization and standardization in key areas for AP region.
 - Coordinate with non-APEC countries, and participate in international standardization efforts for achieving world harmonization in key areas.
 - Take appropriate steps to minimize or, where appropriate, eliminate unnecessary divergence in requirements.
 - Invite selective representatives from the private sector to provide recommendations throughout the SCSC work program.

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Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/018

Product Related Environmental Regulations in Korea and Responses by Korean Electronic Companies to the Regulations

Submitted by: Kun-Mo Lee, Eco-product Research Institute



**6th Conference on Standards and Conformance
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5-6 September 2006**

Product related environmental regulations in Korea and responses by the Korean electronic companies to the regulations

6th September 2006

Prof. Dr. Kun-Mo LEE

Eco-product Research Institute (ERI)
Ajou university
<http://www.ecodesign.ac.kr>

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Legal framework

Environmental management / ecoproduct laws



Packaging EEE Vehicle (Car) Other EPR products (tire, battery)

Recycling / waste Management laws

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Recycling law structure

Facilitation of recycling of EEE

Preventive measure

- Improving material composition
- restriction on the use of hazardous substances
- supply of recycling information

End of pipe measure

- target products for the mandatory recycling ratio
- submission of the mandatory recycling plan
- collection of recycling fee

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Preventive measure

Ease of recycling and supply of the recycling information

Preventive recycling measures including simplification of the number of materials used, expanded use of recyclable plastics, identification of the materials, ease of separation and disassembly, etc

Supply of the following information to the recyclers; hazardous substances to be removed prior to recycling, disassembly information, material and component composition of the waste EEE

Restriction on the use of hazardous substances

same as the RoHS directive in EU

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End of pipe measure

Recycling target per product category (weight/product)

| Product category | 2005 | after 2006 |
|----------------------------------|------|------------|
| TV, PC | 55% | 65% |
| mobile phone | 60% | 70% |
| audio, refrigerator | 60% | 70% |
| washing machine, air conditioner | 70% | 80% |

Note : EU's WEEE: 65 ~ 80% range

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Assigning mandatory recycling target to manufacturers

The manufacturers and importers of EEE shall collect a certain percentage of their waste products.

If not meet the target, fine will be levied (same as the current EPR system)

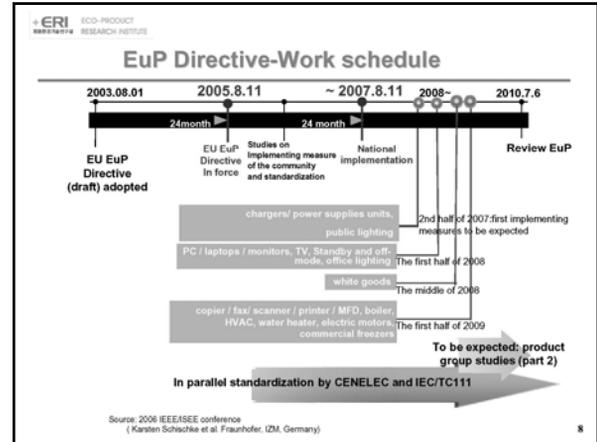
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Comparison of the EU regulation and the Korean regulation

| Category | EU | Korea |
|---------------------|---|--|
| Preventive measure | <p>「RoHS : '06.7 」</p> <p>- hazardous substances (Pb,Cd,Cr⁶⁺,Hg,PBB,PBDE) permissible concentration in a product</p> <p>「WEEE : '07.1 」</p> <p>- enhancing the recyclability</p> | <p>「guide for material composition improvement : '04.11 」</p> <p>- identify target products to be regulated (recommendation)</p> |
| End of pipe measure | <p>「WEEE : '07.1 」</p> <p>- regulation on the recycling of the 10 categories of waste EEE</p> | <p>「EPR : '03.1 」</p> <p>- 7 product categories (10 in 2005)</p> <p>- assign mandatory recycling ratio every year</p> |

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Preparatory studies on implementing measures for EuPs

The notice for tender commissioned by DG TREN in sep. 2005 : regarding the development of the implementing measures covered EuP directive

- Title of Project: Preparatory studies on ecodesign requirements for EuPs
- Objectives: to identify the measures regarding improvement of EuP's environmental performance
- Duration: 11~21 months
- Total budget : 4,000,000 Euro

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Objectives of the studies

- ◆ Whether and which ecodesign requirements should be set for a particular EuP
- ◆ Recommending ways to improve the environmental performance of the EuP

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Deliverables

The study shall provide the necessary information to prepare for the next phases carried out by the EU commission

- The impact assessment
- The consultation of the ecodesign forum
- A possible draft implementing measure

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Contents of studies

Identify

- Market characteristics for the product
- The relevant environmental aspects of the product to be covered and their technical/economical potential for improvement
- Existing relevant legislation
- Self-regulation by industry and standards
- Needs for standards to be developed

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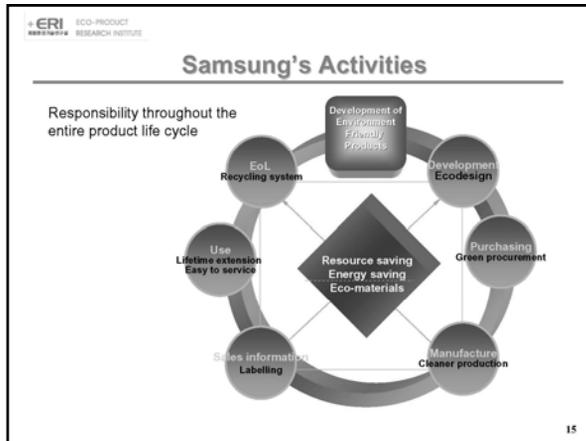
Product categories of Interest: ongoing preparatory study

| Study | Study Website | Contractor |
|---|------------------------|--|
| 1 Boilers and combi-boilers (gas/oil/electric) | www.ecobooler.org | Van Housijn en Kerma B.V. |
| 2 Water heaters (gas/oil/electric) | www.ecohotwater.org | Van Housijn en Kerma B.V. |
| 3 Personal Computers (desktop & laptops) and computer monitors | www.ecocomputer.org | IVF Industrial Research and Development Corporation |
| 4 Imaging equipment : copiers, faxes, printers, scanners, multifunctional devices | www.ecoimaging.org | Fraunhofer Institute for Reliability and Microintegration, IZM, Berlin |
| 5 Consumer electronics : televisions | www.ecotelevision.org | Fraunhofer Institute for Reliability and Microintegration, IZM, Berlin |
| 6 Standby and off-mode losses of EuPs | www.ecostandby.org | Fraunhofer Institute for Reliability and Microintegration, IZM, Berlin |
| 7 Battery chargers and external power supplies | www.ecocharger.org | BIO Intelligence Service |
| 8 Office lighting | www.eup4light.net | VITO-Flemish Institute for Technological Research |
| 9 (Public) street lighting | www.eup4light.net | VITO-Flemish Institute for Technological Research |
| 10 Residential room conditioning appliances | www.ecoaircon.eu | Amines |
| 11 Electric motors, water pumps, circulators in buildings, ventilation fans | www.ecomotors.org | AEA Technology |
| 12 Commercial refrigerators and freezers | www.ecofreezerroom.org | BIO Intelligence Service |
| 13 Domestic refrigerators and freezers | Available soon | Selection of winning offer by end of March/early April 2006 |
| 14 Domestic dishwashers and washing machines | Available soon | Selection of winning offer by end of March/early April 2006 |

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Other EU project on ecodesign for EuPs

- Title : Methodology Study Eco-design of Energy-using Products(MEEUP)
- Duration : 2004. 11. 17 ~ 2005.12.17 (13 months)
- Client : EU DG Enterprise and Industry (DG ENTR), DG Transport and Energy (DG TREN)
- Contractor : VHK(Van Holsteijn en Kerma BV)
- Objectives : To identify target products and set up evaluating method for meeting the article 15 in directive
- Work schedule - Issued the final report : 28 November 2005
 - Workshop on the EUP Methodology Study : Brussels, 3 October 2005
 - Completed the Product Cases Report(1st draft final report) : 23 September 2005
- Participants : Daiken, Canon, Philips, IBM, Siemens, Whirlpool



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Samsung's Activities

FPR : comply with the EU WEEE Directive

| Operation date | Countries | Compliance |
|---|--|--|
| As of April 2006 (15 countries) | Spain, Portugal, Hungary, Finland, Germany, Austria, Czech, Slovakia, Ireland | Join recycling scheme and producer registration |
| | Netherlands, Belgium, Sweden, Denmark, Luxemburg, Greece | |
| Within the second half of 2006 (10 countries) | U.K., France, Italy, Poland, Slovenia, Malta, Cyprus, Lithuania, Estonia, Latvia | Legislation monitoring, Search the recycling companies |

- '05.5, WEEE Marking EU all products
- '05.6, A member of the European Recycling Platform (ERP), a consortium established by major electronics companies (HP, Sony, Electrolux, Toshiba)
- '05.8, recovery/recycling in operation

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Samsung's Activities

- ❖ Response to the Consumer Electronics Recycle Law in Japan (from April 2001)
- ❖ Samsung Electronics joined RKC, a home appliance recycling center. The Company has actively involved in the recycling of consumer electronics by joining A Group, a recycling alliance with GE, Toshiba and others.

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Samsung's Activities

- ❖ In 2003, the Company managed to recover at least 60% of the raw materials in more than 22,000 discarded TVs, refrigerators and washing machines and increased the total figure to some 26,000 units in 2004 (in Japan)
- ❖ Furthermore, a joint recycling program was launched with Mitsubishi Electric and others in October 2003 to recycle PCs (In Japan)

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Samsung's Activities

Control of hazardous materials in parts and products

- ❖ **Suppliers were certified as Eco-Partner**
 - Banned six hazardous substances (*05.8~)
- ❖ **Suppliers' part certification**
 - RoHS six hazardous substances were verified and certified
 - Analyze the composition of a single part and hazardous substances

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Establish environment hazardous materials management system [e-HMS]

- control the information concerning all hazardous substances
- connect with e-HMS and SPDM,SAP
If not approved, confirmation of the BOM and order of the SAP is impossible

| Controlled materials | Samsung | | RoHS |
|----------------------|---------|--------|------|
| | Resin | Others | |
| Cd | 5 | 80 | 100 |
| Pb | 100 | 800 | 1000 |
| Hg | | 800 | 1000 |
| Cr ⁶⁺ | | 800 | 1000 |
| PBB | | 800 | 1000 |
| PBDE | | 800 | 1000 |

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Eco-Partner Certification System (for green procurement)

Suppliers should comply with the Samsung Eco-partner requirements by June of 2005

- Evaluation of SEC environmental management system (EMS)
- Evaluation of the products environmental compliance using document inspection and instrumental analysis

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Laboratories for analyzing environmental impact

- ❖ **Establish precision analytical laboratories: invested US\$ 3.5million**
 - inorganic/organic analysis : Pb, Cd, Hg, Cr⁶⁺, PBB, PBDE, etc
 - VOC analysis : Phenol, Benzene, Toluene, etc
- ❖ **Standardization of the analysis method for six RoHS substances**
 - participate in the IEC/TC 111 working group to develop standard
- ❖ **Certification of the analytical Lab**
 - Accreditation of the analytical lab by the UL and KOLAS: ensuring data credibility

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Ecodesign

Ecodesign process [05.1~]
Evaluate 21 items : Toxicity, Energy efficiency, Recycling, etc.

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Ecodesign

Slim monitor using Dual Hinge:
resource saving, energy saving, distribution cost reduction

Model name : LS17C[750B]

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Ecodesign

New concept LCD separable Note-PC:
reusable LCD monitor

Model name : NT-M70

Before



After



- Separate monitor module from Notebook PC : use monitor cradle, reuse monitor for desktop PC (when upgrading, only body can be upgraded, purchasing cost reduction)
- Adopt automatic power saving mode
- Eco-mark certification
- Do not contain six RoHS substances



Reuse monitor for desktop PC

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LG electronics ecodesign activities

Web based ecodesign system
Ecodesign guide; ecodesign cases, getting product ideas
Use LCA and recycling evaluation tools



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LG electronics RoHS related activities

Establishing substitution and management system

- 1) Completing substitution of hazardous substances
 - begin to manufacture eco products (2005.7)
- 2) Hazardous substance control in product
 - establishing management/operation criteria
 - Management criteria (more stringent than RoHS)
 - setting criteria for submitting data by suppliers
 - establishing proactive Roadmap
- 3) Establishing verification system of hazardous substances in parts
 - hazardous substances DB (Web-based)
 - XRF operating criteria (Screening system)
 - accreditation of the analytical lab set-up (UL)

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LG electronics RoHS related activities

Implementing Eco certification system

- 1) Setting up a system to assist suppliers
 - development and dissemination of manuals
 - training of the hazardous substance management technique
- 2) Capacity building of the suppliers (Level up)
 - assisting them to acquire ISO14000 certification
 - EMS training
- 3) Implementing eco certification system of the suppliers
 - evaluating suppliers
 - implementing monitoring

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LG electronics WEEE related activities

Setting up collection system

- 1) Join the compliance scheme of each country
- 2) computerized management system of the WEEE cost

Supply of WEEE recycling information

- 1) WEEE information supply format
 - Dismantling manual
 - Information of the parts w/ hazardous substances
- 2) WEEE information supply(on-line) set-up

Evaluation/improvement of product recycling rate

- Evaluation of recycling rate and securing analytical method

- 2) Product recyclability improvement design manual

WEEE Marking

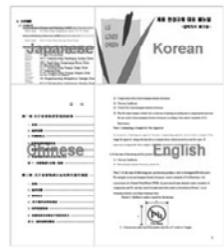
- 1) Establishing WEEE Marking criteria
- 2) Product specific Marking (2005.8.13)

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Environmental Quality Approval Program

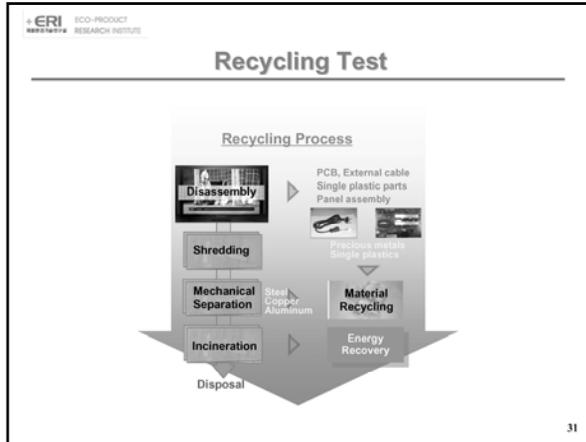
Manual for supplier



Certification



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Eco-Design Guide for Recycling

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WEEE Marking

Marking guide

1 Marking of "Energy Star" certified products (Min-Products/Consumers)

1) Product is energy star certified
 2) Product is not a hazardous product
 3) Product is not a motor
 4) Location: South Korea, Canada, United States, Mexico, Japan, Europe, Australia, etc.
 5) Marking of the label is placed on the product

2 Marking of "RoHS" compliant products

1) Product is RoHS compliant
 2) Product is not a motor
 3) Product is not a hazardous product
 4) Location: South Korea, Canada, United States, Mexico, Japan, Europe, Australia, etc.
 5) Marking of the label is placed on the product

3 Marking of "E" recycling

1) Product is RoHS compliant
 2) Product is not a hazardous product
 3) Product is not a motor
 4) Location: South Korea, Canada, United States, Mexico, Japan, Europe, Australia, etc.
 5) Marking of the label is placed on the product

Cases

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THANK YOU

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Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/019

EU Environmental Regulations – International Standardization and Japanese Business’s View

Submitted by: Koichi Mori, Fujitsu Limited, Chairman of IEC TC111



**6th Conference on Standards and Conformance
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EU Environmental Regulations – International Standardization and Japanese Business’s View

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6th September, 2006

Koichi Mori
Fujitsu Limited
(Chairman of IEC TC111)

FUJITSU
THE POSSIBILITIES ARE INFINITE

Contents

1. EU and Japanese Environmental Regulations
2. International Standardization on Environmental Field
3. Japanese Business’s View
4. Conclusion

FUJITSU
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Worldwide Expansion of Environmental Regulations

Great impact to Industries !

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Product Related Environment Regulations in Japan

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Discussion on Control Measures of Chemical Substances in Electrical/Electronic Products

Focuses of Discussion

- How effectively chemical control can be conducted in a supply chain.
- Does Japan need to establish a regulatory regime similar to the EU?

Basic Concept

1. Leading activities by industries should be well recognized.
2. No needs for restriction of use of certain chemical substances similar to the EU.
3. New measures should facilitate the future development of environment conscious designing.

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Labeling/ Marking Scheme of Materials/ Substances in Products

- Affixing special marking on product or packaging
- Special marking as well as detail information (e.g. indication of relevant parts, quantity of materials/substances) to be provided on product's catalogue/brochure, operation manual, web-site

| Product | Target Materials/Substances |
|---|--|
| <ul style="list-style-type: none"> • Personal computers • Air conditioners • Television sets • Refrigerators • Washing machines • Microwave ovens • Clothes dryers | <ul style="list-style-type: none"> • Lead/Lead compounds • Mercury/Mercury compounds • Hexavalent chromium/Hexavalent chromium compounds • Cadmium/Cadmium compounds • Polybrominated Biphenyls (PBBs) • Polybrominated Diphenylethers (PBDEs) [excluding deca-PBDE] |

If contained (Mandatory) If not contained (Voluntary)

Special Marking



Enforcement: 1st July, 2006

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Contents

1. EU and Japanese Environmental Regulations
2. International Standardization on Environmental Field
 - 2-1. Outline of IEC TC111
 - 2-2. Current Activities of TC111
3. Japanese Business's View
4. Conclusion

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2-1. Outline of TC 111

- Title: Environmental Standardization and Electrical and Electronic Products and Systems
- Update from February, 2006 meeting
 - ◆ P-members: AU, AT, BE, CA, CZ, CN, DK, FI, FR, DE, IN, IL, IT, JP, KR, NL, NO, ES, SE, TH, GB, US (22)
 - ◆ O-Members: MY, MX, PL, SG, SI, CH (6)
 - ◆ Outside liaison: ISO/TC207, ECMA, GEN

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2-2. Current Activities of TC111

- Regulated Chemicals area (RoHS, REACH etc.)
 - ◆ Test procedures of regulated substances : WG3
 - ◆ Material declaration (MD): WG1
 - ◆ Guidance for assessing compliance of finished goods with hazardous substances : PT (TS)
 - ◆ Sample disjointment : AHG started (PAS)
 - ◆ Guideline on the management of chemical substances contained in products : Japan will submit NP (TS)

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Current Activities of TC111 - 2

- Eco-design area
 - ◆ Environmentally conscious design (ECD): WG2
- Recycling, Reuse, Waste Management area
 - ◆ Maybe in the future
- Terminology
 - ◆ USA may propose NP

Various legislations have been /will be issued in many countries/regions. IEC will develop internationally applicable standards and other deliverables, and not for particular countries or regions

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Current Activities of TC111 - 3



3rd TC111 meeting
 June 21st -22nd, 2006
 MicroSoft in Redmond, USA,
 17 countries / 74 people
 (US: 15, CN: 12, JP: 12, KR: 9, FR: 4, ...)

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① Test procedures of regulated substances - 1

- TC111/WG3
- IEC 62321 Ed 1.0: Procedures for the Determination of Levels of Six Regulated Substances (Lead, Mercury, cadmium, Hexavalent Chromium, Polybrominated Biphenyls, Polybrominated Diphenyl Ethers) in Electrotechnical Products
- Convenor: Mr. Markus Stutz (DE): DELL in Europe
- WG Meetings
 - ◆ Establishment: March, 2005
 - ◆ 3rd meeting: 8-9 February, 2006 (Stuttgart, DE)
 - ◆ CDV: Now under voting (voting end: 6th October, 2006)
 - ◆ 4th meeting: 8-10 November, 2006 (Beijing, CN)

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Test procedures of restricted substances - 2

- 2nd IIS (International Interlaboratory Study) has been implemented (26 testing laboratories)
- Purpose: to evaluate the test procedures specified in IEC 62321 Ed 1.0 (CDV) by comparing actual testing results. CRMs were used.
- Current observation
 - ◆ Metal (Hg, Cd, Pb) : good
 - ◆ The other substances: expected further study
- Feedback of the results to CDV may be future discussion matter

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Testing procedures of restricted substances - 3

Attention

- Test shall follow the procedures specified in IEC 62321.
- Need to understand performance of screening by X-ray Fluorescence Spectrometry (XRF)
 - ◆ Relative uncertainty of results is typically 30% or better at a defined level of confidence of 68%. (from IEC 62321)
- Some instrument manufacturers announced in their Web site that their instruments are recommended/ suggested by IEC 62321 testing procedures. This is not true !

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② Environmentally Conscious Design (ECD)

- TC111/WG2
- IEC 62430 Ed 1.0: Environmentally Conscious Design for Electrical and Electronic Products and Systems
- Convenor: Yoshiaki Ichikawa (Hitachi)
- WG2 meeting
 - ◆ 4th meeting: 19-21 June, 2006 (Redmond)
 - ◆ CD: End of July, 2006 circulated for comments (3 months)
 - ◆ 5th meeting: 29th November – 1st December, 2006 (Shanghai)
 - ◆ 6th meeting: February, 2006 (Korea)
 - ◆ CDV: Expected to be issued in February, 2007 (5 months voting)

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③ Material Declaration (MD) - 1

- TC111/WG1
- IEC 62474 Ed 1.0: Material Declaration for Electrical and Electronic Equipment
- Convenor: Robert Friedman (US)
Siemens Medical Solution
- Established in April, 2006
- 1st meeting: 20-21 June, 2006 (Redmond)

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Material Declaration (MD) - 2

- Results of 1st meeting
 - ◆ Agreed scope
 - ◆ Agreed standardization for 3 areas: Process, Data format and Data exchange tools, Criteria
 - ◆ 3 subgroups established
 - ◆ 2nd meeting: 13-15 November, 2006 (Helsinki)
 - ◆ 3rd meeting: Week of 26th February, 2007 (Tokyo)
- Target is to agree WD

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④ Guidance for assessing compliance of finished goods with hazardous substances (Compliance Framework) - 1

- NP proposed by French NC (TS) was approved May, 2006
- No actual discussion at 3rd TC111 meeting
- Next meeting: 18-19 September, 2006 (Paris)

Compliance Framework - 2

1. Presumption of conformity (finished product or equipment)
2. Producer's self declaration (finished product or equipment)
3. Producer's technical documentation (finished product or equipment or components)

4. further supporting information
when complementary information is necessary (finished product or equipment with information on components), either a) or b) or any combination thereof can be used as appropriate

a. analytical techniques

Sample Disjointment

Test Procedure for regulated substances

b. Not analytical techniques

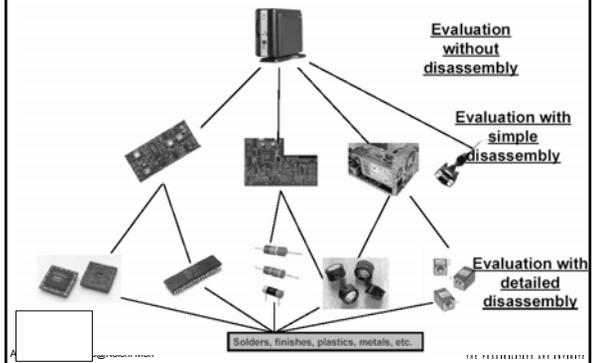
Electrical & Electronic Components and products hazardous substance process management system requirements

Results report: to be used by certification or market surveillance bodies: *Outside the scope of TC111*

⑤ Guidelines for Sampling Electrical products for measurements of level of regulated substances (Sample Disjointment) - 1

- French and China NCs proposed Sampling matter. Coordination resulted to establish AHG under WG3. AHG to develop draft PAS (Publicly Available Specification)
- Member: Experts from WG, CN NC, FR NC and from other NCs
- One of NCs participated to AHG will submit PAS to IEC
- Expect to finalize the PAS by October, 2006
- Next meeting: 20-21 September, 2006 (Paris)

Sample Disjointment - 2



⑥ Guideline on the Management of Chemical Substances Contained in Products (Management of Chemical Substances)

- Introduced by JNC at 2nd TC111 meeting in Cape Town
- Re-introduction by JNC at 3rd Tc111 meeting in Redmond.
- IEC TC 111 notes that JNC will submit a NP on "Guideline on management of chemical substances contained in electrotechnical products".
- TC 111 recommends that the NP shall not overlap and other TC 111 projects (MD and PT: Compliance framework)

Why "Management of Chemical Substances" is proposed?

- Increasing importance of "Management of contained chemicals"
- Many different legislation on chemicals contained in products in many countries / regions.

Companies are requested to guarantee the conformity with legislation on their products, using the data from suppliers of parts/ material

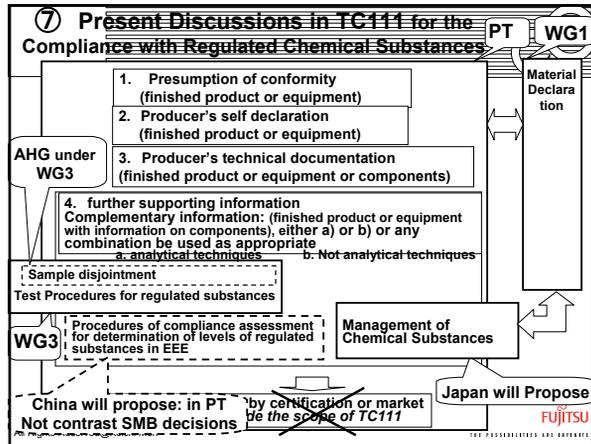
To guarantee the conformity, following two complementary measures should be considered

Analyze parts/ material

High cost burden to analyze the parts/material (esp. for the SME)

Confirm managing contained chemicals from suppliers in the supply chain credibly

Develop "Guideline" as a common rule of the supply chain

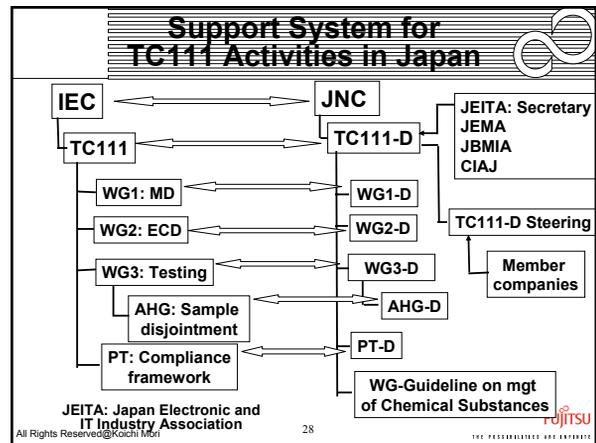


Contents

1. EU and Japanese Environmental Regulations
2. International Standardization on Environmental Field
3. Japanese Business's View
4. Conclusion

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- ## Japanese Business's View
- Worldwide expansion of environmental regulations is great impact to industries
 - But, industries treat "compliance with environmental regulations" as "problems of their business strategy"
 - Industries/government fully support international standardization activities on environment (IEC TC111)
 - Industries need "Guideline on Management of Chemical Substances" to provide practical tool
 - JNC appreciates your kind support on the project (NP)
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Contents

1. EU and Japanese Environmental Regulations
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- ## Conclusion
- Several regulations in the environment area will come into effect in the (near) future
 - Such regulations will make great impact to industries
 - Relating standards are strongly requested by industries and markets
 - IEC established TC111 whose mission is to develop horizontal standards in environment field and the number of its projects will increase
 - Japanese industries support TC111 activities
 - Active participation would be greatly appreciated
 - Next TC111 meeting: 26th February-2nd March, 2006 in Tokyo, Japan
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Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/020

APEC SCSC Trade Facilitation Task Force (TFTF)

Submitted by: Suzanne Troje, Director, Technical Barriers to Trade
Office of the U.S. Trade Representative (USTR)



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

APEC SCSC TRADE FACILITATION TASK FORCE (TFTF)

September 6, 2006

Suzanne Troje

Director, Technical Barriers to Trade
Office of the U.S. Trade Representative (USTR)



Origin and background

2004:

Korea and Japan initiated a more focused dialogue in the SCSC on ways to promote greater participation and cooperation in international standardization activities.

They raised the profile in the SCSC of the implications of various new and developing EU environmental product standards and Directives



They jointly proposed “a dialogue channel” for the discussion of key issues of mutual interest to APEC economies and complementary capacity building projects.

The APEC Joint Ministerial Declaration in 2004 expressed reservation about product related environmental regulations in the EU.



February 2005, SCSC I Gyungju, Korea SCSC held a Seminar:

“Product-Related Environmental Regulations in the EU”

Presentations by government and private sector speakers included:

- Overview of EU product-related environmental regulations, including WEEE, RoHS, EuP and ELV and related work underway in the IEC/TC 111 on Environmental Aspects of Electrotechnical Products (Korea);
- Trade implications (US);
- Impact of WEEE, RoHS and EuP on Electronics Industry (Japan);
- A comparison of EU regulations with similar WEEE/RoHS type regulations in China (China); and,
- Impact of the REACH Directive on the chemical industry (Chemical Dialogue rep).



February 2005, SCSC I Gyungju, Korea

The SCSC established the “Trade Facilitation Task Force” (“TFTF”) to facilitate continued dialogue. And, APEC approved a complementary capacity building e-learning project lead by Korea (CTI 15/2005T for 2005-2006).



September 2005, SCSC II Gyungju, Korea

The SCSC/TFTF met jointly with the Chemical Dialogue Steering Group to exchange information and to discuss issues of mutual interest, including the EU environmental regulations (REACH, EuP, RoHS) and related international discussions.



September 2005, SCSC II Gyungju, Korea

The SCSC agreed to find ways to improve coordination and communication with other APEC fora regarding work and common interests, to draw on relevant expertise and to consider strategies for using external fora as a platform for advancing APEC economies' interests (e.g., the WTO Committee on TBT, ISO, IEC, OECD, and others).



September 2005, SCSC II Gyungju, Korea

The TFTF co-chairs (Korea and the United States) were tasked with developing Terms of Reference for the TFTF



February 2006, SCSC I, Hanoi, Vietnam

The TFTF met to review the proposed terms of reference, discuss general expectations for its work, current issues and next steps.

Specific actions include:

- recommendations on how to improve coordination with other interested and related APEC and international fora (e.g., ISTWG, PASC and IEC TC 111, CDSG, etc.);
- priority topics and issues of mutual interest specifically related to implementation of the EU's EuP Directive and evaluation of new issues



February 2006, SCSC I, Hanoi, Vietnam SCSC held a Second Seminar:

"Product-related Environmental Regulations in the EU"

A platform to hear about related developments in the region.
Presentations by government and private sector speakers included:

- Update on EuP Directive and Japanese industries' activities on ecodesign (JEMA, Japan)
- EuP Directive Implementing measures and Korean activities on ecodesign (Ajou University, Korea)
- Chinese activities on ecodesign and RoHS (AQSIQ, China)
- Environmental Strategy and Promotion of Eco-design in Japan (METI, Japan)
- Discussion of Trade Implications (USTR, USA).



Highlights of the TOR

- Objectives
- Tasks
- Organization



Objectives (complementing the efforts of the SCSC)

Discussion and cooperation forum for

- issues having commercial implications
- proposed / current regulations by an APEC or non-APEC members
- trade facilitation in the field of standards and conformance



Tasks

- Special trade issue arising from the EU directives and regulations related to product environmental aspect
- Information exchange and discussion to enhance the understanding on the above trade issue and to foster common approaches to resolving issues of mutual interest.



- Cooperation in the IEC/TC111, IEC/ACEA
- Cooperation in the WTO TBT Committee
- Addressing the APEC's concern over standards and conformance issues relevant to the EU's product related environmental directives (eg. EuP, RoHS, WEEE, ELV) and REACH regulation



Organization

- Trade Aspect
- Technical Aspect
- Ad hoc basis – open to all interested delegates (aim to improve cooperation with other APEC fora) as well as private sector experts
- TOR of the TFTF and necessity of its continuation be reviewed by the SCSC every two years



Reports from the SCSC and TFTF meetings as well as the detailed presentations from the workshops are available on the APEC website:
www.apec.org.



Thank you



**Session V:
ABAC Dialogue/ Priorities in Standards
and Conformance Assessment -
Business's view**



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/021

Priorities for Standards and Conformance in APEC Region - Views from Business: Importance of Active Consideration for People with Disabilities

Submitted by: Reiko Takahashi, TOMY Company Limited



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

Priorities for Standards and Conformance
in APEC region – Views from business:

**Importance of active consideration for
people with disabilities**

TOMY Company Limited

Ms. Reiko TAKAHASHI
September, 2006

◆ Design Approaches
to Achieve the Accessibility

- Barrier-Free Design
- Universal Design
- What does the Japanese term 'Kyoyo-hin' mean?
- What are the Accessible Toys?

◆ Barrier-Free Design

- Achieve the accessibility (easier daily life) for persons with disabilities by eliminating the barriers.
 - Changing stairs into elevators in the train stations.
 - Turning steps into ramps on the streets.

◆ Universal Design

- Try to suit the needs of 'all people' (as many people as possible) from the beginning
 - Non-step (low-floor) buses
 - Accessible Toys (hopefully ...)

Inconveniences experienced by persons with visual disabilities

Which kind of card is this ?

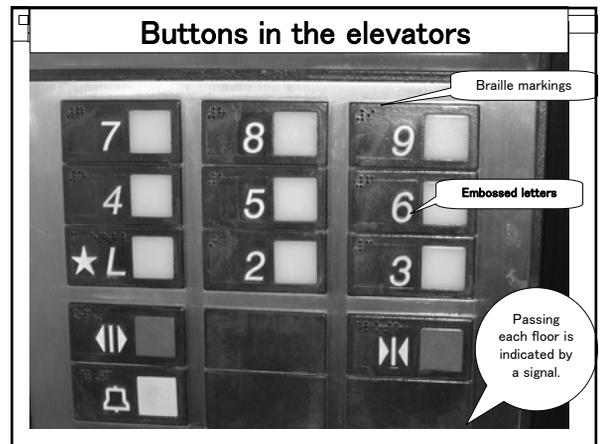
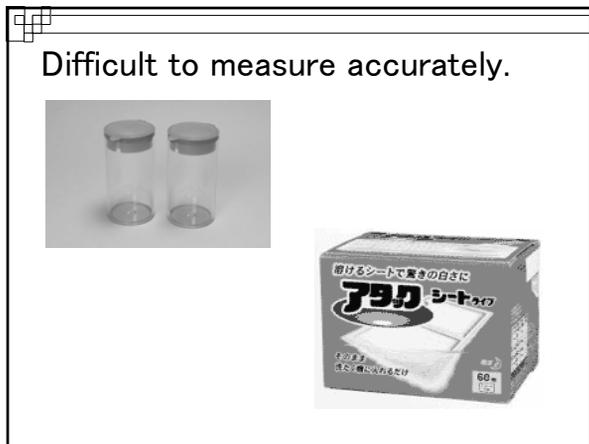
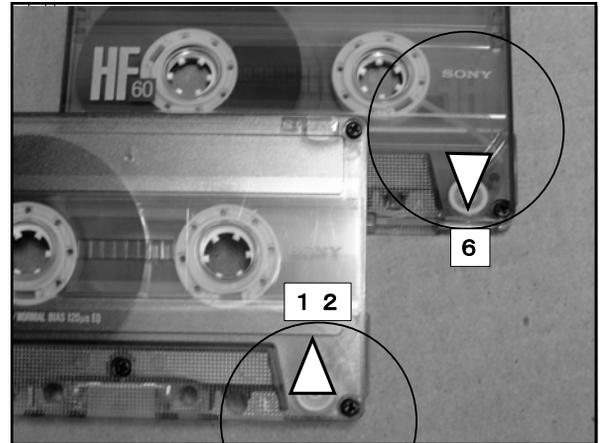
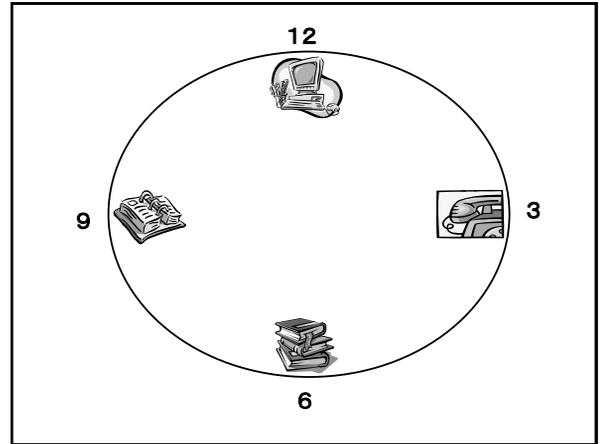
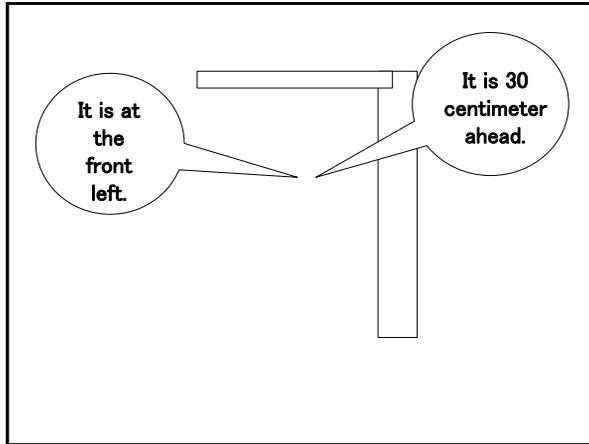
Can't see the bicycle blocking my way.

What's inside of this can ?

Whom is this mail for ?
What mail is this ?

Over there.

I put it over here.

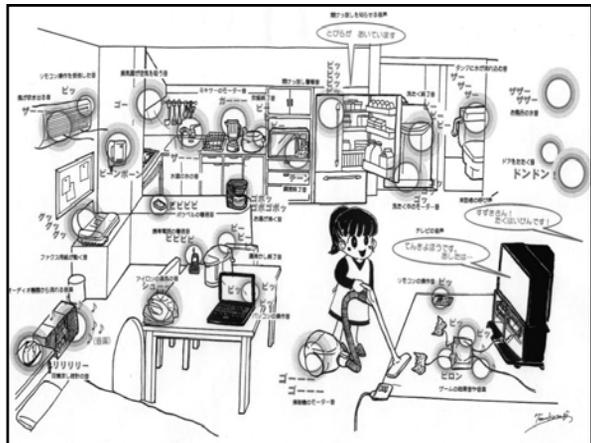


Inconveniences experienced by persons with hearing disabilities

Can't be aware when my name is called.

Can't hear the important signals and alarms at home

Be careful! The bicycle



Electric bulletin board

Next is Tokyo Station

Communicate by writing/writing boards

Inconveniences experienced by wheelchair users

The wheels can be caught in the grooves.

Can't go over the step at the entrance.

Can't see the things on the high shelf.

■ Facilities/equipments



Barrierfree equipments



Prepare in different heights

Inconveniences experienced by older persons



Not strong enough to open this can.



The electrical appliances are too complicated.

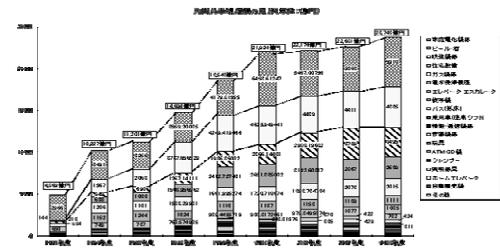
Accessible with one hand



Accessible design products and services covered by the market estimate

The market scale estimate of the fiscal year 2003.

\$20,646,000,000



Elements to be shared

| No. | Item |
|-----|--|
| 1. | Research on actual inconveniences/difficulties |
| 2. | Making standards of contrivances |
| 3. | Information provision of products and services |

Distributing a result report of daily inconveniences surveys



Creating a database of inconveniences/difficulties

<http://kyoyohin.org/07database/fubensadb.html>

The diagram illustrates a two-step process. On the left, a box titled "Create a database of inconveniences/difficulties" contains a screenshot of a web-based database interface with multiple columns and rows. An arrow points from this box to a second box on the right titled "Search and Read", which shows a search results page on a website.

Development of JIS Standards based on ISO/IEC Guide 71.

The diagram shows a book cover on the left and a document titled "GUIDE 71" in the center. The document contains the text: "Guidelines for applying standards to address the needs of older persons and persons with disabilities." To the right of the document are two rounded rectangular boxes. The top one says "JIS completed in 2003." and the bottom one says "Sectorial guides."

The levels of accessible design standards

The diagram is a pyramid divided into three horizontal sections. Each section has an arrow pointing to a descriptive text box.

- Top section:** ① Basic standards (Guide 71) → Basic standards affecting all products and services.
- Middle section:** ② Group standards (Sectorial guides) → Common sectorial standards such as of "operationality" or "signals"
- Bottom section:** ③ Product-specific standards → Standards for individual products or services

International progress concerning Guide 71

- Jan. 2002 (EU): GEN/GENELEC Guide 6 (based on Guide 71) published
- Dec. 2002 (Korea): KSA ISO/IEC Guide 71 published
- June 2003 (Japan): JIS Z 8071 (based on Guide 71) published
- Apr 2004: ISO/TC159/WG established (on "Ergonomics for people with special requirements")

◆ What are the Accessible Toys?

- The toys enjoyable for visually impaired or hearing impaired children and non-disabled children alike.
 - Distributed in the regular market.
 - Need to satisfy the Toy Safety Standards implemented by the Japan Toy Association.
 - Certified as 'accessible' by JTA.
 - Accessible Toy Catalog is published annually.

◆ What are the Accessible Toys?

- The Japanese term for 'accessible toy' is '共遊玩具'

共——together
遊——play
玩具——toy

◆What makes the toys 'accessible'?
 --Some Examples (1/2)

- Change the shape of each label to make it tactually distinguishable ..
- ⌘ Put a raised dot on the 'ON' side of the switch ...

◆What makes the toys 'accessible'?
 --Some Examples (2/2)

- Make braille labels and distribute to those who need them ...

◆The Future Plans for the Accessible Toys
 --Little Additional Notes (1/4)

- Put the standardized tactile dots and embossed symbols on all the toys even when they are not at all enjoyable for visually impaired children.

Why?

◆The Future Plans for the Accessible Toys
 --Little Additional Notes (2/4)

1. Consider blind fathers and mothers who are raising (sighted) children.
 - Even if the toy itself is not enjoyable for the visually impaired, blind fathers or mothers need to be able to handle the toy for their children--at least to know whether it is left ON or OFF, and how to insert/change batteries.
 - If the toy does not give any sound or tactile clues, the raised dots or embossed symbols would be the only clue they can count on.

◆The Future Plans for the Accessible Toys
 --Little Additional Notes (3/4)

2. The first step toward practical standardization in designing accessible toys.
 - Practical guidelines with numerical specifications can be easily followed by everyone.
 - By standardizing 'tactile dots and symbols' for all toys, the basis of accessibility can be firmly anchored down and spread throughout the industry.

◆The Future Plans for the Accessible Toys
 --Little Additional Notes (4/4)

3. Familiarize the children with 'accessibility' ideas.
 - On many occasions, just a little dot or a tactile symbol makes a great difference.
 - If the children (potential future designers) have enough chance to familiarize themselves with such toys, they would feel it is ordinary and a matter of course to put tactile markings on switches and buttons of all the products they create.



THANK YOU !

Please Contact:

The Accessible Design Foundation of Japan

Address: OGA Bldg. 2F, 2-5-4 Sarugaku-cho,
Chiyoda-ku, Tokyo 101-0064 Japan

E-Mail: jimukyoku@kyoyohin.org

Website: <http://kyoyohin.org/>



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/022

Importance of Metrology and Testing Areas to Technical Infrastructure of APEC Standards and Conformance

Submitted by: Duong Xuan Chung, Centre for Consultancy and
Development on Metrological Technology



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

IMPORTANCE OF METROLOGY AND TESTING AREAS TO TECHNICAL INFRASTRUCTURE OF APEC STANDARDS AND CONFORMANCE

Duong Xuan Chung
Centre for Consultancy and Development
on Metrological Technology - CDMT
Vietnam Metrology Association - VINAMET

1. Measurement and testing in conformity assessment

Conformity assessment

Conformity assessment is undertaken regularly during the production process as well as in commercial transactions to ensure the products or goods procured meet prescribed requirements.

Based on purposes of assessment, conformity assessment can include the followings:

- Assessment of conformity with standards;
- Assessment of conformity with technical regulations;
- Assessment of conformity with clients' requirements under commercial contracts;
- Assessment of conformity with consumers' requirements with an objective to improve quality of products or services.

Conformity assessment serves the need of State regulation of goods exported, imported or marketed in terms of safety assurance, health and environment protection. Conformity assessment also provides to producers and traders information on grades of quality of their products as opposed to regulations or expectations of their clients, therefor measures can be taken to improve the quality and competitiveness of goods or services.

Measurement and testing - technical infrastructure for conformity assessment

Conformity assessment can be undertaken by the producers so as to assess and announce that their products or goods are in conformity with standards or regulations. It can also be conducted by independent agencies with an aim to certify the conformity of goods or products with predetermined requirements.

However, all conformity assessments should be undertaken applying measures and testing exercises conducted in specialized equipments. Thus a network of measurement and testing laboratories is established. This network widens with the development of production industries and circulation / distribution of goods and services and involves different areas namely mechanical testing, electrics and electronics, chemistry analysis, food analysis, microbiology, materials, environment analysis, non destructive testing, electro-magnetic compatibility..... Measurement and testing equipments are constantly improved in terms of characteristics, reliability and accuracy.

2. Requirements towards measurement and testing in conformity assessment

Laboratory requirements

In order to ensure the objectivity and accuracy of conformity assessment, measures and testing should give accurate results and show actual status of required indicators or criteria of products or goods in question. To this end measurement and testing laboratories should meet the following requirements:

- Furnished with necessary measurement and testing equipments;
- Staffed with qualified technicians who could deliver required measures and testing;
- Having satisfactory measurement and testing environment;
- Regularly maintaining accuracy and characteristics of measurement and testing equipments through calibration or comparison with standard samples.

Erroneous measure results due to lack of the above requirements usually lead to immeasurable consequences. In production, an erroneous measure in certain point could halt the entire process of product quality formation and directly hampers production efficiency and productivity, even the manufacturer's reputation once the product is marketed. In distribution or cross border transactions, errors in testing might lead to wrong quality assessment and result in approval of exporting or importing large bulks of defected goods.

Laboratory accreditation

To prove that laboratories have met all above requirements, almost all countries have set up laboratory accreditation schemes, namely NAMAS in the UK, DKD in Germany, NATA in Australia, KOLAS in South Korea, CNAS in China, VILAS in Viet Nam, of which some have been active for several decades (the UK NAMAS since 1945, German DKD since the 70's of the last century).

In 1977 International Laboratory Accreditation Cooperation (ILAC) was founded and in 1992 Asia - Pacific Laboratory Accreditation Cooperation (APLAC) was set up. Since then economies have been working closely together in laboratory accreditation under action plans to facilitate accreditation in each country, cooperating in research and improvement of laboratory assessment criteria to be uniformly applied in every country. Mutual Recognition Arrangements (MRA) under ILAC and APLAC are the basis for mutual recognition of the measurement and testing results towards the aim of "One audit, One certificate, Accepted everywhere".

3. Current measurement and testing practices in developing countries

Formation and developments

Measurement and testing practices are established later in developing countries than those in the developed world but have recently speeded up. The following observations can be made on their development:

- Measurement and testing are established and sponsored mainly by the Government and partially supported by international organizations and some developed countries. Measurement and testing laboratories are set up within government agencies in charge of metrology and standardization and in some industries. Their task is primarily to serve the government regulations in measurement and product quality, and subsequently to facilitate the formation and development of industries.
- Businesses, urged by the need to control the production processes and quality of final products, began to establish testing laboratories. Some large companies have invested in calibration equipment for measurement instruments used by themselves.

Several laboratories have separated and become independent organizations to provide testing services.

- The laboratories have formed a network nationwide that meets essential needs of production and the society on measurement and testing, thus contributing to assurance of equity in trade and of consumers' rights.
- A number of testing laboratories that apply quality management system has been assessed and accredited as those meeting international criteria. Some laboratories have established a reputation in providing services to both domestic and foreign clients.

Shortcomings of measurement and testing practices

Measurement and testing in developing countries have achieved remarkable results and contributed to economic development. However, there are some weaknesses and shortcomings as opposed to the requirements of current globalization, which can be summarized as follows:

- *Shortage and incompatibility of equipments:* due to limited funding, laboratories only manage to buy main testing equipments to deliver tests of some critical quality criteria. Equipments are procured in different times and from different suppliers. The result is that not all required indicators are tested and conformity assessment based on tested indicators therefor is inaccurate.
- *Duplication in investments, underuse of equipment capacity:* the paradox is that fund shortage comes with duplication in investments. This waste has been existing for years and no proper measures are taken. The reason is that laboratories sponsored by the government still belong to different agencies and usually cooperation among labs is not put out, and obviously similar testing needs result in duplication of equipments.
- *No calibration and comparison of equipments as required:* there is not enough attention to calibration of measurement equipments, therefor most of the equipments are not properly calibrated, and those who have do not have done it within required timing. There are few proficiency testing or inter-laboratory comparisons for equipment assessment; furthermore the number of labs participating in these programs is usually limited. This situation leads to unreliable test results while tests on the same sample by different labs give different results.

For manufacturers, these shortcomings shall be the main cause of instability of or degradation in product quality. In goods inspection, deviation in test results often leads to complaints or conflicts by exporters and importers. In integration with world economy, while developing countries try to survive and equally compete in such dynamic markets, the above situation will quickly become obstacle.

4. Recommendations on development of measurement and testing labs

To overcome the above shortcomings and eventually improve measurement and testing labs so that they can truly be technical infrastructure for realization of standards, technical regulations and for conformity assessment, the writer would like to make the following recommendations for consideration by concerned agencies:

Lab development

- Government support is essential in development of measurement and testing labs. The government should continue financing equipments and construction of facilities for existing labs belonging to government agencies. However, a masterplan should be worked out to give guidance on investments aimed to avoid duplication or scattered investments.
- Eventual transformation of labs to commercial entities; some big labs can be separated and become independent entities to provide testing or measurement services, later on these organizations can be equitized to become dynamic businesses in the market.
- Encouraging private labs to facilitate a competitive market for measurement and testing practices.
- Promotion of foreign investments in measurement and testing. Option could be joint ventures or cooperation with an aim of expanding existing labs.

Lab quality improvement

- Increasing the number of accredited labs. The number of accredited labs in developing countries is still very low. In parallel with awareness raising activities, there should be improvements in certain procedures of lab accreditation.
 - Inclusion of mutual recognition of measurement and testing results in export, import agreements so as to avoid double inspection in both borders. This practice has not been popular and thus accredited labs still have little value.
 - Increasing proficiency testing and inter-laboratory comparisons programs. APLAC organizes these programs every year but with a limited participation of some outstanding laboratories. It is recommended that in addition to APLAC programs, each country should have its own programs to multiply the effect of APLAC activities.
 - Expansion of calibration of measurement equipments, setting up cooperation among measurement calibration labs within each country; introduction of preferences towards calibration of measurement standards within APMP to support the efforts of developing countries in this field.
-



**SCSC APEC Conference
on Standards and Conformance**
Da Nang 5 – 6 September 2006

**IMPORTANCE OF METROLOGY AND
TESTING AREAS TO TECHNICAL
INFRASTRUCTURE OF APEC STANDARDS
AND CONFORMANCE**



Dương Xuân Chung
CENTRE FOR CONSULTANCY AND DEVELOPMENT
ON METROLOGICAL TECHNOLOGY

Key issues

- Measurement and Testing in conformity assessment
- Requirements towards measurement and testing in conformity assessment
- Current measurement and testing practices in developing countries
- Recommendations on development of measurement and testing labs

**MEASUREMENT AND TESTING
IN CONFORMITY ASSESSMENT**

Conformity assessment

- ◆ Assessment of conformity with standards
- ◆ Assessment of conformity with technical regulations
- ◆ Assessment of conformity with client requirements
- ◆ Assessment of conformity with consumer requirements

**MEASUREMENT AND TESTING
IN CONFORMITY ASSESSMENT**

Assessment can be undertaken

- ◆ by producers
- ◆ by independent agencies

Technical infrastructure of conformity assessment

- ◆ Measurement and testing equipments
- ◆ Measurement and testing laboratories

**REQUIREMENTS TOWARDS
MEASUREMENT AND TESTING**

Requirements for laboratories

- ▶ Measurement and testing equipments
- ▶ Qualified technicians
- ▶ Satisfactory environment
- ▶ Maintaining accuracy and characteristics of equipments

**REQUIREMENTS TOWARDS
MEASUREMENT AND TESTING**

Laboratory accreditation system

- ▶ National accreditation system
NAMAS, DKD, NATA, CNAS, KOLAS, VILAS
- ▶ International Organizations
 - ILAC founded in 1977
 - APLAC founded in 1992

"One Audit, One Certificate, Accepted everywhere"

**MEASUREMENT AND TESTING PRACTICES
IN DEVELOPING COUNTRIES**
(From Vietnamese experiences)

Formation and developments

- **Laboratories owned by government agencies**
 - Agencies for Standards and Metrology
 - Science and technology institutes
- **Laboratories set up by businesses**
- **Measurement and testing laboratory network**
- **Application of quality management system according to international criteria**

**MEASUREMENT AND TESTING PRACTICES
IN DEVELOPING COUNTRIES**
(From Vietnamese experiences)

Shortcomings of laboratories

- **Shortage and incompatibility of equipments**
- **Duplication in investments, underuse of equipment capacity**
- **No calibration and comparison of equipments as required**

**RECOMMENDATIONS ON DEVELOPMENT OF
MEASUREMENT AND TESTING LABS**
(From Vietnamese experiences)

Laboratory development

- ☉ **Continued government support. Masterplan needed to avoid duplication or scattered investments**
- ☉ **Transformation of labs to commercial entities**
- ☉ **Encouraging private labs**
- ☉ **Promotion of foreign investments: joint ventures, cooperation for expanding existing labs**

High Voltage Testing Laboratory in Hanoi
Supported by Korean Government



Food Testing Laboratory in Hanoi
Supported by UNIDO and French Government



**RECOMMENDATIONS ON DEVELOPMENT OF
MEASUREMENT AND TESTING LABS**
(From Vietnamese experiences)

Laboratory quality improvement

- ☉ **Increasing the number of accredited labs**
 - Awareness raising activities
 - Improvements in certain procedures of laboratory accreditation

From the survey of ILAC in 2004

The Value of Laboratory Accreditation

The results indicate that most laboratories are happy to be accredited. Those that are not so pleased tended to complain about the cost and inconvenience of the standard and the accreditation process.

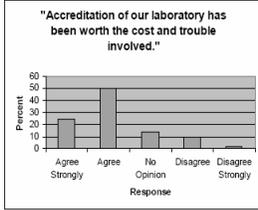


Figure 9

RECOMMENDATIONS ON DEVELOPMENT OF MEASUREMENT AND TESTING LABS
(From Vietnamese experiences)

Laboratory quality improvement

- Inclusion of mutual recognition of measurement and testing results in export, import agreements
- Increasing proficiency testing and inter-laboratory comparisons programs
 - APLAC programs
 - National programs

From the survey of ILAC in 2004

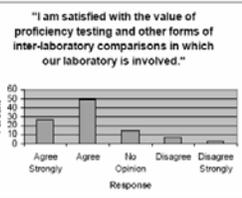


Figure 10

| | | |
|-------------------|-------------|--------------|
| Agree Strongly | 566 | 26.6 |
| Agree | 1045 | 49.2 |
| No Opinion | 316 | 14.9 |
| Disagree | 151 | 7.1 |
| Disagree Strongly | 48 | 2.2 |
| Total | 2126 | 100.0 |

APLAC Proficiency Testing Schedule

Programs Underway

| Program | Coordinator | Starting Date | Final Report Distribution (estimated Date) |
|-------------------------------------|-------------|---------------|--|
| M008 Capacitance/Inductance | NVLAP | December 99 | Early 2006 |
| M010 Sound Level | NATA | May 01 | Early 2006 |
| M013 Internal Cylindrical Standards | NATA | April 02 | Late 2007 |
| M014 High Resistance | SCC | March 02 | Early 2006 |
| M015 Resistance | JAB | August 04 | Late 2006 |
| M016 Watt-Hour Meter | IANZ | August 04 | Mid 2006 |
| M017 Mobile Phones | CNLA/TAF | September 04 | Mid 2005 |
| M018 Sort Gauge Blocks | IAJapan | June 05 | Late 2006 |
| T020 Portland Cement | TAF | May 2005 | Early 2006 |
| T021 Alcoholic Beverage | TAF | May 2005 | Early 2006 |
| T031 Cement | IAJapan | January 02 | Early 2006 |
| T039 Toy Safety | HKAS | December 03 | Early 2006 |
| T042 Paper | AZLA | July 04 | Early 2006 |
| T043 Herbal Medicine | HKAS | June 2005 | Early 2006 |
| T045 Fastener | CNLA/TAF | June 2005 | Early 2006 |
| T047 Animal Materials in Foodstuffs | CNAL | June 2005 | Early 2006 |

APLAC Proficiency Testing Schedule

Programs Planned

| Program | Coordinator | Starting Date |
|---|-------------|---------------|
| M011 Thermocouples | SAC | Mid 2006 |
| M012 Screw Thread Gauges | NATA | Late 2006 |
| T046 Food Microbiological | CNAS | Early 2006 |
| T049 Organochlorine Pesticide Residues in Herbal Medicine | HKAS | Early 2006 |
| T050 Prawn Nitrofurantol Metabolites/Textiles | CNAL | Early 2006 |
| T051 Heavy Metal Elements in Plastics | TAF | Early 2006 |
| T052 Mechanical Properties of Metal | TAF | Early 2006 |

RECOMMENDATIONS ON DEVELOPMENT OF MEASUREMENT AND TESTING LABS
(From Vietnamese experiences)

Laboratory quality improvement

- Expansion of calibration of measurement equipments
 - Cooperation among measurement calibration labs
 - Preferences towards calibration of measurement standards within APMP



**SCSC APEC Conference
on Standards and Conformance**

Thank you for your attention





Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/023

Making FTAs Work - A Business Perspective

Submitted by: Michael Crouch, Australian Member ABAC



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

6th Conference on Standards and Conformance
 September 2006
 APEC Subcommittee on Standards & Conformance

MAKING FTAs WORK
A BUSINESS PERSPECTIVE

By
 Michael Crouch AO
 Australian Member ABAC

**The Importance of Standards
 Harmonisation**

- Free Trade Agreement is a political reality
- Standards are the commercial reality
 - FTA is the archway
 - Standards are the pathway to eliminating barriers to trade

**When we don't have
 international standards**

- Food
- Motor Vehicles
- Steel
- Electrical Goods
- Manufacturing conformity
- Supply chain confusion

**Political Reality v
 Commercial Reality**

Business is about the making and selling of goods and services – trading

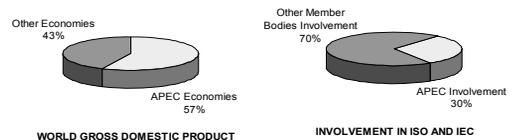
| | | |
|------------------|---|------------------------|
| Europe | v | APEC |
| Efficiency | v | Inefficiency |
| - one common set | | - few common standards |

The Global Standards Effort

Overall over 500 standards-developing organisations with an estimated 400,000 experts contributing

**APEC Contribution to
 International Standardization**

- APEC member economies contribute 57% of world gross domestic product, yet their involvement in ISO and IEC is only 30% of the member bodies (measured by committee secretariats held and participating membership of committees)



APEC MEMBER ECONOMIES CONTRIBUTION TO ISO

| | Secretariats SC | Convenors WG |
|----------------------------------|-----------------|--------------|
| Australia | 17 | 61 |
| Brunei (Correspondent) | 0 | 0 |
| Canada | 21 | 66 |
| Chile | 0 | 0 |
| China | 7 | 14 |
| Chinese Taipei (Non member) | 0 | 0 |
| Hong Kong China (Correspondent) | 0 | 0 |
| Indonesia | 0 | 0 |
| Japan | 41 | 115 |
| Malaysia | 3 | 5 |
| Mexico | 0 | 1 |
| New Zealand | 0 | 2 |
| Papua New Guinea (Correspondent) | 0 | 0 |
| Peru | 0 | 0 |
| Philippines | 0 | 0 |
| Republic of Korea | 5 | 8 |
| Russian Federation | 15 | 12 |
| Singapore | 0 | 2 |
| Thailand | 0 | 1 |
| United States of America | 135 | 473 |
| Vietnam | 0 | 0 |

What can we do?

- Do not rely on ISO to fix the problem (formed in 1947)
- Do not rely on PASC to fix the problem (formed in 1972)
- Build and strengthen infrastructure and business awareness through capacity building
 - two examples from Australia
- Ensures compliance with WTO Technical Barriers to Trade Code
- Align domestic standards with international standards

THE DILEMMA

THE ACTION PLAN - ABAC

- Conduct Survey of National Standards Bodies to better understand the needs of industry and to assist identification of capacity building requirements
- Initial focus will be in the areas of food, security and health
- Analyse the responses
- Develop a proposed agenda and issues for the meeting of the CEOs of the National Standards Bodies in April 2007
- Develop mechanisms to assist in strengthening National Standards Bodies
- Introduce Capacity Building Initiatives

Meeting of National Standards Bodies

- Identifying the means necessary to permit all economies to harmonise their National Standards with International Standards
- Be the foundation for the development of an ambitious programme of capacity building
- This is a key step to easing barriers to trade

The Lazenby Report Key Messages

- Identifying and targeting National Standards Bodies in need of assistance and strengthening
- Enlisting greater industry awareness and involvement in standardisation
- Participation as a region in International Standards development
- Establishing common Standards markings
- Adoption of a regional collection of International Standards
- Developing a regional Standards Code of Conduct

Key Issues of Standards

- Harmonisation of Standards between Economies
- Harmonisation of National Standards with International Standards
- Conformance to and assessment of compliance with those Standards
- Industry and Government support

CAN WE MOVE FORWARD?

SUMMARY

- Standards are the pathway to commercial reality
- Standards infrastructure must be grown
- Standards must be international
- International Standards make FTAs work
- Satisfies the WTO requirements

Greater Participation Benefits to Business

- Lower design costs
- Easier tendering and participation in trade
- Better communications – a common language
- Transparency of regulations and conformity
- Technology transfer
- Safety of Intellectual Property
- Reduction in costs

Appendix



Asia-Pacific
Economic Cooperation

2006/SOM3/SCSC/CONF/024

Case Study - Lessons from the Sardines – Do WTO Rules Create a Level Playing Field for Developing Countries?

Submitted by: Mario Sandoval-Tupayachi, Head of Peruvian
Standardization and Accreditation Bodies



**6th Conference on Standards and Conformance
Da Nang, Viet Nam
5-6 September 2006**

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APEC
VIETNAM 2006

6th Conference on Standards and Conformance

Case Study

**Lessons from the Sardines –
Do WTO Rules Create a Level
Playing Field for Developing Countries?**

by Mario Sandoval-Tupayachi
Head of Peruvian Standardization and Accreditation Bodies

Technical Secretary – Technical and Commercial Regulations Commission
INDECOPi – PERU

5 September 2006 in Da Nang, Vietnam

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Summary:

- WTO rules provide some room to achieve positive outcomes, as demonstrated by the 2002 WTO dispute settlement panel decision in favor of Peru over the EC regarding a European ban on the import of Peruvian canned sardines. There are four WTO mechanisms that are important:
 - guarantee for the right to negotiate,
 - a common standard for evaluating outcomes,
 - the option for several countries to join a dispute, and
 - incentives for states to change a policy found to violate trade rules.
- Developing countries that use these institutional mechanisms by initiating complaints based on a strong legal case and in cooperation with other states will improve their capacity to gain concessions from other states. However, despite WTO rules, unless developing countries develop resources and technical infrastructure to make their standards and conformance system work in a proper and efficient way and to enable their active and effective participation in international organizations, they will still be vulnerable to discriminatory trade policies adopted by their major trade partners.

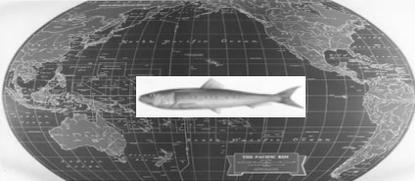
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Trade Dispute Settlement
European Communities - Trade Description of Sardines
WT/DS231/R

- A WTO dispute settlement panel decided in favor of Peru over the EC regarding a European ban on the import of Peruvian canned sardines
- The sardine species from Peru, *Sardinops Sagax*, ranges throughout the temperate Pacific, from Australia and New Zealand, past Japan and along the coasts of North and South America.
- The sardine species from Europe, *Sardina Pilchardus* is found in the Atlantic ocean and the Mediterranean sea

SOURCE: Alice Cascoibi



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**EC – Peru Sardines Trade Dispute Settlement :
a timeline of major events**

- 1947 GATT
- 1951 Peru joins GATT
- 1978 Standard CODEX Stan 94 for canned sardines lists both Peruvian and European sardines as sardines.
- 1989 EC Regulation EEC 2136/89 forbids marketing of fish as sardines if not *sardina pilchardus*
- 1995 WTO, Dispute Settlement Understanding
- 1999 EC starts enforcing EEC 2136/89 , Peruvian sardines can be marketed as sprats, pilchards
- 1999-2001 Peru seeks a negotiated bilateral settlement with the EC
- 2001 Establishment of the Advisory Centre on WTO Law
- 20/03/2001 Peru requests consultations with the EC
- 24/07/2001 Dispute Settlement Body establishes a Panel. Canada, Chile, Colombia, Ecuador, Venezuela, USA reserve third party rights
- 11/09/2001 Panel is composed
- 29/05/2002 Panel report circulates
- 28/06/2002 EC appeals to Appellate Body
- 26/09/2002 Appellate Body report circulates, upheld panel findings
- 23/10/2002 DSB adopts the Appellate Body Report and the Panel Report, as modified by the Appellate Body Report
- 2003 EC Regulation EC 1181/2003. Peruvian sardines *sardinops sagax*

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The Panel and Appellate Body Findings

Was the EC Regulation a Technical Regulation? → YES

Was Codex Stan 94 a Relevant International Standard? → YES

Was Codex Stan 94 used as a basis for the EC Regulation? → NO

Would Codex Stan 94 have been an *ineffective or inappropriate* means for the fulfillment of the legitimate objectives pursued? → NO

→ The EC Regulation is *inconsistent* with Article 2.4 of the TBT Agreement

Developing countries that use WTO institutional mechanisms by initiating complaints based on a strong legal case and in cooperation with other states will improve their capacity to gain concessions from other states, and achieve a better outcome than they could in bilateral negotiations.

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**WTO mechanisms available to developing countries
in a trade dispute with a large economy**

- Guarantee for the right to negotiate:
Under the GATT/WTO agreements, developing countries can appeal to the rules system: the Dispute Settlement Understanding (DSU).
- A common standard for evaluating outcomes:
The DSU makes international trade law the standard for reaching an agreement and not the law or will of any trade partner.
- The option for several countries to join a dispute:
Shared rules facilitate finding allies with related interests.
- Incentives for states to change a policy found to violate trade rules:
Long-term economic interest in supporting the rules encourage compliance with the rulings. Compounded retaliation.

Source: Davis, Christina

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Risks of not using the WTO rules as a small economy in a trade negotiation/dispute with a large economy

- Refusal of the powerful trade partner to negotiate
- Arbitrary rules imposed by the powerful trade partner
- Limited interest from third countries to participate in the trade problem
- The fear of damaging bilateral relations
- Lack of legal expertise
- Lack of economic resources
- Lack of technical expertise and infrastructure
- Lack of retaliatory power

Source: Davis, Christina

WTO priority areas for developing countries slowest to liberalize (Doha), creating the need to seek bilateral free trade agreements, which are negotiated between large and small economies... under which rules?

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International Trade Rules

International Trade Centre
UNCTAD/WTO

WIPO

WORLD TRADE ORGANIZATION

UNIDO

enterprise competitiveness- UNIDO, ITC
WTO agreement for trade - ITC
product & market development - ITC
trade negotiation techniques - UNCTAD
trade disputes - WTO
trade agreements - WTO, UNCTAD
Dumping practices - WTO
Intellectual property - WIPO

INTERNATIONAL RULES FOR TRADE

Developing countries need to use international trade rules...

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International trade capacity and quality infrastructure

ISO IEC ITU

BIPM OIML IAF

IAAC FAO/WHO Food Standards
CODEX alimentarius

Developing countries need to participate in the activities of international standards, accreditation and metrology bodies ...

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Regional cooperation organizations

APLAC

APLMF

COPANT

IAAC

Asia Pacific Metrology Programme

COMUNIDAD ANDINA

PAC

Developing countries need to participate in the activities of regional cooperation organizations...

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Developing country problems for the participation in international organizations

- Lack of general and specific awareness about benefits
- Lack of human and financial resources available to national bodies
- Lack of expertise, experience and infrastructure
- Government and local industry cannot afford to participate in the necessary international technical and work meetings
- Membership fees are high
- Meeting venues are too far
- Language barriers
- Bureaucratic barriers to travel
- Difficulties to put forward interests and achieve results

SOURCE: DEVCO/ISO

On the developing country side, most problems for the participation in international organizations are related to lack of funds, but may be traced back to lack of awareness, information and expertise.

There is the need to participate in many different international negotiations and institutional bodies...
What other needs are there?

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Developing country assistance needs in the TBT field

- Need to improve the knowledge of the TBT agreement
- Need for effective preparation, adoption and application of technical regulations
- Need for effective preparation, adoption and application of standards
- Need for exchange of experience among members and for bilateral contact / cooperation
- National and regional coordination and strategy
- Need for infrastructure and capacity building in relation to standardization, conformity assessment and metrology
- Need for assistance to participate in the work of international organizations

SOURCE: WTO Secretariat, 2002

The TBT needs of developing countries have been identified.
How appropriate are the responses?

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 **WTO rules create a level playing field...
but the players are still of different sizes**

The WTO Rules and the WTO Advisory Centre play a critical role to help developing countries overcome the difficulties of a dispute settlement with a developed country or large economy, as it was shown in the sardines case.

But there are broader demands, for example the need to participate in many different international negotiations and institutional bodies, that developed countries can perform with much more capacity and effectiveness than developing countries.

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- Alice Ascorbi, "Seafood Report: Sardines", Seafood Watch, Monterey Bay Aquarium, 2004

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