



**Asia-Pacific
Economic Cooperation**

Summary Report

**Facilitating Trade in Information and
Communications Technologies
through Encouragement of
Electronic Labeling Best Practices**

**Ho Chi Minh City, Viet Nam
18-19 August 2017**

Sub-Committee on Standards and Conformance

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Summary Report

APEC WORKSHOP ON FACILITATING TRADE IN INFORMATION AND COMMUNICATIONS TECHNOLOGIES THROUGH THE ENCOURAGEMENT OF ELECTRONIC LABELING BEST PRACTICES

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1. Overview & Workshop Description

In a rapidly evolving technology environment, it can be difficult for regulators to determine ICT product conformance using both user-friendly and cost-effective tools. Further, as ICT products that require regulatory labels decrease in size, it can be hard for manufacturers to find space on the device to apply a label for every economy they intend to market the device in. Some APEC economies have started to address these issues by creating and implementing an electronic labeling (or “e-labeling”) policy for ICT products, but this has in turn, meant that standards and conformance procedures for ICT products are not uniform across APEC economies. This can lead to the unintentional development of technical barriers to trade.

This workshop was a first step in addressing this potential challenge, seeking to improve regulatory coherence by fostering a move toward acceptance of best practices for e-labeling for ICT products and encouraging participation in the international standardization effort taking place in ISO/IEC. The workshop brought together participants from APEC economies, which included regulators, representatives from standards agencies, and industry. The first day of the workshop was focused on information-sharing, while the second day of the workshop was focused on developing and drafting a consensus best practices document that can be used by economies interested in developing or updating an e-labeling policy in their economy.

2. Workshop Sessions

General Session: E-Labeling and the ICT Sector: An Overview

Presented by Nigel Cory, Information Technology & Innovation Foundation

This session provided an introduction to e-labeling and set the stage for the rest of the workshops. While e-labeling is a relatively new area, a growing number of economies are developing and implementing policies, including Australia, Canada, China, Chinese Taipei, Japan, Malaysia, New Zealand, and the Republic of Korea.

The presentation focused on a number of areas:

- *Overview of e-labeling*, including what e-labeling is and how it can be used. In the context of his presentation, Nigel defined e-labeling as allowing the display of regulatory information via electronic means.
- *Types of e-labels*. E-labels can take a variety of forms, though at present, the most common is displaying regulatory markings and information on a device’s integrated display screen. However, QR codes or website addresses could also be used.
- *What we want and don’t want in enacting an e-labeling policy*. We want to avoid barriers to innovation and trade. Regulators should be able to access and enforce compliance, but in a way

that does not inhibit a firm's ability to innovate. Aside from that, we want to avoid divergent policy and regulatory fragmentation, which could create barriers to trade.

- *The benefits of e-labeling.* Benefits include more information and utility, easier enforcement, a reduced environmental impact, cost-savings, and easy updating of information. E-labeling also allows for increased innovation, as device innovation isn't stymied by physical compliance display requirements.
- *Issues and challenges in allowing e-labeling.* Challenges include regulatory reluctance to change, the need for possible legal changes, and lack of equipment and technical capabilities, especially at the border.
- *E-Labeling best practices.* The presentation highlighted some principles to consider, such as running a transparent and participatory rule-making process, focusing on streamlining and simplicity, specifying which devices can use e-labeling and how, making e-labeling voluntary, and ensuring that the compliance information is secure and accessible. The presentation also proposed as best practices specifying label placement on the product and/or packaging, specifying details on the accompanying instructions, and considering using QR codes for e-labels.

Session 1: Lessons Learned in Developing E-Labeling Guidance – Best Practices & Regulatory Challenges

Representatives from four APEC economies that allow the use of e-labeling described their policies, how those policies were created and implemented, and their suggestions for other economies. Each speaker presented individually, followed by a panel discussion to answer questions from the audience.

United States

Presented by George Tannahill, U.S. Federal Communications Commission

The FCC provided an overview of the United States' e-labeling policy and the process that it undertook in order to develop it. The process relied heavily on industry and other stakeholder feedback, both to spur the regulator to consider adopting an e-labeling policy and also in drafting the policy.

The presentation also covered the specific requirements of the U.S. policy. Some of those requirements include:

- E-labeling is voluntary; physical label rules apply if manufacturer chooses not to use
- E-labeling can be used for the following products
 - Devices with integrated non-removable screen
 - Devices without such screen, but can only operate when used with a device with an integrated non-removable screen
 - Modular transmitters where host device has an integrated display
- Users must be able to access the e-label easily (less than 3 steps from device setup menu, and do not have to use special access code)

Malaysia

Presented by Abdul Karim Abdul Razak, MCMC

MCMC provided an overview of Malaysia's e-labeling guidelines and focused on how Malaysia developed its policy.

A major step in the process for Malaysia was launching an e-labeling pilot program with a few companies to test the policy and facilitate a move toward e-labeling more broadly. In developing a policy, Malaysia advised that economies consider the balance between regulating and facilitating business, how to prevent the misuse of the e-label, best practices of other economies, the current market situation, flexible methods to suit different products, how to verify the label, and recommended engaging in market surveillance on an ongoing basis.

Chinese Taipei

Presented by Jhih-Chang Shieh, National Communications Commission

Chinese Taipei discussed its labeling requirements, the process it used to develop and implement the e-labeling policy, which went into effect on June 7, 2017, the justification for creating an e-labeling policy, and the complementary measure it has developed – its Compliance Approval Database – to promote transparency. Chinese Taipei initially considered developing an e-labeling policy after receiving a request from Apple. Chinese Taipei currently allows e-labeling for Telephone Terminal Equipment (TTE) with a screen and for controlled RF devices with a screen.

Canada

Presented by Alex George, on behalf of IDES

Canada presented on its e-labeling policy, which it initially began to consider after the telecom industry began requesting that regulators modify labeling requirements and which came into effect in October 2014. Throughout the process of developing its policy, Canada relied heavily on stakeholder input and comments to ensure that the policy would have a minimum impact on industry and that the policy would not create an overly burdensome regulatory environment. Canada also outlined the benefits of an e-labeling policy and noted that it has not encountered any issues since the policy was implemented.

Discussion

Following their presentations, the speakers answered questions, which included the following:

- How did economies engage with customs?
 - Both Malaysia and the United States noted that they worked very closely and communicated extensively with their respective customs agencies in developing the e-labeling policy.
- What hurdles are you facing in moving beyond devices with integrated display screens?
 - The United States noted that it has had several requests to expand the current e-labeling policy beyond devices with display screens. The U.S. said it is open to ideas and that the current process does not prohibit expansion but that there is not a specific timeline to move forward with it as this point. The U.S. also noted that as you expand the policy, the level of complexity increases, which is one of the reasons it has not yet expanded the policy.
 - Malaysia noted it has also received requests from industry to expand but that they are cautious in terms of expanding and are taking it on a case-by-case basis.
- Is e-labeling only for wireless certification or does it include safety certification?

- The panelists were all from bodies that regulate radiofrequency and communications devices, so did not have input on safety certification. The United States said that it informs other agencies about the FCC's e-labeling policy, but that they (the FCC) cannot mandate that other regulators adopt e-labeling for certification. The agency that regulates safety would have to go through its own rulemaking process to allow for e-labeling.
- What outreach or analysis did you do in developing an e-labeling policy?
 - All panelists noted that they engaged in international fora, reviewed other economies policies, and reached out to industry to obtain feedback in the process of developing an e-labeling policy.

Session 2: Lessons Learned in Developing E-Labeling Guidance – Best Practices & Regulatory Challenges (Continued)

Representatives from three additional APEC economies that allow the use of e-labeling or are currently developing an e-labeling policy described their policies, how those policies were created and implemented, and their suggestions for other economies. Each speaker presented individually, followed by a panel discussion to answer questions from the audience.

Japan

Presented by Tomoyuki Ohmura, Ministry of Internal Affairs and Communications

This presentation described Japan's e-labeling policy and how Japan has worked closely with industry stakeholders in this area. Japan implemented its e-labeling allowance in 2010, making it the longest-tenured e-labeling policy of the APEC economies. Japan initially considered allowing e-labeling based on a request from industry stakeholders, and Japan's regulators have continued to consult with industry as they periodically examine whether or not their e-labeling policy should be updated.

Japan's e-labeling policy is similar to those of the other economies that presented during the previous session. E-labeling is voluntary, and if used must display the same information as a physical label. However, they only allow e-labeling for devices with an integrated screen – and not devices that work in conjunction with devices with a screen.

The presentation also covered the difficulties in crafting a policy that can withstand the rapid changes in the ICT industry. The speaker mentioned that when Japan initially allowed e-labeling, manufacturers of cellular phones were most affected. Today, manufacturers of small Internet of Things devices are expressing interest in e-labeling.

Viet Nam

Presented by Ha Manh Pham, Viet Nam Telecommunications Authority – Ministry of Information and Communications

The presenter described Viet Nam's legal framework and overall management of ICT products, including the types of products subject to import licensing and the technical details required on product conformity labels. Viet Nam does not currently allow the use of e-labeling, but the presenter described the economy's interest in doing so and the work underway to further study the issue.

Viet Nam's presentation also provided an overview of e-labeling approaches in other economies, focusing on similarities in particular. The presenter recommended trying to reach consensus in three areas:

1. Product ID size
2. Conformity mark size
3. Number of steps needed for a user to access the e-label, specifically recommending that economies apply uniformity in requiring that an e-label can be accessed in a maximum of three steps

People's Republic of China

Presented by Gao Ang, China National Institute of Standardization

The speaker provided an overview of the China Energy Label (CEL), which is a mandatory label introduced in 2005 for energy-related products. The goal is to provide energy efficiency information to consumers to encourage them to purchase products that are more efficient. In October 2016, CNIS changed the requirements for the CEL to mandate the use of a QR code for consumers to easily access additional energy efficiency and other information on the product. Since then, the QR codes have been scanned more than 85 million times by Chinese consumers.

Before making the QR codes mandatory, CNIS studied the issue for several years. Their process to develop the QR code requirement included a feasibility study and a pilot program with 35 manufacturers.

Discussion

Following the presentations, the speakers answered audience questions. The discussion covered the following topics:

- When asked about how CNIS works to get industry to comply with the requirements, the Chinese speaker noted that they worked closely with industry stakeholders while developing the policy. Unlike the other e-labeling approaches APEC economies covered at the workshop, this is a mandatory requirement because China wants to reduce energy consumption.
- Since Japan has had the most experience with e-labeling, their representative was asked about possible next steps. He said that Japan is currently looking to answer two questions: how to attach a certification mark for very small Internet of Things devices, and how to allow e-labeling for devices without an integrated screen
- The participants discussed how regulators can best “future-proof” their e-labeling approaches so as to craft policies that can withstand rapid technological change. George Tannahill from the FCC suggested that relying on the needs of industry stakeholders can be helpful, since they are aware of upcoming technology trends. Nigel Cory commented that policy developers need to have regular engagement and solicit feedback from stakeholders in order to craft policies that work.

Session 3: Industry Perspectives

Presenters: Abhishek Rala, Apple; Russell Ngo, Dell; Nigel Cory, Information Technology and Innovation Foundation (Moderator)

In this session, representatives from industry shared their thoughts on e-labeling and the benefits it can provide to consumers, regulators, and manufacturers.

The speakers agreed on some of the key benefits of e-labeling:

- Allows consumers to access more product information, and in a format that can be easier to read than the small size of labels on many modern ICT products
- Cheaper and quicker than physical labelling for manufacturers
- Easier product inventory management for manufacturers – can move products between markets without having to change physical label
- Allows for more design possibilities, particularly for small devices

They also made the following recommendations to regulators to consider when developing an e-labeling policy:

- E-labeling should at least be allowed for ICT devices with an integrated display
- They agreed with regulators' goals to ensure e-labeling is easy to use for consumers, but cautioned against making the related requirements too burdensome. The Apple representative noted that the 3 steps or less rule in the United States and Canadian policies is working well, but that a requirement for accessing the e-label in fewer steps would be difficult
- The Dell representative noted that e-labeling provides the most benefit if it is implemented in a standardized way across economies

A workshop participant asked how e-labels can be made secure, and resistant to counterfeiting. Dell suggested that market surveillance efforts can be helpful here, as is the case with physical labeling, and that regulators should continue to study this issue. The Apple representative said that it is actually easier to make a counterfeit physical label than counterfeit e-label in most cases.

Session 4: International Standardization Activities

Dell, on behalf of the chair of the Working Group JTC1-SC31A, gave a presentation on the effort to create an international standard for electronic labeling. There is currently a new work project that has been proposed under JTC1- SC31A to create the international standard on e-labeling (IEC/ISO 22603), with the goal of publishing an international standard by the end of 2018. Dell mentioned that at this point, the international standard is moving in the direction of using a QR code, which would point you to a website for compliance information, instead of displaying the information only on a display screen. The presenter encouraged involvement from all interested parties in the international standardization effort and working group.

Discussion

The discussion focused on the idea of using QR codes for e-labeling, specifically how that would be implemented at the border if there are connectivity issues or if agents do not have a smartphone to scan the device. Dell responded that the ISO/IEC committee will attempt to address all these challenges.

3. Consensus Drafting of Best Practices Document

The second day of the workshop was focused heavily on discussion and drafting of a best practices document.

Small Group Discussion/Breakout Sessions

For most of the morning on Day 2, participants broke into small groups to discuss the previous day's presentations and identify best practice principles. In order to facilitate discussion and help participants identify potential best practices principles and benefits, the workshop leaders supplied participants with a framework that they were able to fill-in with ideas.

Report from Small Group Discussions

Following the morning small group discussions, participants reconvened to provide a report of their group's discussions and what principles they identified. These reports demonstrated that there were many points of consensus on best practices and the primary benefits of e-labeling.

Drafting/Agreeing on Best Practices Document

The rest of the afternoon was spent drafting and agreeing upon best practice principles. There was significant consensus on many of the principles discussed, such as the need for stakeholder input and international benchmarking when developing an e-labeling policy, and that the e-label should be easy for consumers and regulators to access. These and other consensus best practices are captured in the accompanying workshop document, *Best Practices for Electronic Labeling*. Participants also discussed the potential merits and drawbacks of using QR codes or similar techniques for an e-label, but they ultimately decided that there are too many outstanding questions for this to be reflected in a current best practices document. At the end of the day, the group had a rough draft of a document identifying best practice principles for e-labeling.

4. Workshop Analysis & Next Steps

Forty-eight representatives from 15 different APEC economies (Australia; Canada; Chile; China; Indonesia; Japan; Malaysia; Mexico; Papua New Guinea; Peru; the Philippines; Singapore; Chinese Taipei, Thailand; the United States; and Viet Nam) attended the workshop. Participants were interested in learning more about the e-labeling policies of different economies and the Day 1 presentations made for useful launching points for the Day 2 discussion of what works best in developing and implementing such a policy.

Overall, the workshop was an effective starting point for future work on e-labeling. Many participants came to the workshop with little knowledge of electronic labeling and its benefits, but the workshop equipped economies with a baseline understanding of e-labeling. Ultimately, the workshop produced a document, which provides 1.) a chart to help economies identify what "stage" of the e-labeling process they are in and top actions to take at each stage and 2.) a list of consensus best practices agreed upon at the workshop, which will ultimately help economies develop and implement their own e-labeling policies.

There may be room in the future to hold follow-up discussions on expanding e-labeling to products other than ICT devices, especially as it relates to the use of QR codes. Additionally, economies are encouraged to participate in the international standardization effort taking place in ISO/IEC. As APEC economies continue to allow e-labeling and gain experience in this area, future collaborative discussions on best practices and next steps may be helpful.